

A CHRISTIAN COLLEGE OF THE LIBERAL & APPLIED ARTS & SCIENCES

Catalog, Volume LXXXIII, 2007–2008

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A Message from the President

Welcome to Messiah College — a faith-based academic community with the mission of preparing women and men to lead and to serve the 21<sup>st</sup>-century global society. We are committed to provide academically excellent, holistic education that nurtures the intellectual, personal, and spiritual growth of all of our students. Messiah's educational program is designed to challenge and prepare students to use their unique gifts and abilities in service to God and others.

Messiah offers a program of more than 55 academic majors in the liberal and applied arts and sciences. All students are required to complete a core general education program which seeks to prepare them to contribute and to live as intellectually vibrant, actively engaged servant leaders. Messiah's faculty possesses an extraordinary commitment to teaching and scholarship. Accomplished Christian scholars and experts in their disciplines, our faculty and cocurricular educators are student-centered—serving as mentors to help students explore and discover purposeful vocations.

If you are interested in pursuing an educational experience that will challenge, transform, and prepare you, I invite you to consider Messiah College.

Kim S. Phipps President

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# Statement on Liberal Learning and Christian Scholarship

Messiah College educates for mature Christian citizenship. This means that:

- we expect our faculty to teach as Christian scholars in pursuit of faithfulness to both God and academic disciplines;
- we embrace liberal learning, believing that all truth is God's truth revealed by God to be understood and applied by each of us;
- we expose our students to multiple views and perspectives to enable them to respond with maturity to the complexities of the contemporary world;
- we approach intellectual questions in a spirit of humility recognizing that each individual's knowledge, understanding, and wisdom are finite; and
- we seek to learn in order to better serve God and others.

## **Statement on Nondiscrimination**

Messiah College does not discriminate on the basis of gender, race, color, age, disability, or national or ethnic origin in the administration of its educational policies, scholarship and loan programs, and athletic or other College-administered programs.

## **Statement on Change**

The provisions and requirements stated in the Messiah College catalog are not to be considered as an irrevocable contract between the student and Messiah College. The College reserves the right to change any of the provisions or requirements at any time within the student's term of residence. No such change, however, will be applied retroactively so as to extend the time normally required for completion of the student's program. The College reserves the right to cancel any announced program, major, or course, as well as change the course instructor or change the time it will be offered. The College's obligation to continue to offer any programs or majors in conjunction with another institution is expressly contingent on the institution's continued participation.

# COLLEGE PROFILE

## History

Founded in 1909 by the Brethren in Christ Church in Harrisburg, Pennsylvania, to "educate men and women for home and foreign mission or evangelistic work," Messiah Bible School and Missionary Training Home originally had seven faculty and staff members and twelve students. By the end of the first school year, enrollment had risen to thirty-seven students, and construction was under way for Old Main, the first building on the College's current Grantham Campus.

In 1924, the school's name was changed to Messiah Bible College. This change accurately reflected the institution's broadening curriculum and the junior college status it achieved in 1922. By 1951, the College was approved to confer baccalaureate degrees and was renamed Messiah College. Accreditation from the Middle States Association of Colleges and Secondary Schools was achieved in 1963. Messiah initiated a satellite campus in Philadelphia in 1968 and in 1983 launched Messiah College-Africa in Nairobi, Kenya, leading to the chartering of Daystar University in 1993. During the past three decades, the College significantly increased the number of majors offered in the liberal arts and introduced degree programs in several applied areas. Messiah College now offers more than 50 academic majors.

Growth in the student body and in facilities accompanied growth in the academic program. Contributing to the growth in number of students was the College's policy, declared in its earliest official statements, of welcoming students from all denominations and church traditions. From a first-year total of 37 students, the student body has grown to more than 2,900, representing over 60 denominations. Facilities have also increased from a single building to a campus of 400 acres in Grantham and an urban center in Philadelphia, with buildings valued at over \$125,000,000.

Until 1972, Messiah College was owned and operated by the Brethren in Christ Church. Today, the College and Church share in a covenantal relationship, through which each of these two communities works to further the ministry of the other. Legal control is assumed by a self-perpetuating Board of Trustees.

Two presidents held notably long terms of office. C. N. Hostetter, Jr. (president from 1934 to 1960), directed the College through the difficult years of the Depression and

guided its academic life into the beginning of a four-year liberal arts college. D. Ray Hostetter presided for 30 years (1964–1994) over an expansion that occurred on virtually every level of Messiah College's life. From 1994–2004, the College had the benefit of the inspired leadership of Rodney J. Sawatsky who positioned Messiah as a nationally ranked institution characterized as academically rigorous and unapologetically Christian. The College is presently under the leadership of Kim S. Phipps.

With the changes and developments of nearly 90 years, various elements in the history of Messiah College have remained constant—an emphasis on education for service, acceptance of students and faculty from diverse backgrounds, a commitment to excellence, and an endeavor to make Christ preeminent.

## **Identity and Mission**

Three statements best describe the identity and mission of Messiah College:

- Messiah College is a Christian college of the liberal and applied arts and sciences.
- The College is committed to an embracing evangelical spirit rooted in the Anabaptist, Pietist, and Wesleyan traditions of the Christian Church.
- Our mission is to educate men and women toward maturity of intellect, character, and Christian faith in preparation for lives of service, leadership, and reconciliation in church and society.

## **Foundational Values**

The College motto "Christ Preeminent" points to Jesus Christ as both the ground for personal salvation and the pattern for life and service. Since its founding, Messiah College has affirmed a set of values derived from the Anabaptist, Pietist, and Wesleyan traditions. The following five ideals summarize how Messiah College defines its distinctive Christian character:

Unity of Faith, Learning, and Life. This principle affirms the wholeness of persons and the unity of every dimension of life as revealed in the incarnation of Jesus Christ. It also emphasizes that all truth is God's truth and thus avoids the creation of false dichotomies in thinking and in living. Messiah College affirms a united Christian worldview and lifestyle that joins revelation with rational inquiry and that integrates believing with doing. Accordingly, Christian "calling" and vocation is broadly understood. All of our gifts, talents, and interests are to be nurtured as acts of praise towards God while serving humanity and all creation.

**Importance of the Person.** Every person is to be respected and valued, regardless of gender, race, nationality, status, or position, because each person is created in the image of God. Freedom and responsibility are primary characteristics of being human, and we must take care to protect each other's freedom while encouraging responsible living. As free agents, individuals make choices that determine the contours of their lives, and they bear responsibility for those choices. Individuals are accountable for their manner of response to God's grace. Similarly, every person must

be responsible in their pursuit of truth, and yet be free to develop their own understandings as they integrate their formal studies with their broader experience and faith.

Significance of Community. Our understanding of the Church as the body of Christ and our recognition of humanity's interdependence cause us to value community. In community, we voluntarily share our lives with each other, we care for each other, we rejoice and suffer together, we worship together, and we offer counsel to each other. While every community develops rules, in Christian communities such rules should always be humane, recognizing the impact they have on the lives of those affected, and should help us appreciate each other's gifts and talents. In any community there will be tensions that require mutual give and take, but a Christian spirit of care and support provides the security needed to accept one's own weaknesses and those of others. The ultimate goal of every Christian community should be to help us live more faithfully as disciples of Christ.

**Disciplined and Creative Living.** The mature Christian life is characterized by a delicate mix of discipline and creativity. We are called to a life of devotion and obedience to the Gospel. Such discipleship demands of us self-control and sacrifice and requires us to examine all our wants and desires in the light of God's holiness. The Gospel also calls us to celebrate the goodness of creation and to live our lives in active engagement with this ever-changing world in which God has placed us. In order to fulfill these tasks, we must be both creative interpreters of the world around us and creative actors in that world. Creativity and discipline are complementary characteristics of the mature, joyful Christian life.

Service and Reconciliation. Central to the Gospel is the work of reconciling individuals with God, with each other, and with all of creation. God has called us to be active agents in this work, as we are empowered by the Holy Spirit and bear the fruit of the Spirit within us: love, joy, peace, patience, kindness, generosity, faithfulness, gentleness, and self-control. Prepared in this way, we are compelled to share the redeeming Gospel of Jesus with those around us; to build bridges of understanding and peace across the dividing lines of race, class, age, gender, religion, and ethnicity; to demonstrate the love of God in service to others; to open our hearts to the poor and needy; and to work for justice wherever injustice prevails.

## **College-Wide Educational Objectives**

### Introduction

Messiah College is dedicated to helping students blend faith with learning in service to the world. As a Christian college of the liberal and applied arts and sciences, Messiah College advocates a bold and disciplined exploration of the world and expects its students to both embrace and participate in that endeavor. At the same time, Messiah seeks to instill in its students a sense of intellectual humility, recognizing that even the most learned persons have limited insight and therefore need the insights of others. The paradigm under which Messiah's educational programs are designed is that of liberal education. By raising the right questions, exposing students to multiple perspectives, and encouraging critical thinking, Messiah seeks to enable its students to respond with maturity to the world's complexities. In addition to nurturing these intellectual skills, the College encourages its students to apply their knowledge to the needs of the world—as servants, as leaders, as agents of reconciliation.

Messiah College offers two academic degrees: the Bachelor of Arts (B.A.) and Bachelor of Science (B.S.). When combined with purposeful cocurricular activities, these programs of academic study enable students to gain a perspective of who they ought to be and provide them with the abilities to live effectively as intellectually competent, socially responsible citizens of the world.

Messiah College has an historic relationship with the Brethren in Christ Church. Now expressed in a covenant agreement, this heritage informs the College's programs and activities. The distinctives of this heritage, which is rooted in the Anabaptist, Pietist, and Wesleyan traditions of the Christian faith, include emphases on justice-seeking, peacemaking, reconciliation, evangelism, and service. Accordingly, the College encourages and prepares students to act as servants who extend the gifts of grace and peace to a broken world. The College also recognizes the need for each individual to appropriate the Christian faith and express that commitment in daily living within a community.

While we realize that learning is a lifelong endeavor, Messiah College expects its graduates to have made progress toward the fulfillment of the following seven objectives (see "Objectives" below). From a practical standpoint, these seven objectives and their subpoints are both interdependent and overlapping, i.e., while they may be visualized discretely and assessed independently, they are nonetheless connected to one another in numerous ways and will often be pursued in multiple program areas. While the relationships between these seven objectives might be articulated in a variety of ways, they are listed and ordered with a particular rationale in mind.

### Objectives

## 1. To develop those abilities essential to liberal education.

- These abilities include:
- a. Thinking logically and creatively, analytically and synthetically, and abstract-
- ly

and concretely;

- b. Reading, observing, and listening carefully and critically;
- c. Writing and speaking clearly and coherently;
- d. Appreciating the aesthetic dimensions of life;
- e. Functioning effectively in quantitatively and technologically oriented cultures;
- f. Accessing, evaluating, and using information effectively and ethically;
- g. Pursuing the process of learning as a lifelong pursuit;
- h. Balancing commitment with humility.
- 2. To gain knowledge common to liberal education. This includes:
  - a. Developing basic understanding of geographical, social, political, and religious

realities throughout the world;

- b. Learning significant aspects of the Western social, cultural, political, religious, and philosophical heritage;
- c. Learning significant aspects of at least one non-Western culture;
- d. Becoming aware of how people of different cultures perceive the world, interpret reality, and make meaning;
- e. Learning the methods, philosophies, and basic principles of the mathematical, natural, and social sciences;
- f. Learning the traditions and methods of the arts and the humanities;
- g. Making connections (i.e., probing relationships, including congruencies and contradictions) between learnings acquired in a–f above.
- 3. To become biblically literate and theologically reflective. This includes:
  - a. Developing knowledge of and about God as revealed in Jesus Christ;
  - b. Gaining knowledge of the Bible's content and themes, including the biblical witness on service, leadership, and reconciliation;
  - c. Learning about historic Christian beliefs, practices, and ecclesiastical expressions, and the particular emphases of the Anabaptist, Pietist, and Wesleyan traditions;
  - d. Becoming familiar with contemporary theological dialogue and biblical scholarship;
  - e. Recognizing the influence of culture upon the Christian faith, and appreciating the insights that other cultures contribute to Christian theology and practice;
  - f. Acquiring the ability to articulate and evaluate one's faith;
  - g. Exploring various connections between faith and learning.
- 4. To attain specialized knowledge and abilities in at least one area of study. This includes:
  - a. Understanding the foundational content and philosophical assumptions of one's specialized area of study;
  - b. Engaging in scholarship in one's specialized area of study;
  - c. Developing proficiency in one's specialized area of study sufficient to pursue a career and/or continue education at the graduate level;
  - d. Gaining an awareness of options for employment, voluntary service, and/or graduate education in one's specialized area of study;
  - e. Articulating how faith connects to one's specialized area of study and to potential career options in that area of study.
- **5.** To develop an understanding of one's identity and Christian vocation. This includes:
  - a. Developing an awareness of and concern for the whole person, including physical, emotional and spiritual wellness;
  - b. Acquiring an appreciation for how one's faith, community, and culture impact one's identity and sense of meaning;
  - c. Developing a sense of vocation that includes but transcends career choice;
  - d. Gaining a realistic sense of one's distinctiveness, including one's interests, abilities, and limitations;
  - e. Discerning and reflecting on the role(s) one assumes in groups, including one's faith community.
- 6. To develop the intellect and character necessary to express Christian commitments in responsible decisions and actions. This includes:
  - a. Developing individual and corporate spiritual disciplines that nurture person-

al faith and compassion for others;

- b. Assessing cultural values and ethical traditions in light of the biblical witness;
- c. Applying the insights of Christian theology and ethics to complex social and personal issues;
- d. Understanding the nature and causes of violence in the world and the means for promoting peace;
- e. Recognizing the implications of living in an increasingly interdependent world;
- f. Evaluating institutional policies and social/cultural practices on the basis of whether they promote peace, justice, and reconciliation;
- g. Gaining an appreciation for cultural and ethnic diversity.
- 7. To become servants, leaders, and reconcilers in the world. This includes:
  - a. Practicing a lifestyle based on Christian commitments;
  - b. Developing a sense of civic responsibility and commitment to work with others for the common good;
  - c. Developing the courage to act responsibly and redemptively in a complex world;
  - d. Practicing good stewardship of economic and natural resources;
  - e. Acting in ways that respect gender, cultural, and ethnic diversity;
  - f. Making decisions that reflect an ethic of service, a concern for justice, and a desire for reconciliation;
  - g. Recognizing the relevance of Christian faith to all of life.

## **Christian Tradition**

Messiah College was founded by educators with strong denominational concerns; but the College has never been narrowly sectarian. We welcome students without regard to denominational affiliation. The College follows the historic Christian tradition and has adopted the Apostle's Creed as an expression of the essential core of Christian commitments at the College.

### Apostles' Creed

I believe in God the Father almighty, Creator of heaven and earth.

I believe in Jesus Christ, God's only Son, our Lord,

who was conceived by the Holy Spirit,

born of the Virgin Mary,

suffered under Pontius Pilate,

was crucified, died and was buried.

He descended to the dead.

On the third day he rose again,

ascended into heaven,

and is seated at the right hand of the Father.

He will come again to judge the living and the dead.

I believe in the Holy Spirit,

the holy catholic Church, the communion of saints, the forgiveness of sins, the resurrection of the body, and the life everlasting. Amen. In campus worship services the College also frequently uses a confession which expresses the faith orientation of the College in a nonsectarian manner, highlighting the specific emphases of the Anabaptist, Pietistic, and Wesleyan traditions of the Christian faith.

#### **Confession of Faith**

We believe in the triune God—Father, Son, and Holy Spirit—who created and sustains the universe, and who desires to redeem us and all creation.

God creates each of us in the very image of God to live in loving relationships: free, responsible, and accountable to God and each other for our decisions and our actions.

God speaks to us in many different ways, times, and places but is uniquely revealed to all the world in Jesus of Nazareth, who was fully human and fully divine.

God forgives our sins, renews our hearts and minds, and calls us to join in the work of reconciliation by grace through faith in the life, teachings, death, and resurrection of Jesus Christ.

God bestows on us the Holy Spirit who leads us to repentance, instructs us in righteousness, and empowers us to live joyfully as disciples of Christ, as servants of others, and as caretakers of the created order.

God calls us to unite in the Church as a visible community of believers which celebrates God's grace in its worship and bears witness to the truth of the Gospel through its being, doing, and speaking.

God gives us the Bible as the inspired, trustworthy, and authoritative Scripture to reveal God's ways and purposes, to nourish our minds and souls, and to instruct us in how we ought to think and to live.

God instructs us to pursue the kingdom of peace, righteousness, and justice which ultimately will prevail with the return of Christ and assures us that those judged faithful will share resurrected life with God and all the saints forever.

We praise the one God—our Creator, Redeemer, and Sustainer—who has called us to personal faith and new life in Christ and to so order our lives that they may demonstrate the truth of our confession. Amen.

## **Community Covenant**

### All of Life Under the Lordship of Christ

In the motto "Christ Preeminent" the Messiah College community affirms that life draws meaning from submission to Christ and service to others. Our philosophy statement affirms the triune God as the creator of all that is, the source of all truth. As beings created in the image of God, we have special responsibilities and challenges. In our community of believer-scholars we affirm the interrelatedness of what we believe, the way we live, and the way we learn. Our search for truth and commitment to Christ connect us not only to each other but also to God's creation and God's people throughout history.

#### Freedom and Obligation

Within this community, it is not easy to find the right balance of challenge and support for each individual. Personal freedom and community obligation sometimes seem to be in tension as individuals work to integrate belief and behavior. This growth-producing process benefits from the dynamics of a diverse but concerned community, as well as the sense that the lordship of Christ and a commitment to being part of the body of Christ are key values to guide us. With the task before us of searching for truth and promoting personal growth, we join together in the hope of achieving more together than we could separately. We agree to pursue the obligations and challenges of community membership with integrity, respecting our institutional heritage and practicing biblical accountability.

## **Accreditation and Memberships**

Since 1963 Messiah College has been accredited by the Middle States Association of Colleges & Secondary Schools. Academic programs in specific disciplines are accredited by the respective professional associations, including the Accreditation Board for Engineering & Technology, the American Dietetic Association, the National League for Nursing, the Commission on Accreditation of Allied Health Education Programs, the National Association of Schools of Music, the Council on Social Work Education, and the Pennsylvania State Department of Education.

As an active participant in current developments in higher education, the College also holds educational memberships in many organizations, including The College Entrance Examination Board, the Pennsylvania Association of Colleges & Universities, the Council of Independent Colleges, the Commission for Independent Colleges & Universities, the Christian College Consortium, the Council for Christian Colleges & Universities, the Council of Mennonite Colleges, the National Association of Independent Colleges and Universities, and the Council for the Advancement & Support of Education.

## Resources

Messiah has enjoyed the steadily growing support of its alumni and a broad coalition of friends of Christian higher education. These include a wide variety of individuals, corporations, Christian churches, and the central Pennsylvania cultural and business community. As a result, Messiah College maintains a stable financial position and consistently balances its budgets. The College's total assets, including endowment and trust funds, exceed \$250 million. Such support and stability is reassuring in a day when rising costs threaten to erode the financial base of many educational institutions.

# LOCATIONS AND FACILITIES

# **The Grantham Campus**

Grantham, Pennsylvania, ten miles southwest of the capital city, Harrisburg, provides Messiah College with a suburban setting and convenient access to the urban centers of Harrisburg, Philadelphia, Baltimore, and Washington, D.C. Since 1910, the Grantham Campus has been developed into a 400-acre site with modern, attractive facilities accommodating academic, social, religious, and athletic activities.

Our teaching faculty, the most valuable resource at Messiah College, numbers approximately 170 full-time men and women, plus about 142 part-time members. Coming from a multitude of backgrounds, they represent nearly 150 graduate schools in several countries and many denominational affiliations. The total campus employment is about 780 employees.

## **Academic Facilities**

**Boyer Hall** is home to the School of Education and Social Sciences, the School of the Humanities, and the Boyer Center. Along with classrooms and faculty offices, the building houses a state-of-the-art cinema for film studies as well as a computerized language lab.

*Kline Hall* provides space for general purpose classrooms, science and nursing labs, faculty offices, and computer laboratories. Extensive renovation of this building was completed in summer 1999 and houses the Department of Nursing and the Department of Chemistry and Biochemistry.

**Climenhaga Fine Arts Center** is home to the School of the Arts and contains a large lecture hall/theater, a recital hall and instrumental room, music practice rooms, art studios and gallery, theater work space, faculty offices, and general classrooms.

*Frey Hall* includes classrooms, a lecture hall, art studios, computer labs, engineering and physics labs, and faculty offices. The School of Engineering, Mathematics, and Business is located in Frey Hall. It also serves as the center of the campus computer network.

Jordan Science Center and The Oakes Museum opened in 1999 and is the home of the Department of Biological Sciences and the Department of Nutrition and Dietetics. This state-of-the-art science facility provides technologically advanced science laboratories and equipment, faculty offices, and classrooms. The Museum showcases the College's outstanding treasury of large mammal, insect, seashell, and bird egg collections and serves as a resource to central Pennsylvania, offering visitors a close look at the wonders of creation. **Hoffman Hall** provides office space for the Writing Center, Learning Center, Faculty Services, Information Technology, Purchasing, Voice Systems, and Disability Services.

*Larsen Student Union* opened in the spring of 2004 and houses student government offices, the radio station, a casual dining facility, and both indoor and outdoor space for student functions and socializing.

**Old Main** houses the Office of the President and most of the administrative offices for the academic program, operations, finance, and college development. The third floor provides room for Publications and Public Relations.

**Murray Library** provides a wide variety of learning resources in an architecturally striking atmosphere. The library houses more than 400,000 items including books, media, periodical bound volumes, microfilm reels, and microfiche cards. In addition, the library includes space for a media center including audiovisual production space, a computer laboratory, and the archives of the College, the Brethren in Christ Church, and The Boyer Center. In 1995 the library installed an automated library management system which enables clientele to search library holdings, either on-site or through the College's computer network. The library provides access to hundreds of databases through a variety of CD-ROM products and online search services, including connection to more than 10,000 libraries and over 40,000,000 bibliographic records through membership in the Online Computer Library Center. Most importantly, the College librarians support an active instructional program which assists students in learning how to make the best use of the technology and resources available through the library.

# **Campus Center**

The **Eisenhower Campus Center** houses an auditorium/ gymnasium which seats up to 2,200 for Chapel services, a bookstore, mailboxes and U.S. Post Office services, a dining room for up to 750 people, a private dining room, the Falcon Express snack bar, locker rooms, and administrative offices. The EpiCenter provides information on all off-campus study opportunities, and the Career Center guides students in the selection of a career and search for employment.

With several regional awards and one national award to its credit, Messiah College Dining Services has a reputation of serving nutritious and attractive meals. Students living in campus residence halls select from several meal plan options. Students in apartment residences may choose to provide all of their own food or select one of several plans which include services in the College dining room or auxiliary sites through the Flex Dollars Plan.

All students are assigned a post office box on the main floor of the Campus Center. Students may use the full range of postal services available on campus, and the College maintains a twice-daily exchange of mail with the local post office, Grantham, PA 17027-8000.

# Athletic Facilities

The **Sollenberger Sports Center** is home to the Department of Health and Human Performance and provides exceptional recreational and intercollegiate athletic facilities. This 90,000-square-foot complex houses four racquetball courts, a large arena with four basketball courts, an indoor track and fitness center, a natatorium including an eight-lane swimming pool with a separate diving well, classrooms, faculty offices, locker rooms, and wrestling and gymnastics areas. Eisenhower Campus Center provides space for most indoor intercollegiate contests, and houses a weight room and sports medicine laboratory.

Outdoors, the **Starry Athletic Complex** includes a lighted artificial turf field for field hockey and lacrosse, a lighted soccer stadium, an eight-lane all-weather metric track, ten tennis courts, a baseball field, a softball field, and irrigated practice field space.

# **Residence Life**

The College offers both traditional residence halls and apartment-style residences on campus. Staffed by trained, full-time professional Residence Directors, student Assistant Residence Directors, and Student Resident Assistants, these facilities provide an environment which fosters personal growth and responsibility, as students practice living in Christian community. Policies for student residences are provided in the *Student Handbook*.

The Grantham Campus features the following major residences. Each is equipped with card-operated washing machines and dryers.

*Hess Hall*, renovated in 1996, houses all first-year students as part of the College's commitment to the First-Year Experience (FYE). Special programming is conducted to help students transition to the campus and college life.

*Miller Residence Hall*, renovated in 1996, connects to Grantham Hall, which was constructed the same year. Nearly 400 students occupy these buildings and enjoy facilities including floor lounges, a computer lab, and the campus Convenience Store (C-Store).

**Naugle** and **Witmer Residences** provide traditional housing for about 300 students. Both have large lounges on each floor in addition to a recreation area and central lounge.

*Smith, Fry, Mellinger*, and *Kelly Residences* are apartment-style buildings equipped with one- and two-bedroom units and are generally reserved for seniors. Smith Hall was renovated in 1999.

**Sollenberger** and **Bittner Residences** were renovated in 1997 and join **Mountain View Residence**. Together they provide housing for approximately 600 students. The residences include floor lounges, a recreation area, and a computer lab. The College has several smaller satellite buildings which are used as student residences. The Harrisburg Institute, located at the corner of Dewberry and Blackberry, provides residential housing for 25 students.

College residence halls open for Welcome Week in the fall and close during Christmas Break and Spring Break. The privilege to remain in campus residences during recesses requires the approval of the Residence Life staff and may require an additional fee. The College does not insure student belongings. Students are encouraged to provide their own property insurance for personal belongings brought to the College.

# Academic Support Services (Also see Academic Resources)

The office of **Disability Services** assists in assuring equal access to all of the programs, services, and facilities of the College. A variety of support services is available to qualified individuals with disabilities.

The Department of *Information Technology Services* provides extensive support in a variety of computing facilities found here on campus. Students have access to over 350 computers located in 18 general computer labs as well as computers in department labs. Most labs run *Windows XP Pro*, with two labs offering *Apple OS X*. The *Apple* labs are used primarily for graphics and video editing. All labs have a variety of pre-installed software to support academic programs and are connected to the campus network. Five of the labs are located in student residence halls for student convenience. In addition, all student rooms on campus, both in the residence halls and apartments, are set up for wired and wireless access to the campus network.

The *Learning Center* offers assistance with study skills and teaches students to apply those skills to specific course content. The Center also sponsors Supplemental Instruction which targets students in "high-risk" courses.

At the **Writing Center**, students trained in the techniques of peer-tutoring provide writing assistance for any student, at any stage in the composition process.

## **Counseling and Health Services**

The **Engle Center** provides a variety of counseling and health-related services to students. Counseling staff provide individual therapy, nutritional counseling, and premarital counseling. For full-time students, there is no charge for the services available. When needed, assistance is provided in finding a counselor off campus.

Health Services has 24-hour nursing coverage when classes are in session. Services include first-aid treatment, routine ambulatory care, some immunizations, and selective prescriptive and nonprescriptive medication. College physicians and a Nurse Practitioner visit the Center daily. Most services are available without charge; fees are charged for selected services including lab work, referral to specialists, and pre-

scription and certain over-the-counter medications. Appointments with local physicians and hospitals can be arranged through the College nurse at the student's expense or insurance plan.

The College requires students to complete a College-provided medical history form (now available on line through MCSquare) and a physical exam done by the student's physician within one year before entering Messiah. The College also requires students to have had (a) two measles-mumps-rubella immunizations after their first birthday, (b) diphtheria-tetanus immunizations within recommended guidelines, (c) a Mantoux tuberculosis test within one year of entering the College, and (d) a onetime Meningitis vaccine prior to any students residing in College-owned housing. The College recommends that students consider completing the Hepatitis B series. The Hepatitis B series is available through Health Services.

Messiah assumes no liability for accidents, but offers an insurance plan covering sickness and accidents. We urge students to remain in their family insurance plan and provide documentation of coverage to the Business Office; otherwise, the student will be automatically enrolled in the College-sponsored plan.

# **College Centers**

The **Agapé Center for Service and Learning** provides students with the opportunity to engage in community service and serves to equip faculty through training, resourcing and administrative oversight to apply Academic Service-Learning in their course curriculum.

The vision of *The Boyer Center* is to "nurture the educated imagination"! The Boyer Center cultivates responsive educational practice and scholarship from early childhood through higher education. Serving educators, administrators, and organizations, The Boyer Center promotes excellent and accessible education that enriches lives and revitalizes society.

Founded in 1997, the Center has established a distinctive record in fulfilling this mission with the support of private foundations, federal grants, and Messiah College. The Center has perpetuated Boyer's vision for renewing education and society through programs and research both within and beyond Messiah College.

The Center is named for the late Ernest L. Boyer, Sr., distinguished alumnus of Messiah College, whose distinguished service included chancellor of the State University of New York, United States Commissioner of Education under President Jimmy Carter, and President of the Carnegie Foundation for the Advancement of Teaching. The Boyer Center is located in 101 Boyer Hall. Murray Library houses the Boyer Archives.

The Oakes Museum of Natural History is an educational outreach program of Messiah College with a core of over 40,000 specimens, plus the use of the beautiful

campus itself for many outdoor activities. It features animals from Africa and North America set in dioramas of their natural habitats, bird eggs and nests, geologic specimens, butterflies, and a myriad of other insects. Also, herpetological specimens, pressed plants, fungi and Native American artifacts round out the diversified collections held by the museum. Families especially enjoy the Sensory Discovery Room where they can handle birds, seashells, rocks, minerals and jars containing frogs, salamanders and more!

Service focuses on college classes from all majors across the campus plus customized, educational group tours for public and Christian schools. A few students each year are able to do internships at the museum as well. Messiah students serve as volunteer docents who deliver tours during our public visitation hours which are the first four Saturdays of each month from 1:00 to 5:00 p.m. Admission is free for college students and their immediate families as well as for alumni and their immediate families. See our website http://www.messiah.edu/oakes for more details.

Through a variety of educational opportunities and scholarly programs, the **E**. **Morris and Leone Sider Institute for Anabaptist, Pietist and Wesleyan Studies** facilitates the exploration and interpretation of the three theological traditions which have shaped the Brethren in Christ Church. The Sider Institute is also the home of the Peace and Conflict Studies Initiative.

The Brethren in Christ Historical Library and Archives/Archives of Messiah College is the official repository for the denomination and the college. The museum displays feature artifacts from church and college life. Other resources include manuscripts, oral history, and an extensive photograph collection. The Archives is open to the public for casual visits and research. Visit our website at http://www.messiah.edu/archives for more details.

## **Philadelphia Campus**

The Messiah College-Philadelphia Campus provides a unique opportunity in higher education today. Since its inception in 1968 as a response to the continuing urbanization of American society, Messiah College-Philadelphia Campus has excited, challenged, enriched, transformed, and equipped over 1700 Messiah College students. Messiah graduates who have studied at the campus credit Messiah College-Philadelphia Campus as the bridge that linked a successful college career to a satisfying profession in an expanding globalized marketplace. Approximately 19% of the campus' alumni have chosen to live within a 10-mile radius of the campus.

The Messiah College-Philadelphia Campus has the unparalleled ability to offer students an extremely diverse and interactive learning experience. A synergy is generated when a supportive learning community setting is blended with the diversity of a large urban institution, such as Temple University, and the multitude of experiential learning opportunities available in the City of Philadelphia. In this living learning community, education extends beyond the walls of the classroom where city life functions as a "text and context" for course work and an enhanced and holistic educational development of students. Varied and wide-ranging facilities at Messiah College-Philadelphia Campus reflect the unique educational programming offered at the campus. The campus itself provides the locus of a community of learners where shared inquiry is fostered by Messiah College staff, faculty, and administrators who live on site with students and in nearby neighborhoods. The campus is comprised of several large townhouses located on North Broad Street. These buildings house a number of services, including student residences, administrative offices, cafeteria, classrooms, library, computer lab, lounges, and game room.

A second "facility" available to Messiah students is the Temple University campus. Messiah students can take advantage of Temple's vast curriculum and extensive facilities including the impressive new Tech Center with over 700 computers and video and music editing labs, Paley library, the Student Center, Tomlinson Theater, the Tuttleman Learning Center, Liacouras Sports Complex, and recreational facilities.

A third "facility" is the city of Philadelphia in which students engage and benefit from the artistic and cultural venues a major urban center offers.

While all Messiah College students are encouraged to experience at least one semester in Philadelphia, some students need to attend Messiah College-Philadelphia Campus for one or more semesters to complete requirements for their academic major or minor, including broadcasting, communication-film concentration, e-marketing, entrepreneurship, journalism and physics. See www.messiah.edu/philly for additional information.

# CAMPUS LIFE

## **Campus Environment**

Campus life at Messiah College encourages students to stretch and grow intellectually, spiritually, personally, and vocationally. Ultimately, students bear much of the responsibility for their personal growth. Among the marks of maturity are the ability to be self-directed, a willingness to surrender individual wishes for the benefit of the community, and the ability to pursue long-term objectives. Using their gifts, students not only gain from the Messiah College community, but also contribute to it.

## An Engaged Community

To encourage students to develop into well-rounded men and women, Messiah intentionally shapes the campus environment and provides a range of high-quality learning experiences both inside and outside the classroom. The College seeks to provide a learning experience that is both nurturing and challenging. Individual freedom is best expressed alongside social responsibility, and core commitments are balanced by an openness to diverse perspectives.

### A Community with Common Commitments and Diverse Perspectives

As a Christian community of learners, we strive to make Christ preeminent as we pursue academic work, build meaningful personal relationships, shape personal convictions, and strengthen awareness of social responsibility. Our primary commitment is to God. We affirm that all life draws meaning from submission to Christ and service to others. Because of the importance of knowing God and God's Word, we commit ourselves to individual and corporate spiritual disciplines. As teachers and learners we see our activities as acts of service and honor to God. We respond in love to God and to those God has created. As God's stewards on earth, we strive to put biblical teaching into practice in the way we relate to others and to the world around us.

Within our common commitments we celebrate the diversity of Christian perspectives and Church traditions represented by our students, educators, administrators, and trustees. We encourage everyone to understand and appreciate these differences. Furthermore, we discuss and debate multiple perspectives in a spirit of Christian care and civility as we pursue clarity and truth. We also maintain a common commitment of respect for all people. We embrace within our faculty and student body men and women of various races and ethnicities and from diverse denominations and church traditions. As a College we hold that prejudice based upon race, ethnicity, economic class, gender, disability, or nationality is wrong. We view discrimination as contrary to the biblical concept of justice, and we expect students to make sincere efforts to avoid such discrimination and to base their attitudes and actions upon the principles of Christian love and equality in the eyes of God.

### A Community of Responsible Learning and Living

As an academic community, Messiah supports an environment where learning pervades all activities. We embrace liberal learning, believing that all truth is God's truth—revealed by God to be understood and applied by each of us. We approach all intellectual questions in a spirit of humility, recognizing that each individual's knowledge, understanding, and wisdom are finite. We expose our students to many different views and perspectives which enable them to respond with maturity to the complexities of our world.

We also have a commitment to the world around us and to our College community. We encourage and prepare our students for lives of service, reconciliation, and peacemaking both locally and around the world.

We seek to provide an atmosphere where responsible learning and living are encouraged. Because of this commitment, Messiah College expects students to adhere to certain standards of personal conduct. We have set these standards out of consideration for biblical principles, civil law, a desire to advance learning, and our need to function effectively and efficiently.

In order to secure the benefits of college life for the entire College community, Messiah prohibits indulgence in harmful practices including the use of alcohol, tobacco, and illegal drugs. Although individuals may hold differing opinions about some of these standards, the College asks that students and their visitors abide by these expectations. The College assumes that students who accept admission will have carefully considered campus expectations and decided that they can learn and live happily within these guidelines for community living. Elaborations on these and other College expectations, as well as processes for addressing concerns, can be found in the annually updated Student Handbook posted on the College's Internet site.

## A Community for Developing Faith

A central aspect of our mission is to educate students "toward maturity of Christian faith." As a Christian academic community, we affirm Jesus Christ as our ultimate norm for goodness and truth. We affirm an authoritative view of the Scriptures as God's Word, and we require all students to complete courses in biblical studies and theology. Though the College is not a church, we are still an active worshiping community, and students are required to attend campus chapel services regularly.

We expect the faith of our students, just like the faith of all who work at the College, to be a developing faith. The College provides students with a safe yet challenging

place to explore their faith and to ask difficult questions. We cultivate an environment which nurtures personal faith in God and expressions of devotion to God. We encourage active discussion of all areas of faith within a supportive Christian academic environment. The Department of College Ministries, in partnership with other members of the campus community, supports students' Christian spiritual formation through campus-wide programs, small group sessions, and individual mentoring.

### A Community of Transformation

We expect our students to mature, grow, and change—indeed to "be transformed by the renewing of their minds"—throughout their undergraduate studies. We affirm the interrelatedness of what we believe, the way we live, and the way we learn. Because growth does not occur in isolation, we have chosen to be primarily a residential college. The experience of living with others who are both similar to us and different provides the context for interpersonal growth and learning. Our faculty challenge and nurture students toward growth and maturity in many ways. We foster a campus learning environment that supports and advances classroom learning. The Office of Residence Life coordinates residence hall programs that address holistic education—for mind, body, heart, and soul.

## A Community of Service

Because Messiah's distinctives include justice, peacemaking, reconciliation, and service in our world, the College prepares students to act as Christian servants who extend the gifts of grace and peace to a broken and needy world. The Agapé Center for Service and Learning organizes and supports numerous student activities for service locally in Harrisburg, regionally throughout Pennsylvania, and globally. The College also offers a Service-Learning program in which a summer service experience is complemented with two academic courses. Many individual courses include active service components as well. The Career Center and Internship Center also offer interested students service-oriented internships and employment opportunities with local non-profit agencies.

# Chapel

Chapel at Messiah College is a central expression of our identity as a community of Christians with a deep commitment to spiritual growth and academic excellence. Chapel is a required opportunity for exposure to diverse forms of worship, various speakers, and ideas which are put together with the intention of affirming our common commitments while they both reflect and challenge individual preferences in style. Though we hope that students will develop in their faith through chapel, we realize that spiritual nurture is ultimately a function of each person's will, preference, and responsibility and cannot be subject to requirements. Chapel is required as a common experience. Spiritual nurture is each student's own responsibility.

Messiah offers a variety of different chapel experiences. Common Chapels, for the entire student body, generally meet on Tuesdays. Elective Chapels, which offer students a choice between liturgical worship, Bible teaching, praise and worship, mission awareness, a gospel-style service, and more, are generally held on Thursdays. Alternate Chapels are services held at other times and planned by various student organizations and special interest groups. Each student is required to attend 24 chapels per semester.

## **Resources for Campus Involvement**

With a population of over 2,900 students, the College recognizes that students bring many interests and abilities. Messiah seeks to provide programs and activities which foster personal and social growth, contribute to community life, and support the College's learning and living environment.

#### Athletics and Recreation

Recreational and intercollegiate sports programs provide opportunities for students to compete and to get together outside the classroom.

*Recreational Sports*—Groups of students and individuals participate in recreational tournaments in games such as soccer, volleyball, basketball, floor hockey, and ultimate frisbee.

Intercollegiate Sports—A member of the National Collegiate Athletic Association Division III, Messiah College fields 20 teams that compete within the Commonwealth Conference of the Middle Atlantic Conference. Men participate in cross country, soccer, basketball, wrestling, baseball, tennis, golf, lacrosse, indoor track and field, and outdoor track and field. Women participate in cross country, field hockey, soccer, volleyball, basketball, tennis, softball, lacrosse, indoor track and field, and outdoor track and field.

*Recreation*—Messiah's campus provides opportunities for many outdoor activities, including hiking, canoeing, fishing, and birdwatching. Indoors, the Sollenberger Sports Center offers an indoor pool, racquetball and basketball courts, and a fitness center. The fitness center offers an indoor track and exercise machines. During the winter, the surrounding area offers skiing.

Club Sports-Men's Volleyball, Men's Soccer

### Student Organizations and Clubs

We offer student clubs and organizations as opportunities to connect with other students with particular interests. Student clubs and organizations provide excellent opportunities for developing skills, reflecting thoughts, and building community.

Academic Oriented Clubs: Biology Club, Students in Free Enterprise (SIFE), Medical Awareness Society, Messiah College Educators Association, Messiah College Society of Engineers, History Club, Music Educators National Conference, Nursing Student Association, Pi Phi Epsilon (Professionals in Physical Education), Psychology Club, Sigma Zeta (National Science and Mathematics Honor Society), Student Athletic Trainers Association (SATA), Student Nutrition Awareness Coalition (SNAC), Messiah College Council on Family Relations, Math Problem Solving Group, Social Work Club. Student Government Association: Class Governments, Student Forum, Student Government at Philadelphia, Student-Faculty Committees, Multicultural Council, Peer Review Board.

Student Media Opportunities: Clarion (yearbook), The Swinging Bridge (student newspaper), WVMM 90.7 (radio station), Minnemingo Review (literary magazine).

*Leadership Opportunities:* Resident Assistants, Apartment Life Coordinators, Peer Leaders, Life Group Leaders, Loft Facilitators.

*Campus Activities:* Homecoming Staff, Family Weekend Staff, Little Sibs Weekend Staff, Student Activities Board, Welcome Week Staff, Recreational Sports, Outdoors Club, Ski Club, Ultimate Frisbee Organization.

*Music and Theatre:* Brass Choir, Chamber Ensembles, Choral Arts Society, College Orchestra, Concert Choir, Flute Choir, Handbell Choir, Jazz Ensemble, Jazz Singers, Messiah College Singers, Percussion Ensemble, Recorder Consort, Symphonic Winds, Theatre Messiah, United Voices of Praise Gospel Choir, Women's Ensemble.

Special Interest Groups: Acclamation Dance Ensemble, Art Club, Asian Student Association, Flying Club, International Student & Missionary Kid Association, Kouenkai, La Alianza Latina, Messiah College Republicans, Nurses Christian Fellowship, Phi Omega Chi (People of Color United for Christ), Messiah College Democrats, One in Four Students for Justice in the Middle East, African Student Union, Caribbean Student Union, Swing Club.

Student Ministries: Chapel Worship Band, Dokimoi Ergati, Music Ministry Teams, Neuman Club, Outreach Teams, Powerhouse, Service Teams, World Christian Fellowship, Alliance of Confessing Theologies, Worship Community, Project B.

#### Student Government

Students also have many opportunities to develop leadership skills on campus. The Student Government Association (SGA) has a strong history and tradition of representing the student body and developing the leadership of students. Students annually elect Student Government officers as well as Class Councils. The SGA President's Cabinet and Student Forum communicate student needs to College leaders and are active participants in College governance. SGA executive leaders have automatic appointments on the College Council, and student government appoints student representatives to College-wide committees.

# ADMISSIONS

# **Admissions Policy**

Students who desire a higher education to develop their intellect, character, and Christian faith are invited to apply for admission to Messiah College. Application forms and informational brochures may be requested from the Admissions Office and are also available online at www.messiah.edu.

The Admissions Office evaluates applications on the basis of each student's preparation for college-level courses, the relative strength of their academic program, standardized test results (Scholastic Aptitude Test [SAT] or American College Test [ACT] scores), the application essay, and the program of study desired. The written recommendation is important as are a student's achievements in cocurricular activities. The Admissions Committee seeks to admit those applicants who are most likely to benefit from and contribute to the Messiah College community. Application decisions are made on a rolling basis and as such are reviewed as soon as all application materials are received. Those students who wish to be considered for the Trustees' and President's Scholarships and entrance to the College Honors Program must make sure the Admissions Office receives their completed application by January 15. Applications for the Martin's Multicultural Scholarship must be received by March 1.

During the past several years, admission to Messiah College has become increasingly selective especially for the fall semester. In order to be as fair as possible and to achieve the enrollment goals of the College, we offer two application choices for prospective applicants.

### Application Choices: Standard or Write Choice

Students can apply using either of two options: the Standard Choice or the Write Choice. The same application form is used for both application choices. A space is provided on the application to indicate whether the applicant is choosing the Standard or Write Choice. Both application options require the submission of the application form, a high school transcript, the application essay, and a Christian Life recommendation. All application materials received by Messiah College are and will remain the property of the Institution.

The Standard Choice requires the submission of scores from either the Scholastic Aptitude Test (SAT) or the American College Test (ACT).

The Write Choice option requires the student to rank in the upper 20 percent of their high school class and have an interview. Interviews must be scheduled with the admissions office, and the entire application file must be complete prior to the interview. A graded writing sample should be brought to the interview by the Write Choice applicant.

Please note that while a positive admission decision may be made through the Write Choice application without submission of SAT or ACT scores, several scholarships do either require or suggest submitting SAT or ACT test scores. The Trustee's Scholarship (full tuition) and the President's Scholarship (sixty-percent tuition) require submission of either the SAT or ACT. The Provost's scholarship does not require the submission of the SAT or ACT; however, it does have criteria which some students will meet best via the submission of scores from the SAT or the ACT. Please review the requirements for this scholarship in the Financial Aid section of this catalog.

# **High School Students**

Students completing a course of study at a public or private high school in the United States should follow the steps listed below.

- 1. Complete an application form and submit it to the Messiah College Admissions Office with a \$30 fee. The application fee is waived for all who apply before November 15. You may request an application from the Admissions Office or access and complete our application online at www.messiah. edu.
- 2. Request that an official report of your high school transcript and, for Standard Choice applicants, your scores on the Scholastic Aptitude Test (SAT) or the American College Test (ACT) be sent to the Admissions Office. If you have not yet taken either of these examinations, your high school guidance counselor can provide you with information concerning registration procedures, test dates, and locations.

Applicants must have graduated from an accredited senior high school or the equivalent (homeschooled students please refer to the next section). Course units from grades nine through twelve should include the following:

- 4 units in academic English
- at least 2 units (preferably 3 or more) in academic mathematics
- at least 2 units (preferably 3 or more) in academic natural science
- 2 or more units in academic social studies
- 2 or more units in foreign language
- 4 units in additional electives.

The academic requirements for admission listed above are minimum requirements. Students applying for admission to Messiah College are encouraged to enroll in as many academic and college preparatory courses as their high school schedule will allow. Most students who apply exceed the requirements as listed.

- 3. Request the Christian Life Recommendation from your pastor or church youth director. We prefer the recommender not be a relative. The recommendation form is included with the application form.
- 4. Preregistration Deposits

To accept your offer of admission, submit a \$200 preregistration deposit. Half of the fee (\$100) will be applied to your first semester account and half to second semester. The College's policy regarding deposits follows and is in accordance with the principles of good practice of the National Association of College Admissions Counselors.

- A student should pay a deposit when confident of his/her decision to attend.
- Deposits from students should be received by May 1 for the fall semester and December 1 for the spring semester to reserve a place in the student body. Deposits received after the May 1 or December 1 deadlines will be accepted if space is still available. If space is not available, the deposit will be returned and the offer of admission withdrawn/deferred until a later semester. If space is available, the deposit will be accepted and a space will be reserved; however, should the student subsequently cancel his/her enrollment, the deposit is non-refundable.
- This deposit is refundable to students who cancel their enrollment, provided the Admissions Office is notified by May 1 for the fall semester and by December 1 for the spring semester.
- Checks should be made payable to Messiah College. Please include the student's name in the check memo area.

# **Home-Schooled Students**

Messiah College welcomes applications from homeschooled students. The academic requirements for admission are the same as those listed in the previous section.

Along with your completed application and application fee, it is important that you submit a comprehensive transcript of your senior year academic program as well as your courses and course evaluations of the ninth through eleventh grades. If you do not receive grades, please explain your method of evaluation of course content. If you have an independent evaluation of your academic progress by a qualified educator, please include that with your transcript. Scores from the Scholastic Aptitude Test (SAT) or American College Test (ACT) should be sent directly to the Messiah College Admissions Office. The Christian Life Recommendation Form is included with the application form or is available online at www.messiah.edu where it can be printed. It should be given to a pastor or youth director who knows you well. An interview may be required to complete the application process.

Internet: www.messiah.edu/admissions/homeschool/

# Accelerated Students

A number of high schools have accelerated and enriched their programs to the degree that advanced students may be intellectually and emotionally ready for the collegiate experience by the close of their junior year in high school. Messiah College is prepared to admit a limited number of such students annually.

To qualify for accelerated admissions, students must complete an academic course to the end of the eleventh grade in an accredited high school. They must rank high on a college entrance test and place in the top 10% of their class in academic achievement. Students must also demonstrate strong personal motivation and maturity.

The procedure for accelerated admissions is as follows:

- 1. The high school administration recommends in writing students for admission on the grounds of social, emotional, and intellectual maturity, as well as on their ability to adjust to the challenge of college-level course work.
- 2. The applicant's parents must approve in writing the advancement as preferable to the high school senior year program.
- 3. An interview is required before a decision will be made. Qualified students are admitted as first-year students in full standing. At the completion of the first year, the high school receives a report of the student's college grades.

# **Transfer Students**

Students who have graduated from high school or earned a GED and completed 12 credits or more of college-level course work at another institution of higher education at the time of application are welcome to apply for the fall or spring semesters. Along with the application, an official academic transcript from the college(s) attended must be forwarded to the Admissions Office. If a student has completed less than 30 college credits at the time of application, secondary school transcripts and SAT/ACT results are required. An official evaluation of transfer credit will be completed by our Registrar following the offer of admission.

Messiah College carefully evaluates courses taken at other colleges. Credit is granted only for courses in which a student has received a C (2.0) or above. When possible, credits will be applied first to major courses and General Education requirements and then to elective credits. In most cases, standard or traditional core courses (such as History of Western Civilization, Public Speaking, etc.) are applied toward Messiah's General Education curriculum. Courses taken at an institution which has not been accredited by a regional accrediting association will be reviewed on a caseby-case basis. Please contact the Registrar's Office with specific questions concerning transfer equivalencies.

Internet: www.messiah.edu/admissions/transfer/

## **International Students**

Messiah College welcomes applications from international students and US citizens living abroad.

The application process is the same as the process described in the previous pages. In addition, each student who is a citizen of a country other than the USA is required to submit a Family/Sponsor Contribution Form to document their financial resources which can be applied toward their educational expenses. The information provided will also be used to determine scholarships and financial aid awards for the students. Only after the Application and Family/Sponsor Contribution Forms are completed can Messiah College offer admission to a student. To accept the offer of admission, submit a \$200 preregistration deposit as described in the previous pages.

In order to enter the USA as a non-US citizen, students will need an I-20 form (Certification of Eligibility for Nonimmigrant [F-1] Student Status). Upon acceptance and documentation of financial resources, Messiah College will send the I-20 form to the student. The student will then need to obtain an F-1 student visa from the Embassy of the USA in their respective country.

International students with access to the Internet and electronic mail should try to use these methods to communicate with the College. The use of these resources greatly facilitates communication. The application form, recommendation forms, and the Family/Sponsor Contribution Form are all available at www.messiah.edu/admissions/international. Printed forms are also available from the college.

Mailing Address: Messiah College Office of Admissions PO Box 3005 One College Avenue Grantham, PA 17027 Email: admiss@messiah.edu www.messiah.edu/admissions/international

## Interviews

The interview is required for students who apply via the Write Choice application method. For students who apply using the Standard Choice application, Messiah College does not require a personal interview for admission. However, we do strongly recommend an information session if you schedule an individual campus visit. During the information session, we will provide answers to any questions you or your parents may have and present information about the application process. The information session is a good opportunity for us to get to know you and for you to get to know Messiah College better. On occasion, the Admissions Office may require an interview in order to clarify personal or academic issues pertaining to a student's application for admission.

## **Campus Visits**

Prospective students are welcome to visit the College to experience life on campus via a campus tour, an information session with admissions staff/faculty/administrators or by attending an Open House program. The Admissions Office is open Monday through Friday, 8:00 a.m. to 5:00 p.m. Please schedule campus visits by contacting the Visit Coordinator (two weeks notice suggested). The Admissions Office toll-free number is 1-800-233-4220, and the e-mail address is admiss@messiah.edu. Internet: www.messiah.edu/admissions/visit/

# **Advanced Placement Examination**

Students may receive college credit through the Advanced Placement (AP) Examination of the College Entrance Examination Board. College credit is granted when an advanced placement exam grade of 3, 4, or 5 is received. Granting such credit may reduce the number of semester hours students need for graduation. Official transcripts of AP test results should be sent to the Messiah College Admissions Office for evaluation.

Internet: www.messiah.edu/registrar/equivalencies.shtml

## **International Baccalaureate**

Messiah College recognizes the International Baccalaureate and accepts scores of 4 or better on Higher-Level examinations and scores of 5 or better for Subsidiary courses as a basis for course credit and advanced placement.

# **Credit by Examination**

Messiah College honors the College-Level Examination Program (CLEP). Credit will be granted for successfully passing courses through examination. Official transcripts of CLEP test results should be sent to the Messiah College Admissions Office for evaluation.

# MEETING THE COST

## **Financial Assistance**

Students frequently ask, "Can I afford college?" Like any wise investment, an education at a private, Christian college may seem expensive, but it brings definite, lifelong rewards. Because we believe in high-quality Christian education, Messiah College is willing to help deserving students who demonstrate financial need. About nine out of every ten Messiah College students receive some kind of financial aid. The Financial Aid Office is open Monday through Friday, 8:00 a.m. to 5:00 p.m. The office is prepared for consultation with students and their parents planning to finance a college education. Messiah College offers merit-based academic scholarship programs, grants and scholarships based on a combination of merit and need, and tuition discounts. Assistance is also available through federal, state, and private funds administered by the College in the form of grants, loans, and work study.

## **Financial Aid Procedures**

### Applying for Financial Aid

If you have questions about financing a college education, you should discuss the availability of state, federal, institutional, and community scholarships, grants, loans, and work-study programs with your high school guidance counselor and/or a representative from the College.

To determine your financial need, complete the Free Application for Federal Student Aid (FAFSA). The FAFSA is a confidential statement of income and assets for both students and parents. The information is analyzed to compare the financial strength of the applicant to that of other students with similar circumstances in terms of income, assets, size of family, number of family members in post-secondary education, age of parents, etc. The aim is to make the expectations for the family contribution as equitable as possible for each student. The following equation is used to determine a student's financial need:

Cost of College Education – Family Contribution (Determined by FAFSA)

= Financial Need

The FAFSA is available to you at high school guidance offices, at the Messiah College Financial Aid Office, and available on the Web at www.fafsa.ed.gov. It is used to determine your need for state grants (including Pennsylvania) and Messiah College need-based financial aid.

If you are granted admission to Messiah College and you have unusual circumstances that you would like to discuss, please write, call, or e-mail the Financial Aid Office to explain your circumstances.

Submit your application early. High school seniors should apply for financial aid in January or February of their senior year.

### Financial Aid Package

After your financial need is determined, the College Financial Aid Office can begin to put together a financial aid "package." Each student's financial situation is different, so each financial aid package is unique. A financial aid package includes one or more types of financial aid. The most common types of aid include scholarships, grants, tuition discounts, loans, and work-study programs.

Almost all financial aid programs, including those administered by Messiah College, require you to apply each year. Applications for financial aid should be submitted by March 1 preceding the academic year for which you are applying for financial aid. The FAFSA should be mailed, or transmitted if filing on the Web, as soon as possible after January 1 so that it will arrive in our office by April 1. It will take about one month for the FAFSA to be processed and to reach our office. THE FAFSA SHOULD BE SENT NO LATER THAN MARCH 1 SO THAT THE RESULTS WILL GET TO THE FEDERAL PROCESSOR AND BACK TO MESSIAH COLLEGE BY OUR PRIORITY DEADLINE OF APRIL 1.

If you qualify for financial aid from Messiah College, you will be notified by way of a financial aid award letter. This award letter is sent out in the spring prior to the academic year for which you are applying for financial aid. The award letter is presented on line via your MCSquare account.

### Financial Aid Eligibility Guidelines

- 1. Applications received on or before April 1 are given first consideration. After April 1, applications are processed in chronological order if, and as long as, funds are available.
- 2. Institutional scholarships and awards are made with the understanding that you will be carrying a full academic load (12 or more credit hours). Several of the government aid programs require you to be enrolled at least half-time (6 or more credit hours).
- 3. Institutional financial aid programs are available for a maximum of eight semesters and are not available to students who have already received a bachelor's degree from any institution.
- 4. Messiah College students will be allowed to take two semesters of institutional aid to approved off-campus programs. See page 70 for a list of approved Off-Campus Study Programs

- 5. Students who fail to complete the required number of credits as outlined in the College's statement of Satisfactory Academic Progress will be considered ineligible for financial aid. Some institutional scholarships have additional grade-point-average eligibility requirements.
- 6. While receiving aid, you are expected to maintain a high standard of citizenship both on the campus and in the community.
- 7. The Financial Aid Committee reserves the right to revise your award package at any time. Renewal of financial assistance is dependent upon your academic progress and continued evidence of financial need. Your eligibility for need-based institutional aid will be recalculated each year and your award is subject to adjustment each year.
- 8. Each year, the Financial Aid Office publishes a booklet entitled Financial Aid Information. This booklet contains many more details about financial aid policies and procedures than can be included in this College catalog, and contains updates which occur between publications of the catalog. The combination of these publications should give each student the opportunity to be well informed about the financial aid policies which affect them. This booklet is available on the Financial Aid Office webpage at www.messiah. edu/offices/financial\_aid/booklet/.

### **Financial Aid Appeals**

Students who fail to achieve satisfactory academic progress and lose eligibility for financial aid may appeal to the Admissions and Financial Aid Committee. The appeal must include an explanation of why minimum academic requirements were not met and why an exception is warranted. Appeals must be received within three weeks of notification of the award and/or action.

## **Financial Aid Possibilities**

#### A. Grants and Scholarships

- 1. FEDERAL GRANTS
  - FEDERAL PELL GRANTS Federal Pell Grants range in amount from \$400 to \$4,310 and are awarded to students with an EFC between 0 and 4001 (as of the 2007-2008 academic year).
  - FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (SEOG)

Grants in the SEOG program are awarded with first priority to students who are also recipients of the Federal Pell Grant. Amounts range from \$100 to \$4,000 per year, although \$1,000 is the most common amount.

• ACADEMIC COMPETITIVENESS GRANTS Academic Competitiveness Grants are awarded to first and second year students who are also Federal Pell Grant recipients and who completed a rigorous secondary school program of study. Awards are \$750 for the first academic year of study and \$1,300 for the second academic year of study. The student must achieve a 3.0 grade point average in the first year in order to receive the grant for the second year.

## • NATIONAL SMART GRANTS

National SMART Grants of \$4,000 for each of the third and fourth academic years of study are awarded to students who are also Federal Pell Grant recipients and are majoring in physical, life or computer science, engineering, mathematics, technology, or a critical foreign language; and have at least a cumulative 3.0 grade point average in the coursework required for the student's major.

- 2. PENNSYLVANIA STATE GRANTS, awarded by the Pennsylvania Higher Education Assistance Agency to residents of Pennsylvania. Grants may range from \$200 to \$4,700 (as of the 2007–2008 academic year) per academic year.
- 3. STATE GRANTS from states which allow funds to leave their state, such as Connecticut, Delaware, Maine, Massachusetts, Michigan (merit award), Ohio, Rhode Island, Vermont, West Virginia, and the District of Columbia. The amount varies from state to state.
- 4. Six Messiah College full-tuition TRUSTEES' SCHOLARSHIPS are awarded each year to entering freshmen. The amount of the award is frozen at the first-year tuition amount. Trustees' Scholarship candidates are selected by a scholarship committee from the pool of freshmen applicants who have submitted a complete application for admission prior to January 15. Trustees' Scholarship candidates are required to visit campus for an interview with the scholarship committee on selected days during January, February, or March. Interview candidates for the Trustees' Scholarships are selected and are notified throughout January. Trustees' candidates should rank in the top 10% of their high school class and achieve a composite SAT score of 1300 or better OR an ACT score of 29 or better. Trustees' Scholarships are available to the student for all four years at Messiah College, provided the student maintains a 3.3 (B+) cumulative grade point average for the first academic year and a 3.6 (A) cumulative grade point average over two consecutive semesters of each succeeding academic year and exhibits a continuing Christian commitment and leadership role.
- 5. About 80 Messiah College PRESIDENT'S SCHOLARSHIPS of 60% of first-year tuition are awarded each academic year to entering freshmen. Recipients of President's Scholarships are selected by a scholarship committee from the pool of freshmen who meet the eligibility requirements for the Trustees' Scholarship (with the eligibility requirements listed above). President's Scholarships are available to the student all four years at Messiah College, provided the student maintains a 3.2 (B+) cumulative grade point average for the first academic year and a 3.4 cumulative grade point average for each succeeding academic year and exhibits a continuing leadership role. One scholarship is awarded in the name of Marion Barker Burr, one in the name of Henry L. Burr, one each in the names of Alma Keener and Virgie Kraybill, ten in the names of D. S. and Helen E. Poorman, and five in the names of Mary B. and Kenneth Cocklin. Several President's Scholarships are awarded each year in the names of Harold and Mary Engle, and one each in the names of Ruth Garman and Keith Musser. Typically, named scholarships cannot be directly applied for by a student. Instead, they are awarded by the Financial Aid Office to students who have already been awarded a

President's Scholarship and meet the donor's stated qualifications for the named scholarship.

- 6. Fifteen \$1,500 DEANS' SCHOLARSHIPS FOR CONTINUING STU-DENTS are awarded each academic year to students who have completed at least 30 credit hours at Messiah College and who have achieved a cumulative grade point average of 2.5 (C+) or better. These scholarships are available to students who have distinguished themselves as outstanding leaders in specific activities while attending Messiah College. Four of these Deans' Scholarships are awarded in the name of Ira B. Graybill and three in the name of Oscar Marshall. Students already receiving a President's or Trustees' scholarship are not eligible for a Deans' Scholarship for Continuing Students. Typically, named scholarships cannot be directly applied for by a student. Instead, they are awarded by the Financial Aid Office to students who have already been awarded a Deans' Scholarship for Continuing Students and meet the donor's stated qualifications for the named scholarship.
- Messiah College PROVOST'S SCHOLARSHIPS are awarded to entering freshmen who rank in the top 25% of their high school graduating class or who score 1100 on the SAT, or who achieve a Composite ACT score of 24 or high school GPA of 3.5 or higher.

The amounts of these scholarships range from \$6,000 to \$10,000 each year. There is no application form. The Admissions Office uses the academic information available from the student's academic records submitted along with the application for admission to determine eligibility. Provost's Scholarships are renewed each year as long as the student maintains a cumulative grade point average of 2.8 for the first academic year and 3.0 over the two consecutive semesters of each succeeding academic year. To receive a complete breakdown of the scholarship amounts and requirements, write to the Admissions Office and request the "Scholarships for Academic Excellence and Scholastic Leadership" brochure.

Submission of new academic information to increase the amount of a Provost's Scholarship is permitted up to March 1. Thereafter, the award will remain the same regardless of changes in the student's academic standing.

One of these scholarships is awarded in the name of Turkey Hill Dairy, Inc., one in the name of Full Gospel Businessmen, and one by the Fredricksen Foundation. One is given to a chemistry major in the name of Mark B. Wolgemuth, one in the name of C. J. Fredricksen, several to business majors in the name of Richard E. Jordan, Sr., one to a music major in the name of Vivian Steele, one to a nursing student in the name of Quentin Berg, and two to junior or senior Brethren in Christ or Mennonite students preparing for full-time Christian service in the name of the Jabbok Bible School Alumni. Several scholarships are also awarded each year in the names of S. Wilson and Grace Pollock. Typically, named scholarships cannot be directly applied for by a student. Instead, they are awarded by the Financial Aid Office to students who have already been awarded a Provost's Scholarship and meet the donor's stated qualifications for the named scholarship.

- 8. Twenty \$2,000 PROVOST'S SCHOLARSHIPS FOR CONTINUING STUDENTS are awarded each year to full-time students who have completed at least 30 credit hours at Messiah College and who have achieved the Deans' List at Messiah College for two consecutive semesters (fall and spring). Eight scholarships are awarded each year in the name of Edna J. Hazen, three in the name of Charles Eshelman, and four in the name of Alma Cassel. Typically, named scholarships cannot be directly applied for by a student. Instead, they are awarded by the Financial Aid Office to students who have already been awarded a Provost's Scholarship for Continuing Students and meet the donor's stated qualifications for the named scholarship.
- 9. MESSIAH COLLEGE GRANTS are awarded to students based on need and/or academic ability. The amounts of these scholarships range between \$500 and \$12,000 each year. Two of these scholarships are awarded in the name of Turkey Hill Dairy, Inc., with one of the two going to a student preparing for the Christian ministry. Two more scholarships are in the name of Charles and Margaret Miller with preference given to students preparing for the Christian ministry or missionary service. One scholarship is made available by John and Ruth Garman for a student preparing for the ministry or Christian service. Two Faculty Scholarships go to art majors-one in the name of Alice A. Little and one in the names of Alda Smyser Bates and Daniel Howard Bates. Several scholarships are given in the name of Dan Vollmer with preference given to students majoring in the fine arts or music. One scholarship is intended for a nursing student and is awarded in the name of Anna J. Swayze; several for the dependents of foreign missionaries are given in the names of Mr. and Mrs. Leon E. Kocher; one is given in the name of Amelia Winter with preference to a student preparing for a teaching or service-related career; several to Pennsylvania residents (especially from Franklin County) in the name of Johanna Gearhart; one in the name of Jason Gavin Aurada with preference given to a student with a physical handicap; one in the name of Carl Tanner with preference given to a student with a physical handicap; several in the names of Mr. and Mrs. D. S. Stump; several by the Andrew C. Schaedler Foundation with preference given to students graduating from a high school located in Adams, Cumberland, Dauphin, Franklin, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Northumberland, Perry, or York counties; several in the name of Catharine M. Bowen; and one each in the names of Vernon and Faye Anderson, Homer and Gloria Argot, John and Phyllis Brenneman, Mary Louise Brenneman, Lester and Anna Buchart, P. B. and Edna Friesen, Norma Gallagher, Robert and Doris Goss, Joseph and Mary Kratz, Deanna Otto, Mary Sachs, and Mildred Weimer. One scholarship is awarded in honor of Anna Brubaker with preference given to a student from Upland, Calif.; several by the Franklin H. and Ruth L. Wells Foundation with preference given to nursing students from minority ethnic backgrounds; two in the name of Maude Kniesley with preference given to students from the Highland (Ohio) Brethren in Christ Church; and several are provided by the Baltimore Community Foundation with preference given first to Baltimore students and second to Maryland students. Several scholarships are awarded in the name of Dr. and Mrs. J. Loomis Christian with preference

given to students preparing for the Christian ministry; several are made possible by Martin Limestone, Inc., with preference given to students from Lancaster County; one in the name of Anna R. Engle with preference to a junior or senior Bible, Christian Ministries, or Religion Major; one scholarship is awarded in the name of Brian and Pam Hoyt with preference to a junior or senior majoring in business; and several each are made possible by Earl and Joann Henry, Mary T. and Amos R. Herr, Emily Allen Kain, the Ritter Foundation, Harvey and Sakaye Sakimura, John and Ida Sollenberger, and Virgil LeRoy and Bonnie Funderburg. Typically, named scholarships cannot be directly applied for by a student. Instead, they are awarded by the Financial Aid Office to students who have already been awarded a Faculty Scholarship and meet the donor's stated qualifications for the named scholarship.

- 10. Messiah College will award a full-tuition LLOYD AND LOIS MARTIN MULTICULTURAL SCHOLARSHIP to three entering first-year students who in addition to achieving excellence in scholarship and service, ministry, or leadership involvement in their school, church, or community, have demonstrated a commitment to promoting racial/ethnic diversity and reconciliation. To be eligible for consideration, an applicant should rank in the top 10% of their high school graduating class or have excellent standardized test scores (1200 SAT I, 26 ACT or higher) or have a minimum 3.6 GPA; have shown significant leadership, service, or ministry involvement in their high school, church, or local community; and a record of promoting racial/ethnic diversity and reconciliation. Information about leadership involvements and activities during high school is provided via the application for admission to Messiah College. Students may feel free to submit additional documentation of involvements which demonstrate promotion of racial/ethnic diversity and reconciliation. Students who wish to be considered for the scholarship must apply for admission to Messiah College along with any associated documentation for the scholarship prior to March 1 when enrollment is planned for the following fall semester. The scholarships are awarded only once each year and begin in the fall semester. Recipients of Lloyd and Lois Martin Multicultural Scholarships are selected by committee from a pool of first-year students who submit a complete application for admission prior to March 1. From this pool, students will be invited to visit campus to be part of an interview process on a day established by Messiah College in March. Full tuition Lloyd and Lois Martin Multicultural Scholarships are renewable for each of four years at Messiah College as long as the recipient maintains a cumulative 3.0 grade point average for the two semesters of the previous academic year, and a continuing leadership, service, or ministry role at Messiah College which aids in the promotion of racial diversity.
- 11. NATIONAL MERIT SCHOLARSHIPS of \$1,000-\$2,000 per academic year (depending on need) are awarded to incoming freshmen who are National Merit Finalists. These awards are automatically renewable each year.
- 12. DANIEL VOLMER SCHOLARSHIPS in the arts are awarded on the basis of talent in music, art, or theatre. The award is 60% of first-year tuition and

one half of the award is applied to each semester of an academic year. In the music department, the award is based on the audition for acceptance to the music department. For art, the award is based on a portfolio that must be presented to the department and in theatre the award depends on previous acting experience and a written statement. Please contact these respective departments for information about audition dates, submission dates, and any other requirements for application. The awards are renewable each year provided students exhibit satisfactory academic progress in their area of study and meet any other requirements for the continuation of the award as defined by the respective department. The Volmer Scholarship may not be combined with any other Messiah College merit scholarship.

- 13. DEANS' SCHOLARSHIPS in the arts recipients are selected from the same pool of applicants for the Volmer Scholarships. The Deans' Scholarships range in amount from \$500 to \$3,000 each year and are renewable based on maintaining a 2.8 GPA for two consecutive semesters of an academic year and continuing satisfactory contribution to that area of the arts as determined by the academic department.
- 14. MUSIC SCHOLARSHIPS are awarded by the Messiah College Department of Music each year in memory of Earl and Christine Miller and Keith Kuhlman. Others are made possible by Ronald and Beth Sider. Contact the Chair of the Messiah College Department of Music for application forms and more information.
- 15. Several SUMMER MISSIONS GRANTS of \$1,500 to \$3,000 are awarded each year to students who have completed at least 30 credit hours at Messiah College. The purpose of the grants is to provide financial support for students involved in summer missions activities. Application forms and more detailed information are available from The Agapé Center.
- 16. Up to 20 Service-Learning Grants of \$1,500 each are available to students who participate in the Messiah College Service-Learning Project. A limited number of \$1,000 supplemental grants are also available each year. Students who demonstrate financial need are given priority consideration. Applications for these grants are available from the Director of Agapé Center for Service and Learning.
- 17. C. H. MASLAND & SONS AWARD (special consideration given to students whose parents are associates of the company and the funds are managed by the company).
- 18. GUISTWITE FAMILY SCHOLARSHIP for students from the Cumberland Valley Brethren in Christ congregation. Scholarship recipients are determined by the Cumberland Valley Brethren in Christ Church.
- 19. NIESLEY AWARD for students from the Carlisle Brethren in Christ congregation. These awards are determined by the Carlisle Brethren in Christ Church.
- 20. EARL and ELSIE SIDER SCHOLARSHIP awarded to a Brethren in Christ student preparing for Christian service.
- 21. COVENANT SCHOLARSHIPS of \$500 per academic year available for students from churches participating in the Covenant Scholarship program. Travel allowances, ranging in amounts of \$75 to \$300 are available to non-Pennsylvania residents who qualify for these scholarships. Currently, only Brethren in Christ churches participate.

- 22. CONESTOGA WOOD SPECIALTIES, INC., awards grants to its employees' children who attend Messiah College.
- 23. MARK S. HESS SCHOLARSHIPS of up to \$500 are awarded to the high scorer on each of the Bible Quiz Teams participating in the National Brethren in Christ Bible Quiz Championships as well as to members of the winning team.
- 24. DONALD B. AND DOROTHY STABLER SCHOLARSHIP/LOAN FUND awards varying amounts to financially needy junior and senior students who have maintained a cumulative grade point average of 3.0 (B) for at least two consecutive semesters. In order to perpetuate the Stabler Scholarships, recipients of this scholarship/loan are required to sign a letter of intent to pledge, after graduation, an amount at least equal to the amount of the scholarship/loan received from the Donald B. and Dorothy Stabler Scholarship/Loan Fund.
- 25. JANELLE JOY NISLY SCHOLARSHIP, awarded to a nursing or pre-medicine major who has completed at least 30 credits at Messiah College with a minimum cumulative grade point average of 3.3. The recipient shall also be affiliated with a Mennonite or Brethren in Christ church.
- 26. One DOROTHY J. GISH SCHOLARSHIP of \$5,000 is awarded each year to a financially needy, native-born, first-year ethnic minority student from the Harrisburg, Carlisle, Lancaster, or York areas of Pennsylvania. The recipient must (1) rank in the top 10% of high school class, (2) have an excellent high school attendance record, (3) demonstrate active church involvement, and (4) have strong family and/or church support.
- 27. TRANSFER SCHOLARSHIPS range from \$2,000–\$10,000 per academic year. Transfer students may receive one of the following awards:
  - Provost's Scholarships are awarded to transfer students with a cumulative college grade point average average of 2.8 for the first academic year and 3.0 over the two consecutive semesters of each succeeding academic year. The amount of the Provost's award may increase if the transfer student's high school record meets the criteria for a higher level award.
  - Phi Theta Kappa Scholarships are awarded to transfer students who provide proof of membership in Phi Theta Kappa or have a cumulative college grade point average of 3.5.
- 28. AID FOR INTERNATIONAL STUDENTS
  - INTERNATIONAL AID

Grants under the International Aid program are awarded to full-time international students who demonstrate financial need as determined by the College. Amounts range from \$1,000 to \$15,000.

• INTERNATIONAL DAYSTAR GRANT The International Daystar Grant is awarded to visiting students from Daystar University in Nairobi, Kenya. This grant covers full tuition.

• INTERNATIONAL COVENANT GRANT The International Covenant Grant is awarded to international students who are members or regular attendants of Brethren in Christ congregations and other denominations or churches that participate in the Covenant Grant Program. This grant can be up to full tuition. • INTERNATIONAL BRETHREN COLLEGES ABROAD GRANT The International Brethren Colleges Abroad Grant is awarded to international students who are visiting Messiah College under the Brethren Colleges Abroad program. This grant can be up to full tuition and fees.

### B. Loans

- 1. *The Federal Perkins Loan:* Interest-free until nine months following termination of studies. Thereafter, 5% per annum.
- 2. Federal Stafford Loans: Interest-free until six months following termination of studies. Interest is a fixed rate of 6.8%.
- 3. The Federal PLUS Loan: Interest is fixed at 8.5%. Repayment begins within 60 days of second disbursement.

## C. Tuition Discounts

Each of these require an application to be filed; some require the application to be filed by a stated deadline.

- 1. Mature Student Discount on tuition of 25% for a student 30 years and older.
- 2. High School Student Discount of 50% on tuition for high school seniors who enroll concurrently in college courses.

## D. Employment

- Federal Work-Study Program (based on need) or Institutional Work Program. Part time (an average of 10 hours per week) during the school year and full time (40 hours per week) during summer vacation.
- 2. Employment in the immediate College community. It is the student's responsibility to find this employment.
- 3. Paid internships and cooperative education (on a very limited basis).

## E. Other Sources of Aid

- 1. Veterans Administration Educational benefits. Contact your local Veterans Administration Office for more information.
- 2. Grants and loans from businesses and corporations to students whose parents they employ. Your parents should contact their Personnel Office for more information.
- 3. Scholarships and grants awarded by community, civic, and service organizations. Contact your local high school and specific local service organizations for more information.

Unless otherwise indicated, the above financial aid applies to the 2007–2008 academic year and is subject to change.

# Schedule of Semester Fees and Refund Policy

Schedule of Semester Fees (2007–2008 academic year)	
TUITION (12 to 18 semester hours)	\$11,855
STUDENT GOVERNMENT ASSOC. FEE	\$85
STUDENT SERVICE FEE	\$270

BOARD: Meal Plan Options for Residence Hall Living			
	Meal	Flex	Plan
	<u>Plan</u>	<u>Dollars</u>	<u>Cost</u>
First-Year			
Students	Without Limits*	\$100	\$1,750
Sophomores	Without Limits*	\$100	\$1,750
	175 Meal Plan	\$200	\$1,695
Juniors and			
Seniors	Without Limits*	\$100	\$1,750
	175 Meal Plan	\$200	\$1,695
	125 Meal Plan**	\$250	\$1,380
	75 Meal Plan**	\$550	\$1,380

\*Allows unlimited access to residential dining seven days per week. 7:00 a.m.–7:30 p.m. daily.

\*\*To better facilitate use of traditional plans by juniors and seniors, these meals may be used to bring friends and family to dine as guests (Lottie Nelson dining room only). The only limitation is that the meal cardholder must accompany the guests and eat the meal with them.

A la Carte Plans for Apartments and Off-Campus Living Only:

	<u>Spendable Dollars</u>	<u>Plan Cost</u>
Gold	\$890†	\$870
Silver	\$640†	\$630
Bronze	\$405†	\$400

<sup>†</sup>A maximum of \$100 carries over from the Fall to the Spring Semester. There is no carry over from Spring to Summer. Any unused a la carte dollars at the end of the academic school year will be forfeited.

#### Philadelphia Campus Meal Plan

Listed below are approximate prices for 2007-2008 Philadelphia Campus meal plans. Actual prices will not be available until late summer.

Super Value-10	10 Meal plan with \$150 Flex Dollars	\$1,480
Super Value-15	15 Meal plan with \$150 Flex Dollars	\$1,630
Super Value-CB	Carte Blanche / No Flex Dollars	\$1,605

#### ROOM:

Traditional Residence Halls:	Single \$2,050
Bittner-Sollenberger-Mountain View;	Double \$1,920
Miller-Hess-Grantham; Naugle; and	Triple \$1,540
Witmer	Quad \$1,370
Townhouses: (Upper Classmen only)	1-Bedroom \$1,975
Fry, Kelly, Mellinger, and Smith	2-Bedroom \$1,920
Satellites (Upper Classmen only)	\$1,860 - \$1,975
Philadelphia Campus	\$1,850
Harrisburg Housing	\$1,560-\$1,975

Special Fees (2007–2008 academic year)	
Application for Admission (nonrefundable)	\$30
Art Studio Fee (per course)	\$30
Auditing, per semester hour	\$335
Credit beyond 18 hours, per credit hour	\$460
Credit by Examination, per credit hour (nonrefundable)	\$90
Drop/Add Fee	\$10
Health Insurance (per academic year, nonrefundable)\$	340 (estimated)
ID Replacement (nonrefundable)	\$15
Late Payment Fee	\$100
Late Registration Fee per course, (nonrefundable)	\$25
Lost Post Office Box Key (nonrefundable)	\$25
Lost Room Key Fee	\$50
Meal Plan Change Fee	\$50
Misc. Course Fees\$	15-\$20
Nursing Student Fee (Nursing 202, 301, 302, 401 and 402)	\$220
Nursing Technology Fee (Nursing 202)	\$550
Parking Fee (per academic year, nonrefundable)	\$100
Parking Permit Replacement Fee (nonrefundable)	\$10
Private Lessons (Applied Music, includes all APM courses)	
All students (14 one-half hour lessons per semester hour)	\$300
Registration deposit for first-time students (refundable	
through May 1)	\$200
Registration deposit, all matriculated students (due	
March, refundable through July 15)	\$100
Returned Check Fee (nonrefundable)	\$25
Science Lab Fee (per course)	\$30
Skiing Course Fee (PER 128)	TBA
Summer Room and Board, per week (partial summer)	\$210
Summer Room and Board, per week (12-week minimum)	\$190
Summer School, per credit hour	TBA
Tuition for fewer than 12 hours, per credit hour	\$990

#### Fees

The Student Government Fee covers student admission to athletic events, music activities, and receipt of student publications. Some Student Government Association (SGA) sponsored activities are partially subsidized by the activities fee, providing a reduced admission charge to students. Student Services covers maintenance and special improvements in Information Technology in addition to other services (including health services provided by the College). Some of these areas of maintenance and improvement include (1) speed of internet access, (2) the number of computer ports in several residence halls, and (3) our Information Technology Services in Murray Library. These fees are not refundable. Textbooks and supplies are on sale at the College Bookstore. The estimated expense of books and materials is approximately \$900 per year. A parking permit is required each year for all students with cars on campus, and a fee is charged. A proportionate fee is charged to part-time students.

#### **Billing Procedures**

- Bills will be mailed in late July for the fall semester and late in November for the spring semester. These initial bills will be based on preregistration and financial aid information available at the time. Necessary adjustments will be made and reflected on the September and February statements. Financial aid is not credited until official notification of the award is received from the awarding agency.
- 2. Periodic statements of the activity on accounts will be mailed to the student's home address unless another address is specified.
- 3. The tuition, SGA and Student Services fees, and room and board charges for the spring semester include the Spring Term, January Term, and May Term.

#### **Payment Policies**

1. There are two basic plans for making financial payments to the College for fall and spring semesters:

The Semester Plan requires payment of the entire balance due for the semester on August 24, 2007, for the fall semester and December 21, 2007, for the spring semester.

The Monthly Payment Plan with Tuition Management Systems requires ten equal monthly payments for the estimated annual amount due with payments starting June 20 and ending March 20.

In both plans, any *approved but uncredited* financial aid (e.g., student loans, private scholarships, and grants) may be taken into account in computing the payment amount, provided that the relevant information is clearly communicated to the Business Office along with the payment. Any *outstanding balance carried beyond the due date is subject to a late payment charge of* \$100 *in addition to a finance charge of* 1% per month.

2. Full payment is required at registration for summer sessions and independent study courses.

#### Tuition and Fee Refund Policy/Return of Title IV Funds

Refunds for students who withdraw voluntarily or involuntarily are determined according to the following policy:

1. The portion of tuition and residence fees to be refunded to withdrawing students will be as follows:

Week 1	100%
Week 2	75%
Week 3	60%
Week 4	50%
Week 5	25%

2. For refund calculation purposes, spring semester begins the first day of J-Term. Students who withdraw during J-term are considered part-time students for the purpose of calculating refunds. As such, no J-term refunds are issued after the second day of J-term classes.

- 3. Students who withdraw after the completion of the fifth week of classes will not receive a refund of tuition or residence fees.
- 4. Student Government, Student Services, Nursing, and Lab Fees will not be refunded after the first week.
- 5. Dining Services fee refunds are prorated weekly through the fifth week.
- 6. Students who withdraw after the J-term, but before the spring term add date, will be treated as part-time students for refund purposes. As such, no J-term refunds are issued after the second day of J-term classes.
- 7. Refunds and adjusted bills will be sent to the student's home address following withdrawal.
- 8. There are no refunds for incomplete independent study or correspondence courses.
- 9. There are no refunds for enrolled students vacating a room after the start of the semester.
- 10. Spring semester room and standard board charges will be adjusted only for students enrolled in credit-earning, academic, off-campus cross-cultural activities, (for which Messiah has charged a fee), during J-term.
- 11. In accordance with federal regulations, when federal financial aid refunds are involved, the amounts are allocated in the following order: unsubsidized Federal Direct Loans, subsidized Federal Direct Loans, Federal Perkins Loans, Federal Direct PLUS Loans, Federal Pell Grants, Federal SEOG Grants, other Title IV aid programs.
- 12. The term "Title IV Funds" refers to the federal financial aid programs authorized under the Higher Education Act of 1965 (as amended) and includes the following programs: unsubsidized FFEL loans, subsidized FFEL loans, unsubsidized Federal Direct Stafford Loans, subsidized Federal Direct Stafford Loans, Federal Perkins Loans, FFEL PLUS loans, Federal Direct PLUS loans, Federal Pell Grants, Federal SEOG.
- 13. Institutional and student responsibilities in regard to the return of Title IV funds:

#### • Messiah College's responsibilities:

, Providing each student with the information given in the policy

, Identifying students who are affected by the policy and completing the Return of Title IV Funds calculation for those students

, Returning any Title IV funds that are due the Title IV programs

#### • Student's responsibilities:

, Returning to the Title IV programs any funds that were disbursed directly to the student and which the student was determined to be ineligible for via the Return of Title IV Funds calculation

14. Other financial aid will be refunded in proportion to and along the same schedule as tuition.

#### The fees, procedures, and policies listed above supersede those published previously and are subject to change at any time.

# ACADEMIC EXCELLENCE

# **College Honors Program**

The College Honors Program exemplifies Messiah College's commitment to promoting academic excellence and fostering an intellectually rigorous Christian worldview, with the goal of equipping young men and women for lives of leadership and service.

The College Honors Program is designed for students who demonstrate high scholarly ability early in their academic career. The program curriculum is composed of general education honors courses and a Senior Honors Project. In addition to the credit-bearing curriculum, students meet each semester outside of the classroom in the Honors Congress to discuss timely issues and interact with special campus guests. Throughout the academic year, students also have opportunities to participate in onand off-campus academic and cultural activities. Upon graduation students receive special recognition at Commencement and on their College transcript.

Students from all of the College's applied and liberal arts majors are eligible to participate. Moreover, in keeping with the College's commitment to educating the whole person, students in the Honors Program are encouraged to participate in the College's many cocurricular opportunities.

The College Honors Program is open to first-year students. The minimum qualifications include a 1300 SAT score and ranking in the top 10% of the student's high school class. No special application is required. As part of the regular admission process, students who meet the minimum eligibility requirements are evaluated for the program. From the eligible pool of candidates, students are selected for on-campus interviews. After the on-campus interview and evaluation of all other application materials, approximately 100 students are selected to enter the program in the fall. Most students selected for the College Honors Program receive either full or partial tuition scholarships.

See our website: http://www.messiah.edu/academics/honors for more information.

## **Curricular Requirements**

#### Course Requirements

- 1. Freshman Year
  - > First Year Seminar (IDFY Honors section)
- 2. Sophomore and Junior Year

Participants in the College Honors Program take three interdisciplinary (ID) courses, two of which must be honors courses. One of these honors ID courses must be met through an honors section in the *Engaging a Pluralistic World* category. The other honors ID course must be an honors section taken from either the *Science, Technology and the World* category or *Non-Western* category.

**NOTE:** Students with academic majors for which the Science, Technology and the World requirement is met by an overlap with major requirements may elect an IDST (STW) course as one of their two ID honors requirements.

3. Senior Honors Project

The requirement can be met in <u>one</u> of the following three ways:

1. HONR 498, HONR 499: Senior Honors Project

- > A two semester project that can take a variety of forms, including an interdisciplinary thesis, creative arts project, or service learning project. All projects must fulfill the parameters for the Senior Honors Project.
- 2. Department Honors or Department Project
  - > The Senior Honors Project may overlap with department honors or a department project, but must meet the parameters for the Senior Honors Project.
- 3. HONR 497: Senior Honors Seminar
  - > An interdisciplinary capstone seminar for students in the College Honors Program. The thematic focus of each seminar will be defined by the professor and will include intensive reading, discussion, and a written research paper.

## Other Requirements

- 1. Honors Congress
  - > Participation in three semester-long Congresses before graduation.
- 2. Honors Discourse
  - > Participation in on- and off-campus lectures, concerts, museum trips, etc.

## Program Eligibility Requirements

Participation in the College Honors Program requires that students meet the grade point average requirements for the Trustees' and President's Scholarship. Renewal of the President's Scholarship is contingent on maintaining a 3.2 GPA as a first-year student and a 3.4 GPA for each subsequent year. Renewal of the Trustees' Scholarship is contingent on maintaining a 3.3 GPA as a first-year student and a 3.6 GPA each subsequent year. Renewal of both the President's and

Trustees' Scholarships also requires participation in the College Honors Program.

# Scholars Initiatives

#### Deans' List

Students achieving a semester grade point average of 3.6 or higher for 12 or more graded credits are placed on the Deans' List at the end of each semester. Deans' List students are recognized at the annual College Convocation in the fall and are invited to a dinner in their honor in the spring.

#### Smith Scholar Interns

The Smith Scholar Intern Program allows highly qualified upper-class students to work in apprentice relationships with faculty members and to participate in a significant research project. Additional information is available from the Office of Faculty Development.

#### Honor Societies

The College is affiliated with several national honor societies in selected academic disciplines. Students who excel in their academic major may be invited to join the respective society. Nominations are made during the junior and senior years.

#### **Boyer Scholars**

Named for distinguished alumnus Dr. Ernest L. Boyer, Sr., Boyer Scholar selections are based on exemplary scholarship, leadership, and service and demonstrated potential to make a distinctive contribution to society. The Boyer Center sponsors several programs throughout the Scholars' senior year enabling them to understand Boyer's vision and consider models for their own service to the larger community. Boyer Scholars are honored in special ways during their senior year—including recognition in the Fall Honors Convocation and in the Commencement program. This is not a financial scholarship, but it is one of the highest forms of recognition that Messiah College presents to our students. Application for recognition as a Boyer Scholar is made in the spring of the students' junior year and is limited to 24 students. Students must have a 3.6 cumulative grade point average at the close of the first semester of their junior year to be eligible to apply.

#### Department Honors

To encourage scholarly initiative and in-depth investigation within a limited area of study, Messiah College provides able students with an opportunity to pursue honors courses within their major. Students may qualify for an honors course by (1) earning a GPA of 3.50 for all courses completed at the College to the middle of their junior year and (2) meeting all other requirements as prescribed by the department (e.g. GPA for major courses).

Each department offering an honors course prescribes the nature of the work, the point at which it shall begin, and whether the credit in whole or in part may be

counted toward fulfillment of a student's major requirements. The department must also approve a student's work for a given semester before permission can be given to proceed with the next semester's work.

Up to six semester hours of credit in honors courses may be earned at the rate of two or three hours per semester. Only the grades A and B will carry credit. If the honors work is of such high quality as to merit the grade A, the student will graduate with honors in his/her major field, provided he/she has completed six semester hours.

Students participating in the College Honors Program may meet their senior honors project requirement through an approved Departmental Honors course.

Graduation with honors in a discipline is recognized at Commencement and is noted on the student's diploma. Only senior students may participate in Department Honors courses.

#### Graduation Honors

The College awards three levels of honors according to a graduating senior's cumulative grade point average (GPA): summa cum laude (3.90 GPA or above), magna cum laude (3.60–3.89 GPA), cum laude (3.30–3.59 GPA). The following guidelines are used in determining the eligibility and level of honors granted:

- a. Only credit for courses taken at Messiah College and approved off-campus study programs are calculated in the grade point average.
- b. A minimum of sixty (60) graded credit hours must be taken at Messiah College.
- c. Honors published in the Commencement bulletin will be based on the student's cumulative grade point average at the conclusion of the preceding fall semester.
- d. Final honors as noted on the student's diploma and transcript will be based on all credits earned at Messiah College.

# ACADEMIC POLICIES AND PROCEDURES

## **Academic Dishonesty**

#### Academic Dishonesty

Scholastic dishonesty constitutes a serious violation of community standards at Messiah College. Any act which involves misrepresentation of the student's academic work or that abridges the rights of others to fair academic competition is forbidden.

Academic dishonesty includes plagiarism, cheating on assignments or exams, submission of the same (or substantially the same) paper in more than one course without the prior consent of all instructors concerned, depriving others of necessary academic sources, and sabotaging another student's work. The Student Handbook includes a description of measures that will be taken in cases of academic dishonesty.

# **Academic Progress**

#### Academic Warning

When a student's semester grade point average falls below 2.0 but the cumulative grade point average is at or above the required minimum, the student will be given an academic warning. This warning is not part of the student's permanent academic record. However, it does alert the student to potential difficulties.

#### Academic Probation, Suspension, and Dismissal

Satisfactory academic progress toward a degree as a full-time student is defined as completing 24 or more credits per academic year and maintaining a cumulative grade point average of 1.8 while earning the first 23 credits, 1.9 for 24–56 credits, and 2.0 for 57 credits or more. Any full-time student who fails to maintain this minimum cumulative grade point average will be placed on academic probation. A student on academic probation will be advised to take a maximum of 14 credits per semester while on probation. A student who does not maintain the minimum cumulative grade point average for two consecutive semesters will be placed on academic suspension for two semesters. Any student taking six or more credits in a semester who

receives less than a 1.0 (D) semester grade point average will be placed on academic suspension.

After two semesters of suspension, the student may apply for reinstatement by providing evidence of probable success. Upon return, if a student fails to achieve the minimum cumulative grade point average in two semesters, the student will be dismissed from the College. A student who is dismissed for academic reasons may apply for readmission after two years. Such a student must present 24 credits of transferrable work taken after dismissal from Messiah.

#### Academic Appeals of Suspension or Dismissal

Appeals of academic suspension or dismissal must be submitted in writing to the Academic Appeals Subcommittee and must include an explanation of why minimum academic requirements were not met and why an exception is warranted. Appeals must be received within the time limit stated in the suspension notification.

### Cocurricular and Athletic Eligibility

The purpose of placing a student on academic probation is to help the student reorder his/her priorities and time commitments in the direction of greater emphasis on academic studies so that he/she might attain the College's minimum standards for satisfactory academic progress as soon as possible.

A student who has been placed on academic probation shall be ineligible for participation in the following cocurricular activities:

- Intercollegiate athletics and club sports
- Theatre productions
- Music ensembles
- SGA officers
- Officers in any SGA-chartered organization, including team managers of Outreach Teams
- Music Ministry Teams
- WVMM radio station staff
- Resident assistant

The only exceptions will be those cases where such participation earns academic credit in a college course and that course meets a graduation requirement for the student's major.

The Registrar is responsible for notifying students of their being placed on academic probation immediately upon completion of the grading process for the period of study leading to such status.

Students placed on academic probation as a result of fall semester grades shall become ineligible for cocurricular participation on the first class day of January term/spring semester.

Students placed on academic probation as a result of January term/spring semester or summer session grades shall become ineligible for participation on the first class day

of the fall semester.

Students who are removed from academic probation as a result of fall, January term/spring semester, or summer grades shall become eligible for cocurricular participation as soon as grades are officially recorded for that period of study.

A student who is placed on academic probation may appeal for an exception to this policy. The appeal must be sent, in writing, to the Registrar by the end of the first week of the next semester and must be accompanied by letters of recommendation from the student's academic advisor, the person in charge of the respective cocurricular activity, and the student's residence director (if applicable). The Academic Appeals Subcommittee shall act on the appeal and the decision of that Subcommittee shall be final.

# **Degree and Graduation Information**

Academic advisors provide counsel to students regarding choice of curriculum and of each semester's program of courses, but responsibility that the required subjects are included at the proper time rests with the student. Final responsibility for the fulfillment of all requirements for graduation also rests with the student, who is expected to seek advice when needed. Any deviations from the published requirements require the approval of the Registrar.

## Requirements for All Degrees

- 1. 123 hours of credit, except as noted in the requirements for selected majors.
- 2. A minimum cumulative grade point average of 2.0 (C) for all academic work presented for the degree.
- 3. A minimum cumulative grade point average of 2.0 (C) for all work listed as specific requirements for the major.
- 4. The last 30 credits preceding the conferring of the degree earned at Messiah College with a minimum of 12 credits in the major.
- 5. For transfer students, a minimum cumulative grade point average of 2.0 (C) for hours required at Messiah College for graduation.
- 6. Completion of a major with requirements as specified by the respective academic department or as offered at the Philadelphia Campus in conjunction with Temple University.
- 7. Completion of all General Education requirements.

## Application for Degree

Students working toward a degree must file an application for degree with the Registrar's Office at the beginning of their senior year. This presupposes the completion of a minimum of 90 semester hours of credit. Applications require the approval of the Academic Council and the Community of Educators before students are formally admitted to degree candidacy.

## Graduation Attendance

Graduating seniors are expected to participate in the Commencement exercises. Exemption requests should be directed to the Office of the Registrar.

# **Academic Procedures and Policies**

#### Registration

During the fall and spring semesters, currently enrolled students may preregister for the following academic semester. Students must consult with their assigned academic advisor and obtain his/her signature before registering for classes. Prior to registering for classes, a student's account must be paid to date and all health records must be complete in the Engle Center.

Following preregistration, all course changes require the approval of the student's academic advisor. Courses may be added during the first two weeks of the fall and spring semester or during the first three days of classes during January term. Courses may be dropped during the first third of the term in which they are offered without appearing on a student's academic transcript. During the middle third of the semester, a grade of WP (if the student is doing passing work) or WF (if the student is failing) is recorded and appears on the student's transcript. Neither grade (WP or WF) affects the student's grade point average. Specific deadline dates for course changes are posted each semester.

#### Auditing a Course

Students who wish to attend a course but not receive College credit or a grade for their work may audit the course. Students who audit a course attend classes on a regular basis but are not required to do the course work or take any tests in the course. When the course is completed, the audited course is noted on the student's transcript. An additional tuition charge will be added if a student's registration exceeds 18 credits.

#### Change of Major

After having declared a major, students who wish to register for another course of study must obtain the signature of the Department Chair for the new major. The Department Chair will assign the student to an academic advisor for that major. Changing a major must be done through the Registrar's Office. A change of major may impact General Education requirements. Students should consult with the new advisor for information.

#### Minor

A minor is a prescribed set of courses which focuses on a particular academic discipline or area of study. The goal is to allow the student to develop some depth of understanding in that discipline or area of study. Students are not required to complete a minor. Minors require a minimum of 18 semester hours in a discipline other than that of a student's major. A student may complete more than one minor. To earn a minor, a student must attain a minimum grade point average of 2.0 for the courses listed as meeting requirements for the minor. Only one third of the courses in a given minor may count toward the requirements of another minor or major. At least one third of the course work must be taken at Messiah. A student has the option

of declaring a minor during the third semester of attendance or later. More information and the appropriate forms are available through the Registrar's Office.

### Grading System

Letter grades (A, B, C, D, F) carry a quality point value and are used in the computation of semester and cumulative grade point averages. Letter grades and their corresponding quality point values are as follows:

A = 4.0	B+ = 3.3	C+ = 2.3	D+	= 1.3
A- = 3.7	B = 3.0	C = 2.0	D	= 1.0
	B- = 2.7	C- = 1.7	F	= 0.0

## Credits and Quality Points

A credit unit is a semester hour consisting of 50 minutes of lecture, or two to three such periods of laboratory work per week, throughout a semester.

A student's cumulative grade point average is determined by dividing the number of quality points earned by the number of semester hours attempted in which quality points may be earned (graded total). Credits transferred from other institutions do not carry quality points and are therefore not computed in the grade point average.

## Pass/Fail Grades

P = Pass. Used only for a passing grade in a Pass/Fail course or when a student selects to register for a course on a Pass/Fail basis. The cutoff for pass is C–. Semester hours in which the student receives a P count toward graduation, but not toward the grade point average.

F = Failure. The grade of F is a failing grade and is included in the computation of both the semester and cumulative grade point average.

## Auxiliary Symbols

Auxiliary symbols do not carry a quality point value and are not used in the computation of semester and cumulative grade point averages.

WP = Withdrawal Passing. Given only to a student who withdraws from a course doing passing work in the middle third of the term. Does not count in the student's grade point average.

WF = Withdrawal Failing. Given only to a student who withdraws from a course during the middle third of the term and who is doing failing work at the time of withdrawal. Does not count in the student's grade point average.

W = Withdrawal. Given only to a student who withdraws from all courses (i.e., withdraws from the College) or from specific courses in cases of emergency during the final third of the semester.

I = Incomplete. The grade of I is given when, for some major reason such as illness, a

student has been unable to complete the prescribed course on schedule. It should be given rarely and never to accommodate the student who through carelessness or poor planning does not complete his/her work on time. For credit, an I must be removed according to the following time schedule; otherwise, an F will be recorded. Fall semester: Before opening of spring term. All other terms: By the end of the fourth week following term.

#### Pass/Fail Option

During their college careers, students may take a maximum of four courses on a Pass/Fail (P/F) basis with these conditions:

- 1. The course may not be from any discipline required for the student's major. The course cannot be used to meet a General Education requirement or a requirement in the student's minor. It must be a free elective.
- 2. The cutoff for Pass shall be C-.
- Procedure:
- 1. Students must declare their intention to take a course under the Pass/Fail option when they register or during the first five class days at the beginning of the new term. Students may also select to return to the letter grading system during this same time period. The selection on record after the first week of classes cannot be changed.
- 2. The Registrar reviews all requests for the Pass/Fail option to be sure they comply with guidelines.
- 3. Students are notified if their request is refused prior to the end of the drop/ add period.
- 4. Faculty members submit letter grades for all students registered for their classes. These are converted to the Pass/Fail system in the Registrar's Office for those students who have chosen the option.
- 5. The grade of P does not affect the student's grade point average.
- 6. The grade of F is a failing grade and is included in the computation of both the semester and cumulative grade point average.

#### Pass/Fail Only Courses

- 1. Certain courses are approved to be graded on the pass/fail option only. Currently, these are the courses so approved.
  - a) BUSA 102 Opportunities in Business
  - b) HDFS 099 Opportunities in Human Development and Family Science
  - c) PSYC 099 Opportunities in Psychology
  - d) GEST 101 Career Planning and Decision-Making
  - e) COMM 391 Communication Practicum
  - f) ECE 221 Early Childhood Education Field Experience I
  - g) ECE 465 Lab School Student Teaching
  - h) EDUC 393 Practicum in Education
  - i) EDUC 120 The Teaching Profession (with Field Experience)
  - j) EDUC 431, 432, 434, 435, 436, 437, 438 Student Teaching
  - k) ENGL 391 English-Journalism Practicum
  - 1) ENGL 392 Student Publications Practicum
  - m) MUEN 111-148 Ensemble Credits
  - n) HPED 433 Student Teaching Seminar

- o) GEST 140 Adaptation to American Education
- p) MUSI 001 Concert Attendance
- q) Any PHED or ADED (114, 137, 181, 182) General Physical Education activity courses
- r) TREC 485 Recreation Internship
- 2. Procedure
  - a. Faculty members submit a P or F grade for all students registered for a pass/fail only course.
  - b. The faculty member of the course determines the criteria for passing and failing that is appropriate for that course.
  - c. The grade of P does not affect the student's GPA.
  - d. The grade of F is a failing grade and is included in the computation of both the semester and cumulative GPA.
  - e. In consultation with their School Dean, departments should send any requests for pass/fail only exceptions for a course in written form to the Dean of Curriculum for action by the Curriculum Committee. Requests should include a rationale for why the course is best offered with the pass/fail only option.
  - f. Pass/fail only courses must be designated as such in the College Catalog so when students register for the class they know the operative grading option.

## Letter Grade Only Courses

- 1. Certain courses are approved to be graded with the letter grade option only. Currently, these are the courses so approved.
  - a) INTE 394 Internship and Monthly Class
  - b) INTE 395 Internship and Weekly Class
  - c) IBI 331, 339, 350, 390
  - d) BIS 230, 333, 411, and 412 (approved 5/3/2007 CC)
  - e) MRKT 357 (approved 5/3/2007 CC)
- 2. Procedure
  - a. Faculty members submit a letter grade for all students registered for a letter grade only course.
  - b. In consultation with their School Dean, departments should send any requests for letter grade only exceptions for a course in written form to the Dean of Curriculum for action by the Curriculum Committee. Requests should include a rationale for why the course is best offered with the letter grade only option
  - c. Letter graded only courses must be designated as such in the college catalog so when students register for the course they know the operating grading option.

## **Repeating Courses**

A student may repeat any course in which a grade of D+, D, or F was received. With repeated courses, the second grade and credits count in the calculation of the student's cumulative GPA, but the original grade and course will remain on the student's transcript. All repeat courses must be taken at Messiah College, including

Temple courses taken through the Philadelphia Campus and any other approved offcampus program, subject to the assessment of course equivalency.

#### Grade Appeal Procedures

An appeal process for students who wish to dispute the final grade received for a course can be found in the Student Handbook.

#### **Class Attendance**

Punctual and regular attendance at classes is expected except when the student is prevented from doing so by illness, death in the family, or a similar emergency. Each instructor is responsible to establish and implement attendance regulations for his/her own classes. Attendance regulations are conveyed to students at the beginning of the semester and are delineated in the syllabus for each course.

For class absence due to personal illnesses, it is the student's responsibility to notify the instructor. For deaths in the family and similar emergencies, students should notify the Vice Provost/Dean of Student's Office, which will notify the Registrar's Office, which will notify individual instructors.

Student absences due to participation in field trips and intercollegiate athletics are verified by notes in the Intercom. Faculty sponsoring field trips should publish the dates and times of field trips, together with the names of participating students, in the Intercom.

It is the prerogative of the individual instructor to decide whether students who miss a class examination are granted make-up privileges. Any arrangements are to be made between the student and the instructor.

#### Examinations

*Class examinations.* When students miss a pre-announced class examination, the instructor decides whether they will be granted a make-up privilege.

*Final examinations*. The final exam period is an important and integral part of the semester. Faculty members are to use this time as a part of the semester's education and will not schedule events which conflict with the final exam schedule. Students are expected to attend their final exams at the time indicated.

*Requests for final exam changes.* Occasionally exceptions are necessary. When this is the case, students must obtain approval from the Registrar prior to rescheduling an exam.

Any student having final examinations scheduled for more than eight (8) credit hours on one day may request a change in his or her final exam schedule according to the following guidelines:

- 1. The student has the option of taking all finals as scheduled.
- 2. The student requests a change in one of the finals by submitting the appropriate form by the published deadline.
- 3. After obtaining the signature of the Registrar, exams will be rescheduled at

a time mutually acceptable to both the instructor and the student.

4. Travel arrangements are not sufficient reason for exceptions to the schedule.

#### Academic Petitions

Students who find it necessary to request an exception to any academic policy should secure and complete an Academic Policy Petition form from the Registrar's Office. The appeal is then reviewed and acted upon by the Registrar. The decision of the Registrar will be communicated to the student in writing and copies will be distributed to the student's advisor. A copy will also be placed in the student's file in the Registrar's Office.

#### Medical Leave

Medical Leave is available for students who, due to documented serious physical or psychological illness, need to leave the College during the semester without completing their course work or to withdraw from the College for no longer than two consecutive semesters. Students on medical leave are not regarded as having permanently withdrawn from the College and need not apply for readmission through the Admissions Office. However, students must be approved for fitness to return to campus through the process described in the policy.

A student may request a more limited **medically excused** status if he/she is medically unable to complete the final forty percent of a semester but intends to return to the College at the beginning of the following semester. A student approved for medically excused status need not request permission to return to the College for the following semester unless conditions for returning had been stipulated by the College at the time of departure. The complete policy and procedure are available in the *Student Handbook*.

#### Withdrawal from the College

Students who wish to withdraw from Messiah College before the end of the semester must notify the Student Affairs Office and arrange for the payment of all bills in order to secure honorable dismissal. For refund purposes, the date that the Student Affairs Office signs the notification form will be considered the date of withdrawal.

At the end of a fall or spring semester, students who do not plan to return to Messiah should complete a termination of attendance notice available in the Registrar's Office.

#### Access to College Records

Messiah College respects student rights guaranteed by law and appropriate to a private, Christian educational setting. Messiah College maintains student records under the guidelines of the Family Rights and Privacy Act of 1974 (FERPA), which gives enrolled students the right to inspect their "educational records" and to restrict the release of those records. Educational records are defined generally as records, files, documents, and other materials maintained by the College which contain information directly related to the student and from which a student can be individually identified. Examples include academic records, student account records, and many records maintained by Student Affairs. Educational records *do not* include per-

sonal records of instructors or administrators, medical records, financial records of parents, or Public Safety records created for the purpose of law enforcement.

Educational records will be released to parents/guardians *only* with the written consent of the student or upon written evidence that the student has been declared as a dependent on the parent/guardian's most recent income tax return.

FERPA permits the College to release "directory information" without student consent to anyone requesting information. Directory information at Messiah College includes a student's name, home address, campus address, home telephone number, campus telephone number, campus e-mail address, photograph (available only on an internal online student directory and faculty class rosters), dates of attendance, degree for which a student is a candidate, academic major, academic awards or honors, birth date, class year, full-time/part-time status, and weight and height for members of athletic teams. Additionally, the College may provide lists of student names by religious preference (if known) once each year in response to inquiries by local churches. The College does not, however, release directory information to outside organizations for commercial solicitation. Any student who does not want directory information released must give written notification to the Vice Provost/ Dean of Students.

Messiah College's policy regarding access to College records is set forth in full in the *Student Handbook*.

#### Transcripts

Upon written request from students, the Registrar's Office issues transcripts of academic records. Contact the Registrar's Office at www.messiah.edu/registrar for transcript fees. Before transcripts can be issued, a student must have a clear account with the College Business Office.

# ACADEMIC PROGRAMS

## Academic Sessions

#### Semesters

The Messiah College academic program is based on a two-semester calendar. The fall semester begins in late August or early September and extends through part of December. The spring semester begins with the January Term and extends through early May.

#### January Term (J-Term)

An integral part of the second semester, January Term gives students an opportunity to concentrate on a single course for three weeks. Transcultural travel programs are among the innovative courses offered. Students may also enroll in an approved January Term at another institution. The academic load for the spring semester is the sum of courses taken during January and Spring Term. Therefore, students normally earn three or four credits in January and 12 or 13 credits during the Spring Term, for a total of 15 to 17 credits in the second semester.

All students are expected to register for a course during January Term each year. Since January Term and Spring Term together compose the second semester, all fees are applied accordingly. No discounts for tuition or room and board are given to students who do not enroll for a January Term course.

#### May Term

May Term is a three-week term immediately following Spring Term and is reserved exclusively for cross-cultural studies courses. Since May Term is considered a part of the Spring semester, students will be charged additional tuition at the overload rate only for each credit above the 18 credits allowed for the second semester. Students who are interested in courses other than cross-cultural studies should enroll in the Summer Session.

#### Summer Session

Summer Session is designed to meet specific needs of Messiah College students. Several courses which satisfy Messiah College General Education requirements are offered each year. Course titles, dates, and meeting times for each course are announced during the academic year in order for students and their families to plan ahead for the following summer. In addition to the General Education courses, a wide variety of independent studies is available to Messiah students during the summer months. Internships offer students an opportunity to combine full-time employment with academic components to receive credit.

Since Summer Session is not considered a part of the second semester, fees for summer courses are charged independently of fees for the regular academic year.

## Academic Definitions

#### Bachelor of Arts

The Bachelor of Arts (B.A.) degree is conferred for completion of a program with focus on broad and liberal education in the humanities, arts, social sciences, and sciences. Curricula leading to the B.A. emphasize ways of knowing and approaches to understanding consistent with the liberal arts. B.A. requirements typically promote broad preparation within the discipline and among related fields.

#### Bachelor of Science

The Bachelor of Science (B.S.) degree is conferred for completion of a program with focus on in-depth education in the sciences, social sciences, or professional fields. Curricula leading to the B.S. emphasize ways of knowing and approaches to understanding consistent with the sciences and/or professional or pre-professional preparation. B.S. requirements typically promote depth of preparation within a discipline and/or related disciplines.

#### Specialized Degrees

Messiah College may offer specialized degrees such as Bachelor of Science in Nursing (B.S.N.) or Bachelor of Science in Engineering (B.S.E.). Such specialized degrees will be treated as Bachelor of Science degrees.

#### Major

A prescribed set of courses and other requirements recommended by the department and approved by the Community of Educators as a valid representation of the area of study. Generally these courses focus on a specific academic discipline; however, there are some interdisciplinary majors which include work from two or three disciplines. Satisfactory completion of this prescribed set of courses leads to a degree in that area of study.

#### Double Major

Students wishing to complete two majors must designate which is their primary major. That major will be the standard by which general education, other requirements, and the degree are determined. A student completing double majors receives only one diploma and one degree representative of the primary major indicated. If the required work for both majors is completed by graduation or within one calendar year of the graduation ceremony at which the first major was awarded, both majors are noted on the final transcript.

#### Second Degree

A student will be awarded a second degree if he/she completes both a minimum of 30 credits and the requirements for a second major subsequent to graduation. In that case a second diploma will be granted.

#### Minor

A prescribed set of courses which focuses on a particular academic discipline or area of study. The goal is to allow the student to develop some depth of understanding in that discipline. Minors require 18 course credits with a maximum of 28 allowed.

#### Concentration

A prescribed set of courses in a subdiscipline of a major or closely related discipline consisting of a minimum of 12 and a maximum of 36 credits. Students may complete the requirements for more than one concentration. All completed concentrations will be noted in the student's transcript. See department listings for requirements.

#### Emphasis

A prescribed set of courses in a subdiscipline of a major or closely related discipline consisting of a minimum of 12 credits of requirements. Emphases will not be noted in the student's record or transcript. See department listings for requirements.

#### Individualized Major

An option exists for students wishing to pursue an individualized major not available at the College; please contact the Registrar for further information.

#### Independent Study

Independent study is available to students who wish to explore a particular area of study outside a classroom setting. Projects must be carefully designed and directed toward a specific goal under the direction of a qualified faculty member who meets regularly with the student during the study.

#### Directed Study

Directed study is available to junior and senior students who need to complete a catalogued course at a time other than when it is offered. Each department has designated which courses may be offered by directed study. Each study must be done under the supervision of a qualified faculty member who will meet with the student from three to five hours per credit hour of the course.

# **Credit and Load**

#### Credit Hour

A credit hour is a unit of academic work consisting of 50 minutes of lecture, or two or three such periods of laboratory work per week, throughout the standard 15-week semester. In addition to the in-class work, the student is expected to spend at least two hours outside of class. For terms other than the standard 15-week semester, an equivalent amount of class time is required.

### Full-Time Status

Students who carry an academic load of 12 or more credit hours are considered fulltime students, charged at the full-time student rate, and eligible for financial aid as full-time students.

#### Part-Time Status

Students who carry an academic load of less than 12 credit hours are considered parttime students, charged at the part-time student rate per credit hour, and eligible for any financial aid open to part-time students.

#### Overload

Any student taking more than 18 credits per semester must first obtain the approval of the student's academic advisor and the Registrar. Moderate requests for overloads are generally granted if the student has a grade point average of 3.0 or better. Additional tuition will be charged by the credit hour at the overload rate for each credit above 18.

Students at Philadelphia do not need permission for their 19th credit, nor are they charged additional tuition. Students who exceed 19 credits while attending Temple University through the Messiah College-Philadelphia Campus will be charged the overload tuition rate for each credit over 19.

In the spring semester, any student taking more than 4 credits in the January Term or more than 15 credits in the Spring Term must first obtain the approval of his/her advisor and the Registrar. Additional tuition will be charged by the credit hour at the overload rate for each credit above 18.

#### **Classification of Students**

Students carrying 12 or more semester hours are classified as full-time students. The following guidelines are used to determine class level:

- First Year—satisfaction of entrance requirements;
- Sophomore—24 earned credits completed;
- Junior—57 earned credits completed;
- Senior—90 earned credits completed.

Students admitted for limited or special programs designed to meet their particular needs but not leading to graduation are considered nonmatriculated, unclassified, or visiting students, depending on the nature of their program.

# **Course Coding**

The courses listed in the College Catalog are coded as follows:

- 1. Courses numbered 100 to 299 are rated as lower division courses.
- 2. Courses numbered 300 to 499 are rated as upper division courses and are generally restricted to juniors and seniors.
- 3. The credit value of each course appears parenthetically following the course title in the course descriptions. The unit of credit is the semester hour.

## Peace and Conflict Studies

Peace and Conflict Studies Minor (18 credits) BIBL 289 Issues of War, Peace, and Social Justice in Biblical Texts (3) THEO 227 Theology, Violence and Nonviolence (3) SOCI 335 Social Conflict, Justice, and Peacemaking (3) HIST 391 Historical Study of Peace (3) Choose one from the following: COMM 354 Interpersonal Conflict (3) HIST 361 / POLI 315 United States Foreign Policy (3) PHIL 325 Moral Problems (3) POLI 212 International Politics (3) SOCI 356 Race, Ethnicity, and Gender (3) THEA 363 Theatre for Social Change (3) An appropriate discipline-based "Topics" course (with approval of Peace and Conflict Studies committee) Choose one of the following: PACS 391 Practicum in Peace and Conflict Studies (3) PACS 491 Independent Research in Peace and Conflict Studies (3)

#### PACS 391 Practicum in Peace and Conflict Studies (3)

Field experience for junior and senior students in the area of peacemaking and/or conflict resolution. Only students who have completed at least three course requirements for the Peace and Conflict Studies Minor may enroll.

#### PACS 491 Independent Research in Peace and Conflict Studies (3)

Individual research project in the area of peace and conflict studies and supervised by a faculty member. Only students who have completed at least three course requirements for the Peace and Conflict Studies Minor may enroll.

# **Internship Center Courses**

Internships integrate practical work experience with a directed, reflective, academic component under the supervision of the Internship Center faculty. Students develop academically, professionally, and personally. All internship credits are elective credits. Acceptance as major electives is possible with academic departmental approval.

Students may earn up to 16 semester hours of credit through any combination of experiential education options (Internships/Professional Development Experiences/Practica).

#### INTE 291 Professional Development Experience (1-3 credits)

This practical work experience will provide sophomore students with a means to gain initial exposure to career-related work settings under the professional supervision of

Internship Center staff. This does not substitute for departmental practicum credit.

## INTE 391 Professional Development Experience (1-3 credits)

This practical work experience will provide juuniors and seniors with a means to explore career options and to enhance their skill set under the professional supervision of Internship Center staff. This does not substitute for departmental practicum credit.

## INTE 394 Internship and Monthly Class (4-10 credits)

Only third-year and fourth-year students who are academically proficient, and have the approval of their academic department, are eligible. This discipline-related work experience provides for application of classroom theory and development of professional skills. Students observe and participate in the activities of an organization or assist with a special project(s) that promotes professional development. Credit is awarded based upon length and intensity of involvement, the number of individualized learning objectives to be accomplished, as well as prescribed learning activities. Readings, topic papers, learning contract, portfolio, employer evaluations, and participation in a monthly class are some of the components. This option is available during fall, spring, and summer sessions. (Letter grade only.)

## INTE 395 Internship and Weekly Class (6-12 credits)

Only third-year and fourth-year students who are academically proficient, and have the approval of their academic department, are eligible. The course description parallels that of INT 394 with the addition of a weekly class to help students reflect upon and learn from their internship experience. The weekly class engages students in corollary issues and topics relevant to their internship experience - self-directed learning, self-assessment, organizational mission and culture, managing work relationships, professional etiquette, ethics, workplace trends, presentation skills, and others. This option is available only during the fall and spring semesters. (Letter grade only.)

# Service-Learning Courses

## SERV 231 Foundations of Service, Mission, and Social Change I (3)

A study of the role of the church in service, social justice, development, and mission using multidisciplinary perspectives from sociology, theology, and missions. Topics include short-term missions, cross-cultural relationships, racism, Christian ministry, and approaches to service and mission. The course is run as a seminar. Students are required to do a service project through a mission and/or service agency during the summer and participate in SERV 232, Foundations of Service, Mission, and Social Change II (1), the following fall. Financial assistance for the summer is available.

## SERV 232 Foundations of Service, Mission, and Social Change II (1)

A continuation of SERV 231 focusing on reflection and analysis of the summer service-learning experiences.

# Majors

Messiah College offers the following majors:

(B.S.) Adventure Education (B.A.) Art Education (K-12) (B.S.) Art History (B.A.)\* Arts Management (B.A.) Athletic Training (B.A.) Biblical and Religious Studies Concentrations: Bible Religion Theology World Christianity Biochemistry and Molecular Biology (B.S.) Biology (B.S.) Biopsychology (B.A.) Broadcasting (B.A.)\* Business Administration (B.S.) Concentrations: Finance Leadership Management Business Information Systems (B.S.) Chemistry (B.S.) Christian Ministries (B.A.) Concentrations: **Congregational Ministries** Crosscultural Ministries Youth Ministries Communication (B.A.) Concentrations: Film\* **Public Relations** Speech/Communication Computer Science (B.A.) Criminal Justice (B.A.) Economics (B.A.) Economics (B.S.) Education (Teacher Education Programs) Early Childhood Education (B.S.) Elementary Education (B.S.) Concentration: Special Education Art (K–12) (B.S.)

Biology (7–12) (B.S.) Chemistry (7–12) (B.S.) English (7–12) (B.A.) Environmental Education (K-12) Available only to students who also complete **Biology** Certification Family and Consumer Sciences Education (K-12) (B.S.) French (K–12) (B.A.) German (K–12) (B.A.) Health and Physical Education (K–12) (B.A.) Mathematics (7–12) (B.A.) Music (K–12) (B.S.) Social Studies (7-12) (B.A.) Spanish (K-12) (B.A.) E-Marketing (B.S.)\* Engineering (B.S.E.) Concentrations: Computer Electrical Mechanical English (B.A.) Entrepreneurship (B.S.)\* Environmental Science (B.S.) Environmental Studies (B.A.) Family and Consumer Sciences Education (K-12) (B.S.) French (B.A.) German (B.A.) Health and Exercise Science (B.A.) Concentrations: Health and Fitness Pre-Physical Therapy Health and Physical Education (K-12) (B.A.) History (B.A.) Concentrations: American History Classical and Medieval European History Modern European History Public History World History Human Development and Family Science (B.A.) Human Resource Management (B.S.) Humanities (B.A.) International Business (B.S.) Journalism (B.A.)\* Marketing (B.S.) Mathematics (B.A.) Music (B.A.) Concentrations: Church Music Commercial Music

Composition Performance Music Education (K-12) (B.S.) Nursing (B.S.N.) Nutrition and Dietetics (B.S. in Dietetics) Nutrition Science (B.S.) Philosophy (B.A.) Physics (B.S.)\* Politics (B.A.) Concentrations: International Relations **Political Studies** Psychology (B.A.) Concentration: Counseling Psychology (B.S.) Social Work (B.S.W.) Sociology (B.A.) Concentrations: Criminal Justice Cultural Anthropology Spanish (B.A.) Spanish Business (B.A.) Sport Management (B.A.) Studio Art (B.A.) Concentrations: Graphics and Technology Studies Interdisciplinary Studies Mixed Media Studies Two-Dimensional Studies Theatre (B.A.)

\*Requires at least one semester at the Philadelphia Campus.

Messiah College offers an accelerated 3-2 program in conjunction with Carnegie Mellon University's Heinz School of Public Policy. Participating students complete three years of study at Messiah College and two years at Carnegie Mellon University to earn a B.A. in Politics and a Master of Science in Public Policy and Management.

#### Pre-Professional Programs

Pre-Dental Pre-Law Pre-Medical Pre-Physical Therapy Pre-Veterinary

# Minors

#### Messiah College offers the following minors:

Accounting Adventure Education African-American Religion and Culture Anthropology Art History Athletic Training Bible Biology Biology for Environmental Science Majors Brethren in Christ Studies Broadcasting **Business Administration Business Information Systems** Chemistry Children and Youth Services Children and Youth Services for Human Development and Family Science Majors Christian Ministries Church Music Coaching Communication Community Psychology Computer Science Counseling Criminal Justice Early Childhood Education Economics Education English **Environmental Science** Environmental Science for Biology Majors **Environmental Studies** Foods and Nutrition French General Music German Gerontology Global Christian Studies **Global Ministries** Health and Exercise Science History Human Development and Family Science Human Resource Management Human Services Journalism\* Leadership Mathematics Multicultural Families

Music (General) Peace and Conflict Studies Philosophy Politics Pre-Law Pre-Marriage and Family Therapy Pre-Marriage and Family Therapy for Human Development and Family Science Majors Psychology Religion Socio-Cultural Perspectives on Education Sociology Spanish Sport Management Statistics Studio Art Teaching English to Speakers of Other Languages Theatre Urban Studies Women's Studies

\*Requires at least one semester at the Philadelphia Campus.

# Accelerated Bachelor-Master's Degree Collaboration

#### Messiah College-Carnegie Mellon University Collaborative Master's Program in Public Policy

Qualified students interested in pursuing graduate school in public policy are eligible to participate in an accelerated 3-2 program in conjunction with Carnegie Mellon University's Heinz School of Public Policy and Management. Students participating in this program complete three years of academic work at Messiah College followed by two years of graduate work at the Heinz School. At the end of the five-year program the student receives a B.A. in Politics from Messiah College and a Master of Science in Public Policy and Management from Carnegie Mellon University. Students applying to this program must be approved by the Messiah program coordinator and meet all Carnegie Mellon-Heinz School admission requirements. Curricular details of this program are described in the Department of Politics section of this catalog.

# **Off-Campus Learning Opportunities**

#### **Experiential Education**

To encourage students to apply classroom theory in practical settings, the College offers a variety of experiential education programs. The Internship Center offers opportunities in Central Pennsylvania, Philadelphia, London and elsewhere. Also available, through the Agapé Center, are service-learning and volunteer placements with service agencies, businesses, and governmental organizations. Other collaborations, such as the Latino Partnership, provide outreach to the community. Students

may earn up to 16 credits in experiential education, as well as take advantage of a variety of experiences without academic credit.

#### Service-Learning Programs

Messiah College is committed to providing opportunities for students to integrate service with academic courses by incorporating service-learning into courses. A service-learning course links study about service with a summer service experience. Financial assistance for summer placements is available.

#### Approved Off-Campus Study Programs

The EpiCenter (Experiential Programs Information Center) provides students with information about off-campus and enrichment study opportunities, such as study abroad, internships, service, and exchange programs. This one-stop-shop is open weekdays from 8:00 a.m. to 12:00 Noon and 1:00 to 5:00 p.m., and is located in the Eisenhower Campus Center. Applications, brochures, catalogs, course listings, International Student Identity Cards, passport photos, and videos, along with information about costs, deadlines, requirements, passports, travel, and the names of on-campus program advisors are available in the EpiCenter.

For additional information, browse the EpiCenter home page at www.messiah.edu/studyabroad or call at 717-691-6089.

American Studies Program (Washington, DC). Open to juniors and seniors in all majors, the American Studies Program brings together students from various Christian colleges for one semester of study and internship experience in Washington, DC. Students are introduced to a wide range of subjects relating to domestic and international political, economic, and social issues. Drawing upon the vast resources of the nation's capital, students are encouraged to address the public policy implications of these issues in light of their Christian faith. In addition to the academic modules, students are individually placed in internships suited to their academic and vocational interests.

AuSable Institute of Environmental Studies (Chesapeake Bay, VA; Mancelona, MI; Nairobi, KENYA; Puget Sound, WA; Tamil Nadu, India). Messiah College participates in the programs of AuSable Institute of Environmental Studies. The main campus is located in northern Michigan; AuSable also offers opportunities in Chesapeake Bay, VA; Nairobi, KENYA; Puget Sound, WA; and Tamil Nadu, INDIA. The AuSable Institute offers courses and programs during the summer and fall as well as January Term. Scholarships are available to qualified students involved in summer study at the Institute.

Australia Studies Centre (Sydney, AUSTRALIA). Adventure, academics, and art! The Australia Studies Centre is a semester-long program, sponsored by the Council for Christian Colleges and Universities, with a focus on the arts. The Sidney-based Wesley Institute provides students with opportunities to live in this coastal city, to experience Australian culture, and to study visual, theatrical, and musical arts. During the semester students travel to Blue Mountains and Jenolan Caves and to the capital city of Canberra. Students live with Australian families within 10-15 minutes (walking distance) from the campus.

**Central American Study and Service (Guatemala City, GUATEMALA).** Sponsored by Latin American Anabaptist Seminary, this program offers a 12-week study opportunity that permits students to serve in Guatemala. Students spend eight weeks in language and cultural study and four weeks in service projects which may include working in health clinics, educational programs, squatter settlements, orphanages, churches, or development organizations.

**China Studies Program (Xiamen, People's REPUBLIC OF CHINA).** The China Studies Program seeks to expose students to a country whose people make up a fifth of the world's population. Students will learn Chinese language, history, and culture through classroom instruction, by traveling around the country to such places as Tiananmen Square, the Forbidden City, and the Great Wall of China, and by being conversation partners with Chinese students.

**City University – Athens (BCA: Athens, GREECE).** Students live and study in the shadow of the ancient Acropolis while participating in BCA's program in Athens, Greece. Field trips to such places as Delphi, Corinth, Mycenae, Epidaurus, Naphleon, and Sparta provide students with an introduction to the history and culture of Greece. The program includes orientation, university classes, and travel to a number of Greek cities.

**Contemporary Music Program (Martha's Vineyard, MA).** Students interested in contemporary music—as artists or in executive roles—will discover firsthand the inside workings of the music industry. Each semester students create, produce, and market a CD. Martha's Vineyard provides a beautiful setting for students to explore what it means to be a Christian in today's music industry.

**Creation Care Study Program (Nabitunich, BELIZE or Aukland, NEW ZEALAND).** These semester-long programs—affiliated with Christians for Environmental Stewardship—explore Biblical Stewardship, first hand, in Belize or Samoa/New Zealand. The programs include opportunities for study, reflection, research, and travel and may meet a number of general education requirements.

**Cross-Cultural Courses.** Students can discover a whole new world when they step out of familiar surroundings by participating in cross-cultural study courses. Whether studying abroad in Costa Rica or spending a few weeks with an Amish family in Lancaster County, PA, students will experience firsthand a way of life that they may have only read about in books. The three-week courses include intensive study of the society through lectures and readings, as well as either an extended home-stay or an ethnographic fieldwork project. Courses and locations vary annually and have included areas such as Trinidad, the Bahamas, Zambia, Mexico, and England.

**Dalian University of Foreign Languages (BCA: Dalian, PEOPLE'S REPUBLIC OF CHINA).** Mandarin Chinese language and Chinese history, literature, politics, and geography are the focus of study for this semester-long program at the Chinese Studies Institute, a center within Dalian University. In addition to classroom instruction, students participate in several weekend excursions and a study tour to

such places as Beijing and Chengdu.

**Daystar University (Nairobi, KENVA).** Students can join over 1,800 African students from a number of African nations who are studying for their B.A. degree at Daystar University in Nairobi, Kenya. Students may study at Daystar for one or two semesters. The university provides courses in accounting, Biblical studies, business and management, Christian ministries, communications, community development, education, English, and music disciplines. Courses are also available that introduce students to the history, culture, literature, politics, art, music, and religions of Africa. All instruction is in English, offered by a faculty composed primarily of African nationals.

*Gaiety School of Acting (Dublin, IRELAND).* This three-week January Term course, which takes place in Dublin, Ireland, allows students to experience Irish culture through the arts. According to the program syllabus, the course "combines the literary study of plays with work in the craft of acting." In addition to classroom instruction, students visit various Irish museums and theatres (such as the Book of Kells, The Irish Museum of Modern Art, The National Gallery, The Irish Writers Museum, and The James Joyce Centre), as well as participate in a final performance/reception.

Hokusei Gakuen University (BCA: Sapporo, JAPAN). Students will experience Japanese language and culture while studying in Sapporo—Japan's third-largest city. Students are placed in language classes, based on their abilities, from beginning through advanced levels and take classes from the BCA director and at the university. To get a broader understanding of Japanese culture, students will visit cities around the country such as Kyoto, Tokyo, and Hiroshima.

International Business Institute (Multiple European Sites). The International Business Institute facilitates the integration of academic study with an international field experience, giving students an opportunity to develop a global perspective of business. Austria, the Czech Republic, England, Finland, France, Germany, Lithuania, the Netherlands, Russia, Sweden, and Switzerland are the classroom settings for students who participate in the ten-week Institute. Students will experience the history and culture of Europe, while studying international business, global marketing, and international business strategies.

**Internship Program (www.messiah.edu/internship).** Messiah's Internship Program has been recognized nationally for its quality and comprehensiveness. Our internship staff members have served as consultants to national organizations and colleges around the nation.

Students have the opportunity to test classroom theory in applied settings as they transition from college to their first professional position. The program is specifically designed to help students gain hands-on awareness of the demands and issues within a particular profession and consider how values and faith apply to the workplace. Students may earn academic credit for work experience combined with an academic component that includes a weekly or monthly seminar. The Messiah College Internship Program seeks to promote student development in five major areas: self-directed learning, self-assessment, career exploration, professional development, and

work philosophy. International internships are also available.

*January Term Exchange Program.* The January Term Exchange Program enables students to attend participating schools affiliated with the Council for Christian Colleges and take advantage of resources that may not be available in Grantham.

Jerusalem University College (Jerusalem, ISRAEL). Jerusalem University College exposes students to the geography, history, culture, and languages of Israel/Palestine, preparing them for a lifetime of Biblical study. Students can spend one or two semesters studying in and about this Middle Eastern region of the world when they attend the Jerusalem-based institute. The school offers a number of 300-level courses in archaeology, geography, Hebrew Bible translation, history, and Middle Eastern studies.

Latin American Studies Program (San Jose, COSTA RICA). Students study Latin American economics, culture, politics, and faith when they travel to Costa Rica for 17 weeks with the Latin American Studies Program. The San Jose-based program includes home stays, Spanish language study, travel to a number of Central American countries, and two-week service projects. Students who prefer a specialized experience can choose either a concentration in International Business and Marketing during the fall semester, in which the service project is replaced by a fourto five-week internship, or Tropical Science study in the spring.

**London Internship Program (London, ENGLAND).** The London Internship Program, sponsored by Arcadia University: Center for Education Abroad, offers internships and academic study for a semester in London, England. Students are placed in field experiences related to their majors and take classes offered by faculty at Arcadia or City University. Internships are offered in a variety of areas, including arts, charitable organizations, media and broadcasting companies, healthcare establishments, government offices, and large corporate enterprises.

Los Angeles Film Studies Center (Los Angeles, CA). This program provides an introduction to the work and workings of the mainstream Hollywood film industry. It does not assume that students have had previous experience in film. The LAFSC does not intend to be a substitute for film school, as its curriculum is designed to expose students to the industry, to the many academic disciplines that might be appropriate to it, and to critical thinking and reflection on what it means to be a Christian in this field of endeavor. In addition to regular classes, students gain practical experience by participating in internships which have included placement with Warner Bros. Studios, Bruckheimer Films, Chamian Casting, and the "Touched by An Angel" TV series.

**Middle East Studies Program (Cairo, EGYPT).** Students spend one semester in Cairo, Egypt, studying Middle Eastern culture and religion, learning Arabic language, and exploring political conflicts. The 15-week program includes an ongoing field service project, a two-week trip to Israel/Palestine, and a two-week tour of several Middle Eastern countries. This program is designed to give students an increased understanding of Middle Eastern culture, Islam, and the greater Arab world; to broaden their horizons as global citizens; and to provide contact with a civilization that is over 4,000 years old.

**National Outdoor Leadership School (Multiple Sites in the United States).** The wilderness is the classroom for juniors and seniors who participate in this hands-on wilderness education program. NOLS teaches students "outdoor skills, leadership and environmental ethics" in a variety of locations throughout the U.S., including the Rockies, Teton Valley, Pacific Northwest, and the Southwest; students can also take part in an Outdoor Educator Semester.

The Oregon Extension (Ashland, OR). This fall semester program enables juniors and seniors to pursue intensive interdisciplinary study in the southern Oregon Cascade Mountains. The program provides opportunity for students to deal seriously with ideas, Christian commitment, and life as they examine the nature of contemporary society. Classes, taught in three-week increments, include lectures by faculty members and researched presentations by students. During their stay at the Extension, students live in cabins with three or four other participants and are expected to buy and cook their own food as well as contribute to the operating activities of the community.

**Orvieto Semester (via Student Visitor Program – Orvieto, ITALY).** Italian language instruction, art history, and hands-on art studio courses in sculpting and painting makes this 16-credit program in Italy an attractive option for art students. The program is sponsored by Gordon College which allows Messiah students to participate through a consortium exchange agreement—the Student Visitor Program. In addition to classroom instruction, students visit artistically and culturally relevant locations throughout the country.

**Oxford Summer School (Oxford, ENGLAND).** Students can experience the traditional Oxford approach to education when they attend the Oxford Summer School at the Centre for Medieval and Renaissance Studies in England. This program provides students with a focused study of the European Renaissance and Reformation, exposes students to another culture and style of education, and allows students to experience the rich history of England.

Philadelphia Campus (Philadelphia, PA). In response to the increasing urbanization and globalization of American society, Messiah College, guided by Ernest Boyer, Ray Hostetter, and Albert Meyer, launched its Philadelphia Campus in 1968. Located on Broad Street, the campus is situated in the heart of the 5th largest and arguably one of the most historic cities in America. The unique and unparalled urban context of the Messiah College-Philadelphia Campus challenges students to wrestle with current social issues. Also, students are encouraged to cross social, economic, political, and cultural boundaries as they develop relationships with individuals from the myriad of backgrounds represented in the neighborhoods around the campus and throughout the city. While living in an educational "living-learning" community, students take advantage of the broad and diverse course selections provided at the campus and through the campus' affiliation with Temple University. Additionally, students engage the culturally rich and educationally varied experiential learning and service opportunities available throughout the city of Philadelphia. Study options include a semester-long urban studies curriculum, courses that meet general education, major, and minor curriculum requirements and electives, internships, service opportunities, and a May term cross-cultural course.

**Philipps-Universitat (BCA: Marburg, GERMANY).** Messiah students can strengthen their language skills by spending a semester or a year studying at the oldest protestant university in the world. Students live with German families or may be permitted to live in Schloft castle. The program includes orientation/language study, university classes (plus special BCA classes), several weekend excursions, and a study tour to Munich or Berlin.

**Russian Studies Program (Nizhni Novgorod, RUSSIA).** The goals of this program are to expose students to the Russian people and culture and to allow students to observe first-hand the changes occurring in this post-communist society. Students study Russian language (at Nizhni Novgorod State University), culture, and society and take part in two-week service projects in Russian churches, community organizations, businesses, or schools during the 15-week program.

Scholars' Semester in Oxford (Oxford, ENGLAND). The Council for Christian Colleges and Universities presents a slice of British life and Oxford education to students participating in the Scholars' Semester in Oxford. Academically strong students spend a semester participating in one-on-one tutorials with Oxford professors, as well as taking part in small group seminars. The Council director offers a course that allows students to integrate faith and learning. Students participate in field trips to such places as Stratford-on-Avon, Bath, the Cotswolds, Canterbury, and St. Augustine's Abby that are designed to increase student understanding of British culture and society.

**Spring Semester in Thailand (Chiang Mai, THAILAND).** This semester-long program offers students the opportunity to experience Thai life, culture, and society from an indigenous perspective. The program is multidisciplinary and includes the study of history, sociology, anthropology, languages, politics, economics, education, family, and religion. Students participate in internships, live with Thai families, and take a variety of field trips.

**Student Visitor Program.** A student may apply for a semester to study at any one of 12 other members of the Christian College Consortium. This option provides a unique opportunity to benefit from the resources of another Christian college while remaining a Messiah student.

**Temple Overseas Programs (including Rome, ITALX).** Programs offered through Temple University (most notably Rome and London) are available to Messiah College students who register through the Philadelphia Campus.

**Uganda Studies Program (Kampala, UGANDA).** The Uganda Studies Program allows students to explore African culture while studying at a Ugandan Christian University. Students live in dorms with East African students (from locations such as Sudan, Congo, Rwanda, Burundi, Tanzania, and Kenya) and participate in service projects in orphanages and medical clinics. During the semester students will travel to historic sites, parks, and cities within the country.

Universidad de Barcelona (BCA: Barcelona, SPAIN). Living with a host family and studying alongside 80,000 Spanish students allows Messiah students to become

immersed in the language and culture of Spain. Students are introduced to the Spanish culture through an initial orientation that includes intensive language instruction and travel to cities throughout the country such as Avila, Cordoba, Cuenca, Granada, Madrid, Segovia, Sevilla, and Toledo.

University of Gloucestershire (BCA: Cheltenham, ENGLAND). Located in southwestern England (near the border of Wales), University of Gloucestershire is home to the BCA program in the UK. Messiah students experience British life in the quaint English town of Cheltenham, where they take classes at the university. Students also travel to historical and cultural locations around the country.

Universidad de San Francisco de Quito (BCA: Quito, ECUADOR). Quito is often referred to as the "land of eternal spring." This home to the Universidad de San Francisco de Quito provides Messiah students with a beautiful location to work on their language skills. Students study in this South American university, live with Ecuadoran families, and interact with the host country's population. The university is located in the capital of Ecuador; students also travel to the Amazon rain forest and the Galapagos Islands.

Université de Strasbourg (BCA, Strasbourg: FRANCE). Located near the border of Germany, Strasbourg is the home to the Universite de Strasbourg where Messiah students can spend a semester or a year experiencing French language and culture. Like its counterpart in Nancy, the program in Strasbourg includes orientation/language study, university classes (plus special BCA classes), several weekend excursions, and a study tour.

University of Veracruz (BCA, Xalapa: MEXICO). Discover our neighbors to the south in a semester-long, language program in Mexico. Students begin their semester with intensive language instruction in Cuernavaca at the Universal Centro de Lengua y Communicacion before classes commence at the University of Veracruz in the mountainous city of Xalapa. Students experience cultural immersion living with host families, taking classes with Mexican students, and participating part in voluntary service opportunities.

# **Urban Semester Program**

The Urban Semester Program is a semester-long, credit-granting learning experience offered at the Philadelphia Campus which focuses on the contemporary urban context. Using the city of Philadelphia as a laboratory, students are required to complete 15 semester credits of urban-related course work. All courses relate directly to urban studies, satisfy various general education requirements, and can be applied to several minors and concentrations. The general education, three-credit option in cross-cultural studies is waived for students who complete this program. All Messiah College – Philadelphia Campus students are required to take at least one three-credit course taught by a Messiah College faculty member each semester of study.

# Core Course (three credit hours)

URBS 310 Urban Field Experience (3)

#### Messiah Urban Electives (six credit hours)

At least two of the following:

IDST 200 Eco-Urban Footprints of Post Metropolis Life (3) URBS 301/IDPL 301 World-View Perspectives of City Life (3)

URBS 319/RELI 319 Practical Theology of the Urban Church (3)

#### Temple University Courses (three credit hours)

At least one three-credit course with an urban focus offered by Temple University. Courses with an urban focus are approved by the of Enrollment Coordinator during the registration process.

#### One additional course (three credit hours)

At least one additional three-credit course from Messiah (chosen from the list above) or a three-hour course from Temple with an urban focus.

#### **General Education Courses**

# IDST200 Eco-Urban Footprints of Post Metropolis Life: Examining Natural and Social Ecologies of Philadelphia (3)

This course studies urban landscapes as hybrid phenomena that emerge from an integral relationship between human and ecological processes. Urban ecosystems of the Philadelphia metropolitan area are viewed as the outcome of complex interactions between socio-economic and bio-physical systems in which humans have been and continue to be the dominant agents of change. It is suggested that urban spatial patterns can be better understood by describing the unique relationship between land-use and land-cover as ecological footprints in postmetropolis landscapes. Students examine alternative development patterns within this urban landscape and assess and measure various effects on natural and social conditions within the neighborhoods of North-Central Philadelphia. Various techniques of analysis (including the use of Geographic Information Systems) will be learned and used in application to specific community-based research projects. Attention will be given to strategizing new forms of urban living that are conducive to ecological sustainability. [Satisfies the General Education requirement in "Science, Technology and the World."]

#### URBS 260 Philadelphia Urban Cross-Cultural (1)

By 2049 the preponderance of citizens in the United States will be persons of non-European (non-white) descent. In other words, those persons currently construed as "minorities" will constitute a new majority. As 2049 approaches, dynamics of national identity, language, education, economics, and political representation come to the fore. Indeed, the very meaning of "America" is at issue. Similarly Christians must reconsider their mission and identity as the Church. Will 11 o'clock Sunday morning remain "the most segregated hour in America?" Or will the Church fulfill its commision to be a house of prayer for all the nations? Throughout this course students will consider the accuracy and inaccuracy of their own cultural self-awareness and their perceptions. [Satisfies the General Education Cross-Cultural requirement in place of a third language course.]

#### URBS 301 World-View Perspectives of City Life (3)

This course examines how modern and post-modern world-view perspectives shape people's lives and influence the settlement patterns we design and inhabit. Critical consideration is given to the systematic patterns of thought that characterize **Z8upsMaskiahaCollagaChalls 20207**-2000 noments, guide human behavior and facilitate the development of a personal world-view. [Satisfies the General Education requirement in "Worldviews/Pluralism"].

# URBS 319 Practical Theology of the Urban Church (3)

This course studies how Christian beliefs and institutions have been shaped by and help to direct community life within urban locations. Course content focuses on current methods and skills of urban church ministry, community organizing, and social change within the city. Emphasis will be on the participant's own experience and discernments, resulting in some creative expression of how to build the church for the next generations. [Satisfies the General Education requirement in "Christian Beliefs."]

### **Contextual Learning Courses**

# INTE 291/391 Professional Development Experience (1-3)

This practical work experience will provide sophomore (INTE 291), juniors and seniors (INTE 391) with a means to gain initial exposure to career-related work settings under the professional supervision ot Internship Center staff. This does not substitute for departmental practicum credit.

# INTE 394/395 Internship and Monthly or Weekly Class (4-12)

Internships represent a learning strategy that integrates practical work experience with a directed, reflective, academic component to help you develop personal, professional and academic competencies. You will be using the workplace as a starting point for study; however, you will need to go beyond the common experiences of an employee. Study, reasoning, reflection, theoretical and/or conceptual exploration supplement your work experience to help you develop new skills and knowledge. If you have secured a placement for an internship, be sure that you have completed paperwork to register your internship for academic credit. These forms are available from the Internship Center or online. If you have not yet found an internship site, contact Debi Peterson (DPeterso@messiah.edu), Philadelphia Campus Internship Coordinator, for some suggestions. (Letter grade only.)

# URBS 310 Urban Field Experience (3)

This service-learning field experience course focuses on the urban setting. Students accomplish at least 90 hours of service work during the semester in a field placement, meet in a weekly seminar and complete assignments designed to integrate a student's academic interests, knowledge, and skills with field work. Please note that travel expenses to the field placement is the student's responsibility and may need to be considered before registering for this course.

#### Temple University Course Options

Go to www.temple.edu/bulletin to view course descriptions for courses offered through Messiah's Philadelphia Campus in partnership with Temple University. Temple's course schedule is available at www.temple.edu/tucourses.

# ACADEMIC RESOURCES

#### Agapé Center for Service and Learning

The Agapé Center for Service and Learning develops, administers, resources, and coordinates programs of service-learning, community service, and mission contributing to the mission of Messiah College to "educate men and women toward maturity of intellect, character, and Christian faith in preparation for lives of service, leadership, and reconciliation in church and society." Students, faculty, and staff work with community-based partners in local, national, and international settings to address community needs, to provide holistic learning opportunities for students, and to encourage students toward an ethic of discipleship, service and civic engagement.

The Center includes the offices of Service-Learning, Local Community Service, National and International Service and Mission, Outreach Teams, Service Trips, World Christian Fellowship, and Dokimoi Ergatai.

#### Career Center for Vocation and Development

The Career Center provides holistic vocational and academic counseling which is based on integrating faith, learning, and work. The comprehensive services are available to all students, starting with their first year on campus. Career counselors are available to assist students as they identify their strengths, explore majors and career possibilities, and translate their interests into employment or graduate school opportunities. Career preparation is provided through services such as one-on-one advising, résumé critiques, practice interviews, career-related programs, and the Alumni Career Network. Employment contacts are offered through a variety of services and programs: on-campus recruitment, résumé referrals, internet connections, several College-sponsored job fairs, and job postings on the Career Center website. Students considering graduate study are supported throughout planning and preparation with resources, an on-campus Graduate School Fair, and individual advising.

#### **Disability Services**

Students with disabilities may request needed accommodations through the Office of Disability Services. Eligibility is determined by submitting acceptable, current documentation to the Office of Disability Services. Documentation must include 1) verification of a disability ("a substantial impairment in one or more significant life activities," according to the ADA) conducted and signed by a qualified examiner, 2) the specific tests, results, and procedures used in making the determination, and 3) specific statements of need that clearly support and relate to the requested accommodations. Eligibility documentation older than three years may be considered but may not be sufficient for College purposes. Examples of acceptable documentation include in-depth psychological evaluations, medical reports and letters from physicians, and multi-disciplinary team reports from schools. Copies of Individual 80 — Messiah College Catalog 2007–2008

Education Plans or Section 504 Accommodation Plans will be considered but alone are not sufficient to determine eligibility.

The College is responsible for making reasonable accommodations for those who meet the qualifications under the ADA. In some cases, the accommodations provided may be different but as effective as those specifically requested. In particular, those students coming from public school settings where special education has been provided need to be aware that the emphasis changes under the ADA from "entitlements" (required special education supports) to "accessibility," or accommodations to assure qualified students that they have equal access to the full range of programs and services offered by the College.

There are no additional charges for accommodations which may include such things as:

- extended time on tests
- proctored exams in alternate locations
- assistance with getting class notes
- copies of lecture notes
- advocacy/referral services
- ADHD coaching
- textbooks in alternate formats (e-text, braille, etc.)
- special housing arrangements
- assistance during episodic illnesses
- priority registration
- assistance with computer hookups or systems
- assistance with using adaptive/augmentative technology
- interpreter/transcription service
- special parking arrangements
- arranging accommodations for international study

Students requesting accommodation should contact the Office of Disability Services as soon as they have been accepted for attendance at Messiah College. An interview is generally beneficial in helping to determine eligibility and approved accommodations. This also gives the student an opportunity to describe his or her unique circumstances and to problem-solve with Disability Service staff in determining appropriate supports that may be available or need to be developed.

For more information, students are encouraged to peruse the Disability Services homepage: http://www.messiah.edu/offices/disability/

#### EpiCenter

The Experiential Programs Information Center should be the "first stop" for students seeking information on study opportunities in off-campus locations, study abroad, cross-cultural courses, exchange programs, and discipline-specific programs in the U.S. Catalogs, brochures, applications, course listings, and videos, along with information about deadlines, costs, program advisors, and requirements are available to help students explore options for study in numerous off-campus locations. To learn more, visit the EpiCenter homepage: www.messiah.edu/studyabroad.

#### Internship Center

The Internship Center at Messiah is recognized nationally for its quality, comprehensiveness, and excellent resources. Since 2001, over 350 in Actidumin Resourcesquest and materials or have sought to model their programs after the Internship Center. A comprehensive website - www.messiah.edu/internship - makes information available to students and to interested employers.

The student-focused goals of the Internship Center are self-assessment, self-directed learning, professional development, integration of faith with work, and career exploration. Orientation, an integrated class, reflective learning activities, site visits, and employer evaluations are designed to support and promote student development.

Most Students participate in internships within the greater Harrisburg or Philadelphia areas, or through the international internship program in London, England. Internships may be pursued in other locations in the United States, or around the world, in consultation with Internship Center staff.

#### Learning Center

The Learning Center hires and trains student tutors who have done well in general education as well as their chosen majors. These tutors have a desire to assist their peers with class assignments and to share study strategies and apply those skills to course content.

The Center is available and helpful to students at all levels of competence. Students benefit from the one-on-one interaction with a trained tutor who tailors the sessions to each individual's needs. Tutors are available to facilitate small-group study sessions in addition to individual tutoring. ESL assistance is provided as well. The Center also offers Supplemental Instruction (S.I.), a program that targets "high-risk courses" rather than "high-risk students." Supplemental Instruction leaders attend selected class lectures, take notes, read course material, then plan and conduct three or more review sessions outside of class each week. The S.I. review sessions are interactive and utilize a variety of collaborative learning strategies as they review course material and prepare for tests.

Both tutoring and S.I. interaction are provided by the College at no additional cost to the student.

#### Murray Library

A key facility in the College's educational program is the Murray Library. It contains quiet study places for individual and group study; more than 300,000 items, including periodicals and other media; Media Services; the College and Brethren in Christ Archives; and a computer lab. Material is also available from other libraries through interlibrary loans. The library homepage serves as a gateway to web-based resources.

#### Writing Center

Any student at any stage in the writing process—from understanding an assignment and finding a topic to composing and revising a draft—may find assistance and encouragement at the Writing Center. Trained peer tutors advise and support student clients who visit the Writing Center, helping them become more confident and adept writers themselves.

# **General Education**

# John R. Yeatts, Ph.D.

Associate Dean of General Education and Common Learning

# John E. Stanley, Ph.D.

Director of the Core Course

# Mission

The General Education program at Messiah College encourages the development of knowledge, skills, and attitudes of intellect, character, and faith that Christians use in lives of service, leadership, and reconciliation.

# Purpose

The General Education program works along with the Schools and Departments to ensure that the Messiah College Mission and College-Wide Educational Objectives are addressed in the curricula of the college: Students learn academic skills common to all disciplines, achieve an introductory-level understanding of a variety of disciplines, and develop an ability to apply knowledge gained from these disciplines. In the process, students are challenged and nurtured toward mature intellect, character, and Christian faith. Moreover, service, leadership, and reconciliation are addressed at increasingly complex levels as students progress through the program.

# Program

#### Area One-Abilities of the Liberally Educated

- 1. First Year Seminar (3 credits)
- 2. Created and Called for Community (3 credits)
- 3. Oral Communication (3 credits)
- 4. Writing Enriched course\* (3 credits)

#### Area Two—Liberal Education

1. Mathematical and Natural Sciences (9 credits)

Mathematical Science (3) Laboratory Science (3) Science, Technology, and the World (3) Social Sciences and History (6 credits) One course from two of the following categories: Social Science (3) European History (3) United States History (3) 3. Humanities and Arts (9 credits) Literature (3) One of the following: Religion (3) Philosophy (3) Arts (3) 4. Languages\*\* and Culture (9 credits) One of the following: Two semesters of the same language\*\* (6) plus a cross-cultural studies course (3) OR Three semesters of the same language\*\* (9) 5. Non-Western Studies (2-3 credits)

#### Area Three—Christian Faith (6 credits)

- 1. Knowledge of the Bible (3)
- 2. Christian Beliefs (3)

#### Area Four-Social Responsibility

- 1. Health and Physical Education (2 courses)
- 2. Engaging a Pluralistic World: Interdisciplinary Perspectives (3 credits)

One of the following:

Ethics in the Modern World (3) World Views (3) Pluralism in Contemporary Society (3)

\*Each student is required to complete a writing-enriched course. Approved courses are listed in each semester's course schedule with a "W" attribute. The selected course may, but need not, simultaneously meet the W requirement and another curricular requirement.

\*\*Messiah currently offers the following languages, which may be used to fulfill the General Education Languages and Cultures requirement: French, German, Greek, Hebrew, Latin, and Spanish.

# **Interdisciplinary Courses**

Opportunities for interdisciplinary study are included in various sections of the General Education curriculum. At times this represents a course taught by an individual instructor, while at other times a team-teaching approach is used with two or

three faculty members jointly working in the course. Listed below are categories of courses which represent the interdisciplinary areas of the General Education curriculum. Lists of specific courses which meet the General Education requirements in these categories are available each semester from the Registrar and are included in course registation materials. Topics in each category vary from semester to semester.

#### First Year Seminar

An introduction to the intellectual life of the College for first-year students. This is done in the context of a small discussion-oriented seminar designed around specific themes proposed and taught by individual faculty from a variety of academic disciplines. Emphasis is given to developing important academic skills such as writing, reading, and critical thinking.

#### Created and Called for Community

The central question to be considered is, "What is my vocation as a faithful steward of God's creation?" Through examining literary, historical, artistic, philosophical, and theological works, students engage in the biblical themes of forgiveness, compassion, nonviolence, peacemaking, justice, and racial and gender reconciliation through the lens of the College's unique religious identity and foundational values, with a particular focus on the importance of community.

#### Science, Technology and the World

An interdisciplinary exploration of the nature, methodology, and scope of science with special emphasis on the interrelationship between science and culture.

#### Non-Western Studies

An engagement with cultures or people whose heritage and/or present life has been significantly shaped by customs, practices, and ideas outside the European tradition.

#### **Cross-Cultural Studies**

A field-based examination of one or more cultures which seeks to increase the students' appreciation for and understanding of cultural traditions other than their own. Requires three weeks of on-site study, including home-stays or ethnographic fieldwork, in addition to readings, lectures, and site visitations.

#### Ethics in the Modern World

An examination of various approaches to moral decision-making and an application of these approaches to selected contemporary ethical issues and problems.

#### World Views

An examination of the various belief systems which have shaped and continue to shape people's lives with special emphasis on how these belief systems compare and contrast with a Christian worldview.

#### Pluralism in Contemporary Society

An examination of contemporary issues and problems arising out of the racial, ethnic, class, gender, and religious diversity of American society, with a special emphasis on raising the students' awareness of the effects of inequality, prejudice, and

# **General Studies Courses**

# GEST 040 (formerly GEN 040) Study Skills (1-2)

Development and application of basic skills to promote effective study. Includes time management, motivation, goal setting, reading skills, note taking, learning theory, and preparation for examination-taking. Open to all students, but required of all conditionally admitted students.

### GEST 101 (formerly GEN 101) Career Planning and Decision-Making (1)

Exploratory course designed for students who are uncertain about their major and/or career goals. Emphasizes applying decision-making skills to career information gathered throughout the course. (Pass/Fail grade only.)

### GEST 140 (formerly GEN 140) Adaptation to American Education (1)

Focus on adjustment to American culture and educational processes with special attention to language needs and skills necessary for academic success. (Pass/Fail grade only.)

# GEST 210 (formerly GEN 210) Racial Healing (1)

This course focuses on racial justice and uses an experiential methodology to assist students to better understand the problems of racism and specific strategies used to bring about the healing of racism. Admission only with permission of the instructor. Graded Pass/Fail.

#### IDWR 099 (formerly ENG 105) Basic Writing (3)

Intensive workshop in writing, focusing on discovery, drafting, revision, and editing. Designed to be taken in conjunction with the First Year Seminar. Does not count toward the English Major or Minor.

# Writing Across the Curriculum

The Writing Across the Curriculum Program at Messiah College is composed of a College-wide community of teacher-scholars committed to the principle that writing is a fundamental mode of self-discovery, intellectual understanding, and human interaction. Therefore, the program is further committed to the principle that both the teaching of writing and the use of writing to further and disseminate human insight into the world around us is the responsibility of every educator.

The specific objectives of the WAC Program in terms of curriculum are outlined in other documents, but the fundamental mission of the WAC Program includes the following:

- To ensure that all students will graduate with abilities in writing that will enable them to communicate effectively with various audiences and in multiple writing situations.
- To encourage all students to understand and employ writing as a means of

learning and self-discovery, and to encourage the use of writing as a means of life-long learning.

- To equip faculty members in their efforts to be more effective teachers of writing, and to promote the use of writing as a fundamental form of pedagogy across all disciplines.
- To nurture a culture of writing on campus that values and celebrates writing and reading in all areas of campus life.

The writing program at Messiah includes four classes: (1) a basic writing course, (2) a First Year Seminar, (3) a writing-enriched course marked with a "w" suffix on the course schedule, and (4) a writing-enriched course developed for the major (major-w).

- 1. Basic Writing Although not a course required of the majority of our entering students, basic writing is an important element in any writingacross-the-curriculum program. It will both help students who have particular needs and limit the number of severe writing problems that teachers in the First Year Seminar program will need to address. Because placement in this course represents an entrance deficiency, the hours it represents fall under the "elective" category in the General Education/Major/Elective scheme. This part of the writing program, for those of whom it is required, may be satisfied by completing IDWR 099 Basic Writing during the fall semester of the student's first year.
- 2. First Year Seminar The seminar is the standard first-year writing experience in our program, and is consequently required of all students. While the content topics of each seminar vary widely, there is a substantially common approach to writing instruction and related assignments among the seminars. The requirement must be satisfied in the student's first year by completing one of the many First Year Seminars which are offered primarily during the fall semester.
- 3. Writing Enriched Course ["W" Course] A student may take any "W" course to satisfy the writing requirement. Approved courses are listed in each semester's course schedule and are identified by a "W" designation (suffix). The selected course may, but need not, simultaneously meet the "W" requirement and another general education, elective, or minor requirement.
- 4. Writing Enriched Course in the Major [Major-W] The major-w course is taken within the students' chosen disciplines; its primary purpose, in relation to writing, is to allow students to begin to acquire familiarity with the expectations of their own professional discourse communities. There is considerable variation in the kinds of courses into which various majors incorporate the writing emphases; each department is responsible for addressing this requirement as part of the academic major.

# School of the Arts

# Richard E. Roberson, D.M.A.

Dean

- Department of Music
- Department of Theatre
- Department of Visual Arts
- Interdisciplinary Arts Management Major

The School of the Arts fosters excellence through artistic practice and scholarship in a Christian environment.

The School of the Arts

- trains artists through a balance of discipline and exploration.
- develops students towards professional artistry and cultivates aesthetic integrity through critical dialogue.
- grounds students in the history and traditions of their discipline.
- utilizes historical perspectives as a point of departure for individual growth.
- engages the student with experiences in and beyond the classroom.
- collaborates with a wide variety of arts organizations locally, nationally, and internationally.
- encourages analytical, reflective, and expressive responses to the Christian faith through artistic mediums.
- orients students to serving the community through the arts.

# Interdisciplinary Arts Management Major

The Arts Management degree prepares graduates for work in the front office of nonprofit arts organizations such as galleries, museums, theatres, and music performance groups of all types. Students will receive training in both the arts and business, so that they may make sound decisions in both areas. It will also enable them to effectively communicate with both the artists with whom they work, and the businessoriented supporters of the arts organization.

The degree requires students to do extensive work in music, theatre, or the visual arts, so that they have a "hands-on" understanding of an artist's life and work.

Students in the degree will choose an emphasis in one of the three artistic areas, while doing some study in all three areas. Students will also receive a thorough background in business, giving them the tools to make the sound financial decisions which enable and support the artistic work of the organization. Preparation in the arts and business will come together in specific training for arts management, including a requiired internship with a local arts organization.

#### Arts Management Major (72-73 credits)

ACCT 141 Financial Accounting (3) BIS 230 Computer Accplications (3)\* BUSA 281 Applied Statistics for Management I (3) One of the following: BUSA 381 Business Law I (3) BUSA 382 Business Law II (3) ECON 110 Economics of Social Issues (3) HRM 120 Principles of Management (3) MATH 107 Applied Math for Management (3) MRKT 230 Marketing Principles (3) Two of the following: BIS 343 Introduction to E-Commerce (3) BUSA 380 Small Business Development (3) MRKT 337 Advertising (3) MRKT 357 Personal Selling ART/MUSI/THEA 401 Arts Management (3) INTE 394 Internship and Monthly Seminar (4)

#### Students must choose one of the following emphases: Music, Theatre, or Visual Arts

#### **Music Emphasis**

Two of the following: ARTH 150 Art History I (3) ARTH 151 Art History II (3) ARTH 309 History of Modern Art (3) THEA 340 History of Theatre I (3) THEA 341 History of Theatre II (3) Applied Major Courses (MUAP) (8) MUTH 101 Music Theory I (3) MUTH 102 Music Theory II (3) MUEN elective (.5) MUEN 112 Choral Ats Society (.5) MUMH 304 History of Music II (3) MUMH 305 History of Music III (3) MUMH 338 Studies in Ethnic Music (2) MUSI 481 Senior Seminar in Music (1) Five credits to be selected from the following: MUED 227 Instrument Repair (3) MUED 251 Conducting I: Fundamentals (2) MUEN electives (1-3) MUMH 303 Music History I (3) MUSI 230 Opera Workshop (3)

MUSI 271 Music Theatre (3) MUSI 343 Piano Pedagogy (3) MUSI 452 Vocal Pedagogy (3)

#### Theatre Emphasis

One of the following: ARTH 150 Art History I (3) ARTH 151 Art History II (3) ARTH 309 History of Modern Art (3) MUMH 304 History of Music II (3) MUMH 305 History of Music III (3) One of the following: ARTH 310 Topics in NonWestern Art (3) MUMH 338 Studies in Ethnic Music (2) THEA 110 Introduction to Theatre (3) THEA 115 Production Practicuum (3) THEA 150 Introduction to Technical Theatre (3) THEA 240 Survey in Dramatic Literature (3) THEA 340 History of Theatre I (3) THEA 341 History of Theatre II (3) Six elective credits in Theatre (6) THEA 470 Theatre Capstone Project (3) THEA 475 Theatre Capstone Seminar (3)

#### Visual Arts Emphasis

Two of the following: MUMH 304 History of Music II (3) MUMH 305 History of Music III (3) THEA 340 History of Theatre I (3) THEA 341 History of Theatre II ( 3) One of the following: ARTH 150 Art History I (3) ARTH 151 Art History II (3) ARTH 309 History of Modern Art (3) ARTH 310 Topics in NonWestern Art (3) ART 171 Foundations of Drawing (3) ART 182 Color and Design (3) ART 282 Form, Space, and Media (3) Nine elective credits in studio art (9) ART 493 Art Seminar (3)

**NOTE:** To complete their major, all students must pass the Computer Competency Exam.

\* All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introducton to Computers.

# MUSIC

# William J. Stowman, D.M.A.

Chair, Department of Music

# Faculty

Professors R. Roberson, W. Stowman

Associate Professors T. Dixon, K. Peddell, D. Thomas

Assistant Professors B. Genevro, M. Harcrow

Artists in Residence L. Tedford, R. Wilt

Senior Lecturers E. Henderson, D. Savarino, R. Zwally

# **Majors and Minors**

The Department of Music offers a major that leads to a B.S. degree and Pennsylvania Instructional I teacher certification: Music Education, K–12

The Department of Music also offers the following majors: Music (B.A.) Concentrations: Performance Church Music Commercial Music Composition

The Department of Music offers the following minors: General Music Church Music

# **Program Requirements**

The Music (B.A.) curriculum offers a basic education in music with four options for concentration: performance, church music, commercial music, or composition. In addition, this degree offers the opportunity to minor in a non-music area. The B.S. in Music Education leads to Pennsylvania certification to teach all areas of music in public schools.

### Music Application and Audition

Students who wish to enroll in a music program must complete a one-page music application form and schedule an audition. After acceptance into the College as an entering student, a prospective music major should schedule a music audition through the Music Office. The audition includes evaluation in the following areas:

- 1. Skill level in one principal area of performance. Prospective music majors are asked to prepare two contrasting selections for solo performance at the audition. If you are currently taking private lessons, be sure to consult your teacher who will help you select appropriate music.
- 2. Skill level on the piano. Applicants are asked to demonstrate at least an elementary skill at the keyboard. You are encouraged to play a prepared selection at the audition.
- 3. Ability to sight-sing. You will be asked to sing at sight several melodies, employing either a neutral syllable ("la") or sol-feggio.

#### Performance Expectations for Music Majors

All music majors are required to perform publicly. Each semester, students majoring in music are required to register for MUSI 001 Concert Attendance. Each week music students and music faculty assemble for Performance Class, a period devoted to solo and small group performance. Minimal performance requirements are as follows: freshmen are expected to perform one time during the academic year; sophomores, juniors, and seniors are expected to perform one time each semester (except when student teaching); all fourth-year students present a shared senior recital. In addition, all music majors demonstrate progress in their principal area of performance through Music Juries held at the end of the semester.

#### Change of Applied Major

Students wishing to change their applied area of study must re-audition in the new applied area. A student may surrender departmental scholarship money for the original applied area based on the results of the audition in the new applied area.

#### Private Music Lessons

Private lessons in voice, piano, organ, and orchestral instruments are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half-hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Students are expected to take 14 lessons per semester.

Please visit www.messiah.edu/music for a complete detailed listing of departmental and degree requirements. From the Department of Music homepage, choose

"Current Students" then "Department Handbook."

# Music

Music Education Major (96 credits) MUED 140 Voice Class (1) MUED 201 Introduction to Music Education (with Field Exp) (1) MUED 211 String Class (1) MUED 221 Percusson Class (1) MUED 222 Brass Class (1) MUED 251 Conducting I: Fundamentals (2) MUED 301 Curr. & Instr: 6-12 Choral Music (with Field Exp) (3) MUED 311 Woodwind Class (1) One of the following: MUED 351 Conducting II: Choral (2) MUED 352 Conducting II: Instrumental (2) MUED 401 Curr. & Instr.: Instrumental Music 4-12 (with Field Exp) (3) MUED 402 Curr. & Instr.: K-5 General Music (with Field Exp) (3) MUMH 303 History of Music I (2) MUMH 304 History of Music II (3) MUMH 305 History of Music III (3) MUMH 338 Studies in Ethnic Music (2) MUSI 481 Senior Seminar (1) Six credits MUSI electives (6) MUTH 101 Music Theory I (3) MUTH 102 Music Theory II (3) MUTH 107 Sight Singing and Ear Training I (1) MUTH 108 Sight Singing and Ear Training II (1) MUTH 109 Keyboard I (1) MUTH 110 Keyboard II (1) MUTH 201 Music Theory III (3) MUTH 202 Music Theory IV (3) MUTH 207 Sight Singing and Ear Training III (1) Twelve credits of the applied major (MUAP) (12) Six credits of music ensembles (MUEN) (6) MUSI 001 Concert Attendance Piano Proficiency Exam Senior Recital (solo or joint) EDUC 120 The Teaching Profession (1) EDUC 201 Education and American Society (3) EDUC 438 Student Teaching Music (9) PSYC 203 Educational Psychology (3) 6 credits of MATH/COSC/STAT xxx GenEdMath/Comp. Sci./Stats (6) 3 credits of ENGL xxx American or British Literature (3)

#### Music Major (57 credits)

MUED 140 Voice Class (1)

MUED 251 Conducting I: Fundamentals (2)

MUMH 303 History of Music I (2)

MUMH 304 History of Music II (3)

MUMH 305 History of Music III (3)

MUMH 338 Studies in Ethnic Music (2)

MUSI 485 Senior Seminar (1)

MUTH 101 Music Theory I (3)

MUTH 102 Music Theory II (3)

MUTH 107 Sight Singing and Ear Training I (1)

MUTH 108 Sight Singing and Ear Training II (1)

MUTH 109, 110 Keyboard I, II (1, 1)

MUTH 201 Music Theory III (3)

MUTH 202 Music Theory IV (3)

MUTH 207 Sight Singing and Ear Training III (1)

Applied Major (MUAP) (8)

Music Ensembles (MUEN) (6)

Piano Proficiency Exam

Senior Recital (solo or joint)

Twelve additional credits of MUAP or MUSI electives, or one of the following concentrations:

# 1) Church Music

Three additional credits of the Applied Major

MUGE 209 Psalms, Hymns and Spiritual Songs (3)

One of the following:

MUCM 431 Church Music Administration (3)

MUCM 443 Practicum in Church Music (1-2)

Three to five credits MUSI Electives

Students in Church Music are encouraged to investigate the Contemporary Christian Music Program at Martha's Vineyard (www.bestsemester.com). Credits taken during the one semester program at Martha's Vineyard can be transferred for credit into the Messiah College program.

# 2) Performance

Eight additional credits of Applied Major MUSI Electives (4)

# 3) Commercial Music

MUCM 336 Music Business (3)

MUCM 351 Electronic Music and MIDI (3)

The following courses taken at Temple University:

MUS 0320 Audio Engineering (2)

MUS 4113, 4114 Jazz Improvisation: Theory and Practice I, II (2, 2)

Students in Commercial Music are encouraged to investigate the Contemporary Christian Music Program at Martha's Vineyard (www.bestsemester. com). Credits taken during the one semester program at Martha's Vineyard can be transferred for credit into the Messiah College program.

# 4) Composition

MUAP 181 Composition (8) MUCM 351 Electronic Music and MIDI (3) Music (MUAP, MUEN, or MUSI) Electives (1)

#### General Music Minor (18 credits)

MUTH 101 Music Theory I (3) MUTH 102 Music Theory II (3) MUTH 107 Sight Singing and Ear Training I (1) MUTH 108 Sight Singing and Ear Training II (1) One of the following: MUMH 304 Music History II (3) MUMH 305 Music History III (3) Applied Music (MUAP) courses (4) MUAP, MUSI, or MUEN Electives (3)

#### Church Music Minor (18 credits)

MUTH 101 Music Theory I (3) MUTH 107 Sight Singing and Ear Training I (1) MUGE 209 Psalms, Hymns and Spiritual Songs (3) MUED 251 Conducting I: Fundamentals (2) MUCM 431 Church Music Administration (3) Applied Music (MUAP) courses (3) Music (MUAP, MUEN, or MUSI) Electives (3)

#### Applied Music (1–2)

Levels for Applied Music courses

Applied Music (MUAP) courses may be taken at four different levels: Level 1xx is for first year students, level 2xx is for sophomores, level 3xx is for juniors, and level 4xx is for seniors (e.g., MUAP 131 Organ is for first year students, MUAP 231 Organ is for sophomores, etc.). Listed below are all of the instruments currently available at Messiah – only the 1xx level courses are listed.

MUAP 111 Voice	MUAP 154 Euphonium
MUAP 121 Piano	MUAP 155 Tuba
MUAP 122 Harp	MUAP 161 Violin
MUAP 131 Organ	MUAP 162 Viola
MUAP 135 Harpsichord	MUAP 163 Cello
MUAP 141 Flute	MUAP 164 Double Bass
MUAP 142 Oboe	MUAP 165 Guitar
MUAP 143 Clarinet	MUAP 166 Bass Guitar
MUAP 144 Bassoon	MUAP 167 Jazz Improvization
MUAP 145 Saxophone	MUAP 168 Praise and Worship Keyboard
MUAP 146 Alto Recorder	MUAP 171 Percussion
MUAP 151 French Horn	MUAP 181 Composition
MUAP 152 Trumpet	MUAP 183 Conducting
MUAP 153 Trombone	

#### MUAP 111 Applied Voice Lessons I, II, III, IV

Private lessons available to music as well as non-music majors. Students may earn one credit in applied music by taking a half-hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

### MUAP 121 Applied Piano Lessons I, II, III, IV

Private lessons in piano are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half-hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

### MUAP 122 Applied Harp Lessons I, II, III, IV

Private lessons in harp are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fees applied.

#### MUAP 131 Applied Organ Lessons I, II, III, IV

Private lessons in organ are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 135 Applied Harpsichord Lessons I, II, III, IV

Private lessons in harpsichord are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 141 Applied Flute Lessons I, II, III, IV

Private lessons in flute are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 142 Applied Oboe Lessons I, II, III, IV

Private lessons in oboe are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 143 Applied Clarinet Lessons I, II, III, IV

Private lessons in clarinet are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 144 Applied Bassoon Lessons I, II, III, IV

Private lessons in bassoon are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

Private lessons in saxophone are available to music as well as non-music majors.

Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week.

**MUAP 146 Applied Alto Recorder I, II, III, IV** Private lessons in alto recorder are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half-hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 151 Applied French Horn Lessons I, II, III, IV

MUAP 145 Applied Saxophone Lessons I, II, III, IV

Additional fee applied.

Private lessons in French horn are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 152 Applied Trumpet Lessons I, II, III, IV

Private lessons in trumpet are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 153 Applied Trombone Lessons I, II, III, IV

Private lessons in trombone are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 154 Applied Euphonium Lessons I, II, III, IV

Private lessons in euphonium are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 155 Applied Tuba Lessons I, II, III, IV

Private lessons in tuba are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 161 Applied Violin Lessons I, II, III, IV

Private lessons in violin are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

### MUAP 162 Applied Viola Lessons I, II, III, IV

Private lessons in viola are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

### MUAP 163 Applied Cello Lessons I, II, III, IV

Private lessons in cello are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 164 Applied Double Bass Lessons I, II, III, IV

Private lessons in double bass are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 165 Applied Guitar Lessons I, II, III, IV

Private lessons in guitar are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 166 Applied Bass Guitar Lessons I, II, III, IV

Private lessons in bass guitar are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 167 Applied Jazz Improv Lessons I, II, III, IV

Private lessons in jazz improvisation are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 168 Praise & Worship Keyboard Lessons I, II, III, IV

Private lessons in praise and worship keyboard are available to music as well as nonmusic majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 171 Applied Percussion Lessons I, II, III, IV

Private lessons in percussion are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

### MUAP 181 Applied Composition Lessons I, II, III, IV

Private lessons in composition are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a one-hour lesson per week. Additional fee applied.

#### MUAP 183 Applied Conducting Lessons I, II, III, IV

Private lessons in choral or orchestral conducting are available to music as well as non-music majors. Students may earn one credit in applied music by taking a half hour lesson per week or two credits by taking either two half-hour lessons or a onehour lesson per week. Additional fee applied.

#### MUCM 336 (formerly MUS 336) Music Business (3)

The business side of a career as a performer and/or composer. Study of copyright laws, contracts, booking concerts, preparing a publicity packet, publicizing concerts, fundraising, and other related matters.

#### MUCM 351 (formerly MUS 351) Electronic Music and MIDI (3)

Applied study of contemporary electronic music techniques. Applications of synthesizers, computers, and software in a variety of musical styles, utilizing the musical instrument digital interface (MIDI). Prerequisites: Music Theory I or equivalent; intermediate piano proficiency. (Alternate years, offered 2008–2009.)

#### MUCM 431 (formerly MUS 431) Church Music Administration (3)

Organization and administration of a comprehensive church music program: multiple choir programs, rehearsals, specific musical services, facilities and equipment, budgets, literature, and recent trends in church music.

#### MUCM 443 (formerly MUS 443) Practicum in Church Music (1-3)

Guided experience in leading church choirs. Student assigned to direct a local church choir (children, youth, or adult) with observations by College supervisor.

#### MUCM 444 (formerly MUS 444) Practicum in Studio Teaching (1)

Practical experience in teaching music in studio setting. Observation and evaluation by applied music instructor. Prerequisites: MUTH 101, 102, minimum of four credits in applied music.

#### MUED 140 (formerly MUS 140) Voice Class (1)

Applied voice in a class setting. Principles and techniques of voice production. Emphasis on basic knowledge of the voice in preparation for teaching vocal music in the classroom or choral setting.

#### MUED 201 Introduction to Music Education (with Field Experience) (1)

This course is designed to provide students with an introduction to the music teaching profession. Course content is intended to prepare students for subsequent courses required for Pennsylvania certification to teach vocal and instrumental K-12. This course will include field experience that is comprised of visits to local schools to do observation only (band, orchestra, chorus, elementary general and secondary general music). Prerequisite: EDUC 120.

# MUED 211 (formerly MUS 211)String Class (1)

Applied strings in a class setting. Designed to provide a practical playing knowledge of each string instrument (violin, viola, cello, string bass). Principal objective to prepare prospective school teachers to instruct beginners in strings.

# MUED 221 (formerly MUS 221) Percussion Class (1)

Applied percussion in a class setting. Emphasis on techniques of playing snare drum in first portion of semester. In the latter part of the course attention is given to timpani, mallet, and effect instruments.

# MUED 222 (formerly MUS 222) Brass Class (1)

Applied brass in a class setting. Basic techniques, problems, and teaching techniques for each brass instrument. Emphasis on ensemble performance.

# MUED 227 (formerly MUS 227) Maintenance and Repair of Band Instruments (3)

Instruction in maintaining wind, brass, and percussion instruments as well as laboratory experience in making all repairs that do not require an extensive professional repair shop. Students assemble a repair kit capable of handling normal school instrument repairs and perform a major reconstruction of a damaged instrument as a final project.

# MUED 251 Conducting I: Fundamentals (2)

First semester experience intended to emphasize the most fundamental aspects of conducting. Emphasis will be placed on basic techniques such as score reading, ear training for the conductor, basic beat patterns, use of the left hand, and transposition. Fundamentals of Conducting will prepare students to move into 300-level Instrumental and/or Choral Conducting.

# MUED 301 Curriculum and Instruction: 6-12 Choral Music (with Field Experience) (3)

This course is designed to prepare pre-service teachers with materials and teaching strategies to plan and implement choral music instruction in the middle and secondary school settings: Grades 6-12. The course will involve the study of music education philosophies, repertoire selection, rehearsal planning, and assessment.. Prerequisite: Admission to the Teacher Education Program. The course will include three, three-hour visits including one in a local middle school and two in local high schools. These visits will be observation only.

# MUED 311 (formerly MUS 311) Woodwind Class (1)

Study of the clarinet to establish a basis for other woodwinds. Basic techniques of playing the flute, oboe, saxophone, and bassoon.

# MUED 331 Practical and Technical Applications in Music Education (with Field Experience) (3)

This course is designed to prepare pre-service teachers with materials and strategies to plan and implement general music instruction in the middle and high school settings: Grades 6-12. Included will be the application of guitar, keyboard skills and computer technology for the classroom. In addition, students will explore theory pedagogy and other music electives appropriate for these settings. A limited experience (four one-hour visits) to local middle schools and high schools will be included for the purpose of observation. Prerequisite: Admission to Teacher Education Program or permission of instructor.

#### MUED 351 Conducting II: Choral (2)

This course will emphasize techniques directly associated with choral conducting. Further development of aural and physical techniques will be enhanced by discussion of repertoire, programming, and other issues specific to the preparation, teaching, and performance of choral music. Prerequisite: MUED 251.

#### MUED 352 Conducting II: Instrumental (2)

This course will emphasize techniques directly associated with instrumental conducting. Further development of aural and physical techniques will be enhanced by discussion of repertoire, programming, and other issues specific to the preparation, teaching and performance of instrumental music. Prerequisite: MUED 251.

# MUED 401 Curriculum and Instruction: Instrumental Music 4-12 (with Field Experience) (3)

This course is designed to prepare pre-service teachers with materials and teaching strategies to plan and implement instrumental music instruction in school music programs in grades 4-12. The course will involve the study and evaluation of music education philosophies, materials, methods, approaches, and issues. Prerequisite: Admission to the Teacher Education Program. Regular visits to local elementary schools to teach individual instrumental lessons are included (approximately six hours).

# MUED 402 Curriculum and Instruction: K-5 General Music (with Field Experience) (3)

This course is designed to prepare pre-service teachers with material and teaching strategies to plan and implement general music instruction in the elementary school setting: Grades K-5. The course will involve the study and evaluation of general music education philosophies, materials, methods, approaches, and issues. Prerequisite: Admission to the Teacher Education Program and MUED 301.

#### MUED 421 (formerly MUS 421) Marching Band Methods and Materials (3)

Materials and techniques for training high school marching bands. Offered as an independent study experience with the student assigned to work with a practicing high school band director.

#### **Music Ensembles**

Participation in ensembles is open to all students. (All Ensembles are Pass/Fail grade only.)

#### MUEN 111 (formerly ENS 111) Concert Choir (.5)

Consists of approximately 45 mixed voices, chosen by audition. Literature includes mainly sacred choral music drawn from the Renaissance through the 20th century.

Principal performances include Christmas concert and Spring concert, Spring Break tour and concerts at area churches. Two rehearsals per week. (Pass/Fail grade only.)

# MUEN 112 (formerly ENS 112) Choral Arts Society (.5)

College-community chorus, consisting of approximately 100 singers. Active in the four-month period, January to April. Annual spring concert presents a major choral work with full orchestral accompaniment. (Pass/Fail grade only.)

# MUEN 113 (formerly ENS 113)Women's Ensemble (.5)

This chorus of 75 College women functions in the Fall Semester and participates in the Christmas concert. One rehearsal per week. (Pass/Fail grade only.)

# MUEN 114 (formerly ENS 114) JazzSINGERS (.5)

Consists of 16 vocalists plus a rhythm section. Performs jazz and popular classics. Performance schedule includes two on-campus appearances and occasional programs at local events. Two rehearsals per week. (Pass/Fail grade only.)

# MUEN 115 (formerly ENS 115) Men's Ensemble (.5)

Open to all students by audition. Performs a variety of repertoire for male voices for Christmas concerts, spring concerts, and chapels. One rehearsal per week. (Pass/Fail grade only.)

# MUEN 116 (formerly ENS 116) Chamber Singers (.5)

A select group of 12–16 members drawn from Concert Choir. Performs a cappella music of all periods. One rehearsal per week. Performs in Christmas and spring concerts and spring break tour with Concert Choir. (Pass/Fail grade only.)

# MUEN 117 Pit Orchestra (.5)

Select ensemble which accompanies musical theatre and opera productions. (Pass/Fail grade only.)

# MUEN 121 (formerly ENS 121) Symphony Orchestra (.5)

Symphony orchestra open on an audition basis. Performs literature drawn from the Baroque through the 20th century, presenting three concerts each academic year. Also accompanies major choral and stage productions. Two rehearsals per week. (Pass/Fail grade only.)

# MUEN 122 (formerly ENS 122) Symphonic Winds (.5)

Concert band of selected instrumentation, composed of 60 musicians, open on an audition basis. Performs the highest quality in wind band literature as well as light and popular selections. Two rehearsals per week. (Pass/Fail grade only.)

# MUEN 124 (formerly ENS 124) Brass Choir (.5)

This ensemble of 16 brass players performs in the annual Christmas concert. Each semester the ensemble also appears in several area churches. Two rehearsals per week. (Pass/Fail grade only.)

# MUEN 125 (formerly ENS 125) Accompanying (.5)

Guided experience in piano accompanying. Requires accompanying for one per-

former in weekly lessons and public appearances. (Pass/Fail grade only.)

#### MUEN 126 (formerly ENS 126) Flute Choir (.5)

An ensemble of 10–12 flutes including alto and bass. Performs in Chapel and occasional off-campus worship services. One rehearsal per week. (Pass/Fail grade only.)

#### MUEN 127 (formerly ENS 127) Chamber Ensemble (.5)

Various chamber groups are formed with the purpose of providing performing experience to qualified instrumentalists. Includes groups such as Saxophone Quartet, String Quartet, Recorder Consort, and Trombone Choir. (Pass/Fail grade only.)

#### MUEN 128 (formerly ENS 128) Concert Handbell Choir (.5)

Includes 12 ringers chosen by audition in the fall. Performs in the Christmas concert, spring concert, and in various off-campus concerts. Two one-hour evening rehearsals per week. (Pass/Fail grade only.) (Pass/Fail grade only.)

#### MUEN 130 (formerly ENS 130) Guitar Ensemble (.5)

An ensemble of three to six performers that develops players' note reading ability and fingerstyle techniques. The group plays a wide variety of music from the Renaissance to the 20th century. The ensemble performs on and off campus. One rehearsal per week. (Pass/Fail grade only.)

#### MUEN 131 (formerly ENS 131) Percussion Ensemble (.5)

Consists of 10 to 12 members performing standard percussion and marimba ensemble repertoire. The group performs each semester. (Pass/Fail grade only.)

#### MUEN 132 (formerly ENS 132) Recorder Consort (.5)

Small ensemble designed to include players on soprano, alto, tenor, and bass recorders. The music performed is taken predominantly from the Renaissance and Baroque periods. The ensemble performs one or two times at Christmas as well as in the Small Ensembles Concert each spring. (Pass/Fail grade only.)

#### MUEN 133 (formerly ENS 133) Chamber Strings (.5)

String chamber groups rehearse weekly and perform on and off campus. Includes groups such as String Trio, String Quartet, or String Octet. (Pass/Fail grade only.)

#### MUEN 134 Jazz Combo (.5)

Small group jazz offering for students with developed improvisation skills. Rehearses once a week, performs for on-campus and off-campus functions. (Pass/Fail grade only.)

#### MUEN 135 Wind Ensemble (.5)

This 40–50 member select wind ensemble performs the highest level of wind band repertoire. Available for the most experienced players, this group rehearses two times per week, performs on and off campus. Records regularly and tours yearly. (Pass/Fail grade only.)

#### MUEN 138 United Voices of Praise (.5)

Gospel choir of approximately 60-100 singers that meets once a week, performs on

campus as well as local and regional churches. (Pass/Fail grade only.)

# MUEN 139 (formerly ENS 139) Music Ministry Team (.5)

Small student ensembles of variable instrumentation which perform in off-campus worship services. Open by audition. (Pass/Fail grade only.)

# MUEN 140 (formerly ENS 140) Messiah College Singers (.5)

A 20-member student ensemble which performs contemporary and traditional sacred music. Open by audition. (Pass/Fail grade only.)

# MUEN 141 (formerly ENS 141) JazzONE (.5)

Big Band ensemble performs standard arrangements and more contemporary charts. Appears on campus each semester and occasionally in off-campus programs and tours. One rehearsal per week. (Pass/Fail grade only.)

# MUEN 142 (formerly ENS 142) JazzTWO (.5)

Big Band ensemble performs standard arrangements and more contemporary charts. Appears on campus each semester. One rehearsal per week. (Pass/Fail grade only.)

# MUEN 143 (formerly ENS 143) Woodwind Quintet (.5)

Chamber ensemble consisting of flute, oboe, clarinet, horn, and bassoon. (Pass/Fail grade only.)

### MUEN 144 (formerly ENS 144) Brass Chamber Music (.5)

Brass quartets or quintets formed to perform throughout the semester. (Pass/Fail grade only.)

# MUEN 145 (formerly ENS 145) Trumpet Ensemble (.5)

An all-trumpet ensemble comprised of music majors that performs locally and competes nationally. (Pass/Fail grade only.)

# MUEN 146 (formerly ENS 146) Piano Quartet (.5)

Ensemble of piano duets and quartets for campus and community performances. (Pass/Fail grade only.)

# MUEN 147 (formerly ENS 147) Saxophone Quartet (.5)

An ensemble comprised of soprano, alto, tenor, and baritone saxophones. (Pass/Fail grade only.)

# MUEN 148 (formerly ENS 148) Saxophone Quartet (.5)

A small traveling music ministry ensemble comprised of six to eight students that travels extensively during the summer. A wide range of music is performed highlighting various talents of the performers. Students are selected by audition. (Pass/Fail grade only.)

# MUGE 101 (formerly MUS 104) Fundamentals of Music Theory (3)

This course will provide students the history and appreciation of Western music from the Renaissance to the 20th century through lecture, listening, and class discussion,

along with an opportunity to study the basic concepts involved in the analysis and composition of music. Designed to satisfy the General Education requirement for non-music majors, this course also serves as a viable precursor to Music Theory I (MUTH 101) so that music majors or minors with no prior knowledge of theory can better prepare to follow the course of study required for their degrees. Fundamentals of Music Theory will not count toward the degree for students who major or minor in music. Meets the General Education Arts requirement.

#### MUGE 203 (formerly MUS 203) Music Through Piano (3)

An introduction to Western music, including American popular styles, using the performance medium of the keyboard: piano, harpsichord, and synthesizer. Includes hands-on experience in performing keyboard music. Meets General Education Arts requirement.

#### MUGE 208 (formerly MUS 208) Music Through String Instruments (3)

Provides students with an introduction to the history and appreciation of Western music from the Renaissance to the 20<sup>th</sup> Century and the opportunity to study the elements of music through playing the violin, viola, cello, or bass. The use of the elements of music by the major composers of the various historical periods is examined through reading, listening to recordings, class discussion, and the concert attendance. Students who do not have their own instrument can use one provided by the Department of Music for a nominal instrument use fee. Meets General Education requirement.

#### MUGE 209 (formerly MUS 209) Psalms, Hymns, and Spiritual Songs (3)

An introduction to music employed in Christian worship, including consideration of the worship experience, historical and current hymnody, and music for the trained choir. Includes hands-on experience in both keyboard playing and song leading. Meets General Education Arts requirement.

#### MUGE 210 (formerly MUS 210) American Popular Music (3)

Survey concentrates on musical styles and types popular in American culture during the 19<sup>th</sup> and 20<sup>th</sup> Centuries; content includes the investigation of such types as pop songs, ragtime, jazz, and rock. The course requires active participation in listening to and/or performing popular music. Meets General Education Arts requirement.

#### MUGE 213 (formerly MUS 213) Music Through Percussion (3)

Provides students with an introduction to the history and appreciation of Western music from the Renaissance to the 20<sup>th</sup> Century. Provides opportunity to study the elements of music through percussion instruments. The course, which will include the study of music by the major composers of the various historical periods, is examined through reading, listening to recordings, class discussion, and concert attendance. Meets General Education Arts requirement.

#### MUGE 217 (formerly MUS 217) Music Through Singing (3)

This course helps students to gain an understanding of the voice through lecture/ demonstration, recital attendance, and singing in both class and individual settings. Class members will experience a variety of vocal styles and singing techniques as they survey the Western tradition through vocal music. Meets General Education Arts requirement.

# MUGE 218 (formerly MUS 218) Music Through Guitar (3)

Students will explore the role of the guitar and related fretted strings throughout the various historical periods from the Renaissance through the 20th century. Class members experience the basic elements of music as they learn to perform chords and melodies on the guitar. Other activities include watching videos, listening to recorded guitar music, and attendance at live concerts. Class members must supply their own guitars. Two class sessions and one-hour lab weekly. Meets General Education Arts requirements.

### MUGE 219 (formerly MUS 219) Music Through the Recorder (3)

Provides students with an introduction to the history and appreciation of Western music from the Renaissance to the 20th Century. Provides opportunity to study the elements of music through learning to play the recorder. The use of the elements of music by the major composers of the various historical periods is examined through reading, listening to recordings, class discussion, and concert attendance. Meets General Education Arts requirement.

### MUGE 223 (formerly MUS 223) Jazz Improvisation (3)

Studies in the art of jazz improvisation through jazz theory, improvisation techniques, transcription and performance. Students will also survey the history of jazz and illuminate its impact on American music and society, including contemporary worship. Meets General Education Arts requirement.

#### MUGE 224 (formerly MUS 224) Songwriting for Beginners (3)

An introduction to the art of songwriting and music composition. Designed for the novice musician, this course also accommodates those with more substantial skills in the area of music. Class participants will have the opportunity to develop original ideas into song with the guidance of a composition professor. Through the writing of songs and setting of text (both sacred and secular), this course will provide for the study of music theory, composition, and history. The course will also provide students with the history and appreciation of Western music from the Renaissance to the 20<sup>th</sup> century through lecture, listening and class discussion. Meets the General Education Arts requirement.

#### MUGE 225 (formerly MUS 225) Guitar for the Church Musician (3)

Applied guitar study with the performance in worship as the focus. This course will serve as a guide for the use of the guitar in modern worship settings. Through attention to guitar technique, chord reading, music reading, and accompanying, the students will develop the skills necessary to lead and accompany worship in a variety of styles. Students must have their own guitar. Meets General Education Arts requirement.

# MUMH 243 (formerly MUS 243) Music Literature (2)

Aural recognition of music literature as it has appeared within the six major style

periods of Western music. Principal activity involves listening to various forms and types of recorded music.

# MUMH 303, 304, 305 (formerly MUS 303, 304, 305) History of Music I, II, III (2, 3, 3)

Study of music from medieval to present day, stressing musical styles of various historical periods, schools, and individual composers.

### MUMH 338 (formerly MUS 338) Studies in Ethnic Music (2)

Designed to provide students with musical background opportunity to study a given non-Western musical culture in depth. Through readings, listening, and direct musical experience students will come to understand some of the cultural and aesthetic differences of a specific non-Western music system. Meets General Education Non-Western Studies requirement.

#### MUSI 001 (formerly MUS 001) Concert Attendance (0)

Involves both a weekly music seminar (student recital period) and a minimum of ten concerts/recitals per semester. Required of music majors each semester of full-time study except student teachers. (Pass/Fail grade only.)

#### MUSI 230 (formerly MUS 230) Opera Workshop (.5)

Designed to provide students with an opportunity to focus on literature from Opera. This course will study basic knowledge and protocol of the stage as well as the craft of performing opera. Topics include stage direction and management, role development, learning of repertoire, and performance techniques. The course will include performance of "opera moments" in addition to a final Opera Scenes Concert. Designed as an opportunity for the more advanced singer, admission to this course will be based on the instructor's discretion.

#### MUSI 271 (formerly MUS 271) Musical Theatre (3)

Practical experience involving principles and techniques of musical theatre; performance and production; singing, acting, dancing, lighting, set construction; course culminates in the performance of a full musical or light opera (offered three consecutive years in a four-year cycle). Cross-listed with THEA 260.

#### MUSI 343 (formerly MUS 343) Piano Pedagogy (3)

Fundamentals and techniques of teaching piano, with studio teaching of individuals and small groups. Survey of methods and literature for pianists of various age levels, supplementary materials for music theory and appreciation, and teaching labs.

#### MUSI 401 Arts Management (3)

Examines the skills needed to run an arts organization, including fundraising, budgeting, grants writing, publicity, event planning, and board development. Cross-listed with ART 401 and THEA 401.

#### MUSI 452 (formerly MUS 452) Vocal Pedagogy (3)

A study of the anatomy of the voice and the singing process. An exploration of the techniques and methods most commonly used in teaching voice. A survey of related topics such as diction, repertoire, vocal health, and voice classification. Prerequisite:

one year of MUAP 111 and one year of MUAP 211.

### MUSI 481 (formerly MUS 481) Senior Seminar in Music (1)

This capstone course investigates music's role in contemporary education, worship, and in the broader spectrum of American culture. Each student will formulate a personal artistic philosophy relating to his/her mission as an active Christian musician.

# MUSI 491 (formerly MUS 491) Independent Study (1-3)

Independent study and research under the supervision of a College instructor, whose approval must precede enrollment. Topic to be determined by the student in consultation with the supervising instructor.

### MUSI 497, 498 (formerly MUS 497, 498) Major Honors (3, 3)

Independent creative and/or research program for junior and senior-level students who have a strong academic record for a minmum of five previous semesters of college study. Overall GPA of 3.5 and departmental approval required for enrollment.

### MUTH 101 (formerly MUS 101) Music Theory I (3)

Basic elements of music, including scales, intervals, triads; emphasis on the analysis of melody and rhythm; harmonic analysis of root position chords; transpositions for all orchestral instruments; elementary keyboard harmony.

### MUTH 102 (formerly MUS 102) Music Theory II (3)

Harmonic analysis of music written during the common practice period (ca. 1700–1850); composition in chordal texture, orchestrating for small ensembles (e.g., string quartet, brass quintet).

# MUTH 107, 108, 207 (formerly MUS 107, 108, 207) Sight Singing and Ear Training I, II, III (1, 1, 1)

Sight singing of melodies employing solfeggio; aural analysis of melodic, rhythmic, and harmonic aspects of music.

#### MUTH 109, 110 (formerly MUS 109, 110) Keyboard I, II (1, 1)

Keyboard instruction in a lab setting; emphasis upon functional skills such as sight reading, score reading, harmonization, and transposition; designed to prepare music majors to successfully complete the Keyboard Proficiency Test.

#### MUTH 201 (formerly MUS 201) Music Theory III (3)

Harmonic analysis of music written during the Romantic period (ca. 1840–1910); composition projects in the more elementary forms (e.g., binary, ternary, theme and variations); orchestrating for ensembles and chamber orchestra; advanced keyboard harmony.

#### MUTH 202 (formerly MUS 202) Music Theory IV (3)

Analysis of 20th-century music; composition projects in more complex forms; orchestrating for wind ensemble, jazz band, etc.; advanced keyboard harmony, including modulation.

# THEATRE

Valerie R. Smith, Ph.D. and Tymberley A.Wittrig, M.F.A. Co-Chairs, Department of Theatre

# Faculty

Associate Professors E. Cohn, V. Smith

Assistant Professor T. Wittrig

# **Majors and Minors**

The Department of Theatre offers the following major: Theatre (B.A.) Emphases: Acting Directing Technical Production and Design

The Department of Theatre offers the following minor: Theatre

The Department of Theatre offers a rigorous exploration of historic and contemporary theatre practice within a vibrant liberal arts program. Our curriculum cultivates the stewardship of intellect and imagination through a variety of Christian perspectives. In a dynamic exchange between learning and doing, students engage theatre through a wealth of hands-on experiences. Our students participate in theatre as a forum for civic dialogue where history, culture, politics, and religion meet to give form and meaning to the human experience. Upon graduation, our students are prepared not only to meet the artistic and technical challenges of 21st century theatre, but also to serve and lead a new generation of artists and scholars.

The Department also contributes to General Education at Messiah College. It offers a variety of courses in theatre that are designed to fulfill the College's General Education Arts requirement. The Department sponsors theatrical productions and lectures that are attended by the Messiah community as well as residents of the

# Theatre

The Theatre major at Messiah College leads to a B.A. degree with an emphasis in acting, directing, or technical production and design. Our curriculum includes course work in dramatic literature, theatre history, and theory as well as applied studio courses in acting, directing, and technical production and design. Our program is designed to develop students' creative gifts as they gain knowledge and experience in a variety of educational settings.

# **Enrichment Program**

We recognize that professional theatre thrives in urban centers. For this reason, we believe it is essential for students to learn about themselves and their craft in the city. During the first semester of the junior year, theatre majors may attend the Messiah College-Philadelphia Campus at Temple University. Enrichment credits may also be earned at department-approved programs throughout North America and Europe. Our students have enriched their Grantham education through theatre training at the Gaiety School of Acting, Dublin; Royal Holloway, University of London; The Wesley Institute, Sydney Australia; and internships with professional theatre companies.

Students return to the Grantham campus during the second semester of the junior year to continue course work and propose a Senior Capstone Project. This portfolio project represents the culmination of the student's training and serves as a bridge to graduate programs, professional theatre, or other job opportunities.

# Acting Emphasis

The acting emphasis at Messiah College offers students the benefits of individualized attention in an intimate environment. Studio courses, workshops, and master classes are complemented by a robust season that includes three mainstage, one blackbox, and several student-directed productions each year. The January term provides an intensive exploration of musical theatre or theatre for young audiences culminating in a fully mounted production.

# **Directing Emphasis**

The directing emphasis is designed to equip directors with both foundational and intimate knowledge of the theatrical process. Directors apply course work in directing theory, acting, design, and production to studio projects as well as to a fully mounted, one-act play in the Senior Capstone Project.

# Technical Production and Design Emphasis

The technical production and design emphasis is structured to provide students with more than just working skills. Along with learning about and experiencing some of the current technological advances in theatre production, our curriculum assists students in developing an aesthetic perception of their art. With a combination of classroom and realized production and design experiences, students will learn the communication skills necessary to work effectively not only with actors and directors, but also with other designers and technicians.

The Theatre major requires a minimum of 50 credit hours, with emphases in acting, directing, or technical production.

#### Theatre Major

#### Theatre Core Credits (27-29 credits)

THEA 115 Production Practicum (1 credit per semester) THEA 120 Introduction to Acting (3) THEA 150 Introduction to Technical Theatre and Design (3) THEA 240 Survey of Dramatic Literature and Criticism (3) THEA 340 History of Theatre I: Antiquity to Renaissance (3) THEA 341 History of Theatre II: Renaissance to Postmodernism (3) THEA 470 Theatre Capstone Project (1–3) THEA 475 Theatre Capstone Seminar (3)

#### Enrichment Program (11 credits)

A minimum of 11 credits at a department-approved enrichment institution (11)

One or more of the following Emphases: Acting Emphasis (12 credits) THEA 220 Voice and the Actor (3) THEA 225 Movement (3) THEA 320 Acting Techniques (3) THEA xxx Elective in Theatre (3)

#### Directing Emphasis (12 credits)

ENGL 448 Shakespeare (3) THEA 230 Fundamentals of Play Directing (3) THEA 320 Acting Techniques (3) THEA xxx Elective in Theatre (3)

#### Technical Production and Design Emphasis (12 credits)

THEA 230 Fundamentals of Play Directing (3) THEA 350 Scenographic Techniques (3) THEA 450 Theatre Design (3) THEA xxx Elective in Theatre (3)

#### Theatre Minor (18 credits)

THEA 115 Production Practicum (1) THEA 120 Introduction to Acting (3) THEA 150 Introduction to Technical Theatre and Design(3) Electives (minimum of 11 additional credits from the Theatre curriculum)

#### THEA 110 (formerly THE 103)Introduction to Theatre (3)

A survey of the theatre as a humanizing art. Students are introduced to historical and cultural influences, dramatic theory, staging styles and techniques, and major movements in dramatic writing. Analytical readings of play texts are supplemented by viewings of live and recorded performance. In addition to play analysis, students are introduced to the production process through workshops and guest lectures on the role of the actor, director, producer, and stage manager as well as the costume, lighting, set, and sound designer in current departmental and local productions. Meets General Education Arts requirement.

# THEA 112 (formerly THE 150) Introduction to Dance (3)

This course provides an overview of dance as a cultural and performative art form, with an experiential component designed to give the student a basic level of skill in the fundamentals of dance. Using classroom and studio settings, the student will gain an understanding of the historic, cultural, and physical developments of dance through an introduction to traditional dance forms (cultural), concert dance forms (ballet, modern, jazz, tap), and creative dance vocabulary for application in educational settings. Meets General Education Arts requirement.

# THEA 115 (formerly THE 130) Production Practicum (1)

Participation required in at least one departmental production activity. Required every semester the student is a full-time major. Open to Theatre majors and minors only.

# THEA 120 (formerly THE 110) Introduction to Acting (3)

An overview of basic acting skills such as relaxation, concentration, and imagination, and also of the various ways in which the actors' art has been conceived from the ancient Greeks to the present. There are selected readings, discussion, laboratory exercises, improvisation, and scene work. Meets General Education Arts requirement.

# THEA 150 (formerly THE 118) Introduction to Technical Theatre and Design (3)

An introduction to the backstage arts and technology of theatrical production, designed to give the student a broad understanding of the history and development of theatre crafts, as well as an understanding of the basic principles and technical procedures used in the design and execution of scenery, costumes, lighting, and sound. Meets General Education Arts requirement.

# THEA 220 (formerly THE 121) Voice and the Actor (3)

Vocal production as an integral part of the psychomuscular process of breathing, relaxation, and energy. Attention is given to the anatomy and physiology of human vocal projection with practical application to theatrical performance.

# THEA 225 (formerly THE 122) Movement (3)

Basic movement instruction designed to discover the psychological and physical control over movement, and to practice applying these skills to role development.

# THEA 230 (formerly THE 246) Fundamentals of Play Directing (3)

Basic elements of directing, with laboratory work in theatrical problems and short scenes. Readings and discussions on directing theory. Prerequisite: THEA 120.

THEA 240 (formerly THE 235) Survey of Dramatic Literature and Criticism (3) Considers the development of dramatic literature, theory, and criticism from the

Antiquity to postmodernism. Students interact with the ideas of seminal theorists and apply them through a variety of play scripts and productions.

#### THEA 250 (formerly THE 218) Stage Management (3)

Introduction and application of basic principles of stage management, with emphasis on the paperwork and procedures required in theatrical productions. Considers other forms of performance which utilize a stage manager such as opera, dance, and touring productions. Prerequisite: THEA 150.

# THEA 260 (formerly THE 271) Musical Theatre (3)

Introduction to the theory and practice of musical theatre production. Includes preparing and performing a musical. Cross-listed with MUSI 271.

# THEA 261 (formerly THE 238) Theatre for Young Audiences (3)

Introduction to the theory and practice of theatre for young audiences. Includes preparing and performing a play for children.

# THEA 320 (formerly THE 222) Acting Techniques (3)

Development of a viable acting technique through the coordination of thought, movement, and voice. Emphasizes textual and character analysis as the focal point of the acting process. Course work includes exercises, monologues, scene work, and keeping a journal. Prerequisite: THEA 120.

# THEA 361 (formerly THE 230) Drama in Education (3)

Exploration of the theories and techniques of pedagogical uses of drama and theatre activities within educational environments. Emphasis on K–12 students in the areas of curriculum support, social and personal development, and creative development. Prerequisite: THEA 110, THEA 120, or THEA 115.

# THEA 340 (formerly THE 232) History of Theatre I: Antiquity to Renaissance (3)

This survey course considers evidence of the theatrical past including theatre architecture, production values, acting and directing styles, and the political and social movements that informed these traditions. Through selected readings, discussion, projects, and multimedia, students consider seminal moments in the development of the theatre from its conjectured origins in ancient Greece and Rome to the European Renaissance.

# THEA 341 (formerly THE 234) History of Theatre II: Renaissance to Postmodernism (3)

A continuation of THEA 340. Considers the politics of historiography and the implications of cultural theory in shaping our own contemporary "readings" of the theatrical past.

#### THEA 350 (formerly THE 318) Introduction to Scenographic Techniques (3)

Exploration and application of graphic fundamentals for use in theatrical design. Emphasis on two dimensional forms of communication such as drafting, costume rendering, and mechanical perspective. Prerequisite: THEA 150.

#### THEA 360 Topics in Theatre (1-3)

Selected topics in theatre not currently included in course offerings. Topics may include performance styles and techniques; studies of particular periods, movements, or innovators in theatre history, theory, dramatic criticism, and literature; technical production and design.

# THEA 362 (formerly THE 341) Studies in Irish Theatre: Gaiety School of Acting (4)

An applied study of Irish theatre facilitated by the faculty at the Gaiety School of Acting, Dublin, Ireland. Intensive acting workshops are complemented by seminars in Irish dramatic literature and attendance at a variety of Dublin theatres. Prerequisites: Audition, approval of the Department of Theatre Chair. (Offered January Term only.)

# THEA 363 (formerly THE 240) Theatre for Social Change (3)

This course explores theatre created in the pursuit of social justice. Students interact with 20<sup>th</sup> century performance practices that use theatre as a venue for consciousness raising and civic dialogue. Theoretical approaches are applied in laboratory sessions which invite the student to evaluate the efficacy of specific processes. Course material includes western and non-western forms of community animation. Meets General Education Arts requirement.

# THEA 381 (formerly THE 391) Theatre Internship (1–3)

Theatre work under the supervision of a theatre professional. Open to junior and senior Theatre majors who have completed at least four Theatre courses.

# THEA 401 Arts Management (3)

Examines the skills needed to run an arts organization, including fundraising, budgeting, grants writing, publicity, event planning, and board development. Cross-listed with ART 401 and MUSI 401.

# THEA 450 (formerly THE 418) Theatre Design (3)

Studio course designed to give the student an examination into the chosen area of study. Emphasis on textural interpretation, design theory and aesthetics, development of specific design concepts, and the means to express and communicate the design. Prerequisites: THEA 150 and THEA 350.

# THEA 470 (formerly THE 426) Theatre Capstone Practicum (1-3)

Senior Theatre majors will conduct a significant final portfolio project as supervised and approved by the Theatre faculty.

# THEA 475 (formerly THE 439) Theatre Capstone Seminar (3)

Explores the relationship of theatre arts to faith and ethics. Requires students to discover connections between theatre practice and their philosophical presuppositions while preparing them for careers in the respective fields. Prerequisite: Must be taken in conjunction with a senior-level project. (Offered Fall Semester only.)

# THEA 491 Independent Study (1-3)

Independent study or research in theatre under the supervision of an instructor. Instructor's approval must precede enrollment.

# VISUAL ARTS

# Christine A. Forsythe, M.F.A.

Chair, Department of Visual Arts

# Faculty

Professors S. Caroselli, C. Forsythe, D. Forsythe, K. Hettinga, T. Prescott Associate Professors D. Finch, D. Kasparek, G. VanDyke Lecturer B. Good

# **Majors and Minors**

The Department of Visual Arts offers the following majors: Studio Art (B.A.) Concentrations: Graphics and Technology Studies Interdisciplinary Studies Mixed Media Studies Two-Dimensional Studies Art Education (B.S.) Concentrations: Graphics and Technology Studies Interdisciplinary Studies Mixed Media Studies Two-Dimensional Studies Art History (B.A.)

The Department of Visual Arts offers the following minors: Studio Art Art History

The Department of Visual Art offers majors leading to a B.A. in studio art, a B.A. in art history, and a B.S. in art education. The majors provide a strong curriculum and thorough training in the arts within the framework of a liberal arts education and with a commitment to a Christian world view. Our goals are to foster excellence in

the arts and to serve God and society through the use and development of creative gifts. The three majors have all been accredited by the National Association of Art and Design (NASAD), and the Art Education Program is accredited by the Pennsylvania Department of Education (P.D.E.). The department sponsors a complete exhibition calendar as well as annual lectures that are attended by the Messiah community and residents of the Harrisburg area. The department takes advantage of the close proximity to several large metropolitan areas and takes department-wide semi-annual trips to the museums in New York and other cities.

#### The Facilities

The studio facilities in the Climenhaga Fine Arts Center provide excellent resources for painting, drawing, printmaking, and photography. The Fine Arts Center also houses the M. Louise Aughinbaugh Art Gallery, where work by artists of all genres and media, as well as by students, is exhibited. Frey Hall contains well-equipped sculpture, ceramics, and textile studios, a state-of-the-art computer graphics lab, and specially equipped art history classrooms. The department also has a facility known as The Warehouse, which houses private and semi-private studio spaces for art students during their senior year.

# Studio Art Major

The Studio Art major at Messiah College leads to a B.A. degree. The major is designed to provide students with both breadth and depth. Students begin the curriculum with a five-course foundation sequence: Art Foundations and a drawing course are taken in the first year, along with a selection of two foundational design courses completed in the sophomore year. Students also begin a four course art history sequence which includes a survey of the history of Western Art and Modern Art History. The studies in art history are normally completed by the junior year. In the sophomore year, art students begin to select individual studio courses from four areas: Graphics and Technology (computer graphics and computer art), Two-Dimensional Studies (drawing, painting, photography and printmaking), Mixed Media Studies (ceramics, paper processes, sculpture, and textile arts), and Interdisciplinary Studies where students combine course work from the above concentrations with course work from other majors. In the senior year, students stay at the Grantham Campus. Studio art majors prepare an exhibit of work in their area of study. By graduation, art students should demonstrate a knowledge of several areas of the visual arts and depth in one area.

#### Sophomore Review

All Studio Art and Art Education majors are required to go through the sophomore review at the end of their sophomore year. This review is typically held at the end of March. Students are required to present a portfolio of the work that they have accomplished thus far in their program to a panel of studio faculty. The faculty rate the student's work as average, above average, or below average. Students must receive an average or an above average rating to continue in the program. Students who receive below average must re-submit their portfolio during the next review. All Art students must maintain a 2.0 or above GPA in their major to continue in the program.

# List of Courses:

Art Education Courses: ART 355, ART 356, ART 407 Capstone Core Courses: ART 483, ART 485, ART 487, ART 493, ART 494 Ceramics Courses: ART 220, ART 221, ART 320 Computer Art Courses: ART 211, ART 312, ART 411 Drawing Courses: ART 171, ART 271, ART 339, ART 371, ART 372 Foundational Core Courses: ART 110, ARTH 111, ART 182, ART 282 General Education Courses: ART 103, ART 107, ART 130 Graphic Design Courses: ART 112, ART 237, ART 337, ART 347, ART 435, ART 437 Painting Courses: ART 143, ART 215, ART 315, ART 415 Photography Courses: ART 251, ART 351 Printmaking Courses: ART 262, ART 263, ART 283, ART 364, ART 462 Textile Design Courses: ART 224, ART 234, ART 334, ART 438

# Concentrations:

Studio Art majors along with Art Education majors choose from one of the four concentrations to do in-depth studio study. Students must take a minimum of five courses in their concentration.

**Graphics and Technology** (computer graphics and computer art): Students use the latest programs such as InDesign, QuarkExpress, Illustrator, Photoshop, Flash, Freehand, and Dreamweaver in our Macintosh lab system which is continually updated. Students choose from a variety of course work that will develop students' skills and aesthetic sensibilities in the production of computer-generated art work, graphic-oriented materials and Web design.

**Two-Dimensional Studies** (drawing, painting, photography and printmaking): This concentration emphasizes the study of a variety of media and processes that are traditionally used to produce two-dimensional work. Students choose to study from an extensive menu of related course work including courses such as: figure drawing, illustration, lithography, intaglio and relief printmaking, and various levels of painting and photography courses.

**Mixed Media Studies** (ceramics, paper processes, sculpture, and textile arts): The mixed media concentration is extensively three-dimensional course work. Students select studying various sculptural processes such as construction and assemblage, carving, casting, and furniture design. They can also choose textile-related work such as wearable art, surface design, and weaving. In addition, various levels of ceramic studies are offered.

Interdisciplinary Studies: Students combine course work from the above concentrations with course work from other majors outside the department. This concentration is designed for the student who is interested in investigating related arts outside of the department and combining them with the studio art curriculum. Students create their concentration curriculum under the guidance of their advisors and with the approval of the department.

# Studio Art Major (57 credits)

ART 110 Introduction to Visual Literacy (3) ARTH 111 Introduction to Art History (3) ART 171 Foundations of Drawing (3) ART 182 Color and Design (3) ART 282 Form, Space, and Media (3) One of the following: ARTH 150 Art History I: Ancient through Medieval Art (3) ARTH 151 Art History II: Renaissance through Contemporary Art (3) ARTH 309 History of Modern Art (3) ARTH 3xx Elective Art History (3) ART 493 Art Seminar (3) ART 494 Senior Exhibit (3)

Students must take three different processes, one 300 level course, and Advanced Studies to complete the 15 total credits within the concentration, in addition to 12 credits in Cross Concentration Studies.

1) Graphics and Technology Studies Concentration: ART 237 Graphic Design I: Typography (3) One of the following Computer/Digital Art courses: ART 211 Computer Art (3) ART 312 Digital Studio (3) One of the following required level II courses: ART 337 Graphic Design II: Digital Imaging and Typography (3) ART 411 Advanced Computer Art (3) One of the following courses: ART 347 Publication Portfolio (3) ART 435 Computer Graphics and Multimedia (3) ART 437 Graphic Design III: Advanced Typography and Design (3) All concentration students must take: ART 483 Advanced Graphics and Technology Studies (3) **Cross-Concentration Studies** Two of the following from Two-Dimensional Studies (6 hrs. total): ART 215 Painting I (3) One of the following: ART 232 Screen Printing (3) ART 330 Intaglio and Relief Printmaking (3) ART 331 Lithography (3) ART 251 Photography I (3) ART 271 Intermediate Drawing (3) ART 339 Illustration (3) Two of the following from Mixed Media Studies (6 hrs. total): ART 136 Paper Processes (3) ART 283 Furniture Design (3) One of the following: ART 220 Ceramics I: Wheel Techniques (3)

ART 221 Ceramics I: Handbuilding (3) One of the following: ART 224 Textiles Surface Design (3) ART 234 Weaving Techniques (3) ART 334 Wearable Art (3) One of the following: ART 262 Construction and Assemblage (3) ART 263 Carving (3) ART 364 Casting (3)

# 2) Mixed Media Studies Concentration:

Three of the following (9 hrs. total): ART 136 Paper Processes (3) ART 283 Furniture Design (3) One of the following: ART 220 Ceramics I: Wheel Techniques (3) ART 221 Ceramics I: Handbuilding (3) One of the following: ART 224 Textiles Surface Design (3) ART 234 Weaving Techniques (3) ART 334 Wearable Art (3) One of the following: ART 262 Construction and Assemblage (3) ART 263 Carving (3) ART 364 Casting (3) Take one of the following: ART 320 Advanced Ceramics (3) ART 462 Advanced Sculpture (3) ART 438 Advanced Textiles Processes (3) Or an additional textiles course: ART 224 Textiles Surface Design (3) ART 234 Weaving Techniques (3) ART 334 Wearable Art (3) All concentration students must take: ART 485 Advanced Mixed Media Studies (3) **Cross-Concentration Studies** Two of the following from Two-Dimensional Studies (6 hrs total): ART 215 Painting I (3) ART 251 Photography I (3) ART 372 Figure Drawing (3) One of the following: ART 232 Screen Printing (3) ART 330 Intaglio and Relief Printmaking (3) ART 331 Lithography (3) ART 339 Illustration (3) Two of the following from Graphics and Technology Studies (6 hrs. total): One of the following: ART 112 Introduction to Graphic Problem Solving (3) ART 237 Graphic Design I: Typography (3)

One of the following: ART 211 Computer Art (3) ART 312 Digital Studio (3)

# 3) Two-Dimensional Studies Concentration: Three of the following (9 hrs. total): ART 215 Painting I (3) ART 251 Photography I (3) ART 271 Intermediate Drawing (3) ART 372 Figure Drawing (3) One of the following: ART 232 Screen Printing (3) ART 330 Intaglio and Relief Printmaking (3) ART 331 Lithography (3) ART 339 Illustration (3) Take one of the following: ART 315 Painting II (3) ART 351 Photography II (3) ART 371 Advanced Drawing (3) Or an additional printmaking course: ART 232 Screen Printing (3) ART 330 Intaglio and Relief Printmaking (3) ART 331 Lithography (3) Or an additional drawing course: ART 271 Intermediate Drawing (3) ART 372 Figure Drawing (3) All concentration students must take: ART 487 Advanced Two-Dimensional Studies (3) **Cross-Concentration Studies** Two of the following from Graphics and Technology Studies (6 hrs. total): One of the following: ART 112 Introduction to Graphic Problem Solving (3) ART 237 Graphic Design I: Typography (3) One of the following: ART 211 Computer Art (3) ART 312 Digital Studio (3) Two of the following from Mixed Media Studies (6 hrs. total): ART 136 Paper Processes (3) ART 283 Furniture Design (3) One of the following: ART 220 Ceramics I: Wheel Techniques (3) ART 221 Ceramics I: Handbuilding (3) One of the following: ART 224 Textiles Surface Design (3) ART 234 Weaving Techniques (3) ART 334 Wearable Art (3) One of the following: ART 262 Construction and Assemblage (3) ART 263 Carving (3)

ART 364 Casting (3)

**4) Interdisciplinary Studies Concentration** – Under the guidance of an advisor, and with the approval of the department, a student selects/designs course work to create a unique program with a minimum of 12 credits, in addition to one of the following advanced studies courses.

One of the following:

ART 483 Advanced Graphics and Technology Studies (3)

ART 485 Advanced Mixed Media Studies (3)

ART 487 Advanced Two-Dimensional Studies (3)

# **Cross-Concentration Studies**

A student pursuing the **Interdisciplinary Studies Concentration** must take at least one course from each of the three other concentrations for a total of **12 credits** as delineated below:

ART 112 Introduction to Graphic Problem Solving (3) ART 211 Computer Art (3) ART 237 Graphic Design I: Typography (3) ART 312 Digital Studio (3) At least one of the following from Two-Dimensional Studies: ART 215 Painting I (3) ART 251 Photography I (3) ART 372 Figure Drawing (3) One of the following: ART 232 Screen Printing (3) ART 330 Intaglio and Relief Printmaking (3) ART 331 Lithography (3) ART 339 Illustration (3) At least one of the following from Mixed Media Studies: ART 136 Paper Processes (3) ART 283 Furniture Design (3) One of the following: ART 220 Ceramics I: Wheel Techniques (3) ART 221 Ceramics I: Handbuilding (3) One of the following: ART 224 Textiles Surface Design (3) ART 234 Weaving Techniques (3) ART 334 Wearable Art (3) One of the following: ART 262 Construction and Assemblage (3) ART 263 Carving (3) ART 364 Casting (3)

# Studio Art Minor (18 credits)

One of the following: ART 171 Foundations of Drawing (3) ART 182 Color and Design (3) ART 237 Graphic Design I: Typography (3) ART 282 Form, Space, and Media (3) One of the following: ARTH 150 Art History I: Ancient through Medieval Art (3) ARTH 151 Art History II: Renaissance through Contemporary Art (3) Twelve additional credits of ART electives (12)

#### Art Education

The Art Education major at Messiah College leads to a B.S. degree with teaching certification (K–12) accredited by the Pennsylvania Department of Education (P.D.E.). It is a demanding program with 131 credits necessary for graduation, but one that students have found very rewarding and an excellent preparation for a teaching career. The program combines the strength of two different areas—studio art and education. The Art Education major will complete the same curriculum as the studio major which includes choosing a concentration (as listed above) and completion of the senior exhibition experience. In addition, Art Education majors take the required education curriculum and art education curriculum as required by the P.D.E. Students in the Art Education major will matriculate through the major finishing with their professional semester of student teaching in the spring of their senior year. Art Education Majors are required to apply to the Teacher Education Program in their sophomore year. Art Education majors are also required to take the appropriate Praxis tests required by the P.D.E.

#### Art Education Major (95 credits)

ART 110 Introduction to Visual Literacy (3) ARTH 111 Introduction to Art History (3) One of the following: ARTH 150 Art History I: Ancient through Medieval Art (3) ARTH 151 Art History II: Renaissance through Contemporary Art (3) ART 171 Foundations of Drawing (3) ART 182 Color and Design (3) ART 282 Form, Space, and Media (3) ARTH 309 History of Modern Art (3) ARTH 310 Topics in Non-Western Art (3) ART 355 Elementary Curriculum Strategies (3) ART 356 Secondary Curriculum Strategies (3) ART 407 Art Curriculum and Instruction (3) ART 483/485/487 Advanced Studies in one concentration area (3) ART 493 Art Seminar (3) ART 494 Senior Exhibit (3) Concentration (one of four from Studio Art) (12) Cross-concentration studies (two each from two other concentrations) (12) 6 credits of MATH/COSC/STAT xxx GenEd Math/Comp. Sci./Statistics (6) ENGL xxx American or British Literature (3) EDUC 120 The Teaching Profession (with Field Experience)(1) EDUC 201 Education and American Society (3) EDUC 203 Educational Psychology (3) EDUC 318 Secondary Learning Environments (with Field Experience) (1) EDUC 331 Instructional Design and Assessment for Secondary Education (3) EDUC 437 Student Teaching: Art (9)

# Art History

Students studying Art History will earn a B.A. in Art History. The major at Messiah College is designed to give students knowledge of the art and architecture of Europe, Western Asia, and the Western Hemisphere. Upper-level courses will focus on a specific place or period, or will be worked around a theme such as spirituality and abstract art, artists and the theater, or biblical themes in the Middle Ages and Renaissance.

In the junior and senior years, students will spend one to three semesters at Messiah College's Philadelphia Campus, or in other approved programs in the United States or abroad. Students must be on the Grantham Campus for their Capstone Courses.

#### Art History Major (45 credits)\*\*\*

ARTH 150 Art History I: Ancient through Medieval Art (3) ARTH 151 Art History II: Renaissance through Contemporary Art (3) ARTH 261 Art Historical Methodologies and Theories (3) 15 credits of Art History - one course from each of the following areas: Ancient or Early Christian/Byzantine Art (3) Medieval or Renaissance Art (3) Baroque or Neoclassical Art (3) Modern or Contemporary Art (3) Non-Western Art (3) One of the following: ART 103 Introduction to Drawing (3) ART 171 Foundations of Drawing (3) ART 182 Color and Design (3) One of the following: ART 107 Introduction to Painting (3) ART 215 Painting I (3) ART 330 Intaglio and Relief Printmaking (3) ART 262 Construction and Assemblage (3) ART 263 Carving (3) ART 364 Casting (3) ARTH 492 Art History Capstone (3) 12 additional credits in advanced art history, or museum studies.

\*\*\*ARTH 150, 151, and 261 must be taken at the Grantham Campus; other courses may be taken either at Messiah, at Temple University while resident at the Messiah College-Philadelphia Campus, or in another approved program in the United States or abroad.

# Art History Minor (18 credits)

ARTH 150 Art History I: Ancient through Medieval Art (3) ARTH 151 Art History II: Renaissance through ContemporaryArt (3) ARTH 261 Art Historical Methodologies and Theories (3) Nine additional art history credits approved by the advisor (9)

# **Humanities**

# Humanities Major (36 credits)

This is an interdisciplinary major allowing great flexibility for students to structure their own program in consultation with their academic advisor. Please refer to the "Interdisciplinary Humanities Major" section of the Catalog for more information about this program.

# ART 103 Introduction to Drawing (3)

Introduction to the basic materials, methods, and subjects of drawing. Observations and development of imagery are stressed. Meets General Education Arts requirement. (Does not meet Major requirement.)

#### ART 107 Introduction to Painting (3)

Introduction to the history and process of oil painting. Emphasizes studio work, with attendance at museum exhibits and research of master and modern painters to build appreciation and knowledge of the medium. Includes instruction in drawing, color theory, painting from nature, and abstraction. Meets General Education Arts requirement.

# ART 110 Introduction to Visual Literacy (3)

This class introduces students to basic creative problem-solving skills, processes, and methods in the analysis and creation of visual art. Students will solve visual problems and develop skills in concept/content development through the creation of various forms of visual art in a studio environment (majors only).

# ART 112 Introduction to Graphic Problem Solving (3)

An introduction to conceptual approaches for solving visual communication problems effectively and creatively within the artistic discipline of graphic design. Meets the General Education Arts requirement.

# ART 130 Introduction to Computer Art (3)

Introduction to the history and use of the computer as a creative visual tool. Images are created with paint and drawing software as well as by manipulation of scanned objects and video-capture. Meets General Education Arts requirement.

#### ART 136 Paper Processes (3)

Introduction to various papermaking techniques, paper surface design, and bookmaking processes. Technical, aesthetic, and historical components are emphasized. Meets General Education Arts requirement.

#### ART 143 Introduction to Watercolor (3)

Introduction to the materials and techniques of painting in watercolor, with an appreciation of the accomplishments in this exacting medium. Meets General Education Arts requirement.

#### ART 171 Foundations of Drawing (3)

Introduction to the materials and processes of drawing. Observation, spacial organization, and the development of imagery are stressed. Meets General Education Arts requirement.

#### ART 182 Color and Design (3)

Study of the elements and principles of two-dimensional design, with an emphasis on color. Meets General Education Arts requirement.

# ART 211 Computer Art (3)

An introduction to the computer as a tool for image making, exploring drawings using pressure sensitive tablets and creating collages and layered images. Utilization of various input devices and output devices. Meets the General Education Arts requirement.

# ART 215 Painting I (3)

Introduction to the materials and techniques of oil painting, including preparation of supports. Emphasizes color, surface, and composition. Meets General Education Arts requirement.

# ART 220 Ceramics I: Wheel Techniques (3)

Introduces the basic wheel-thrown forms that are primarily utilitarian. Emphasizes clay making, glazing, and firing techniques. Meets General Education Arts requirement.

# ART 221 Ceramics I: Handbuilding (3)

Introduces the various techniques of pinching, coiling, slab building, and casting which are used in both a utilitarian and sculptural manner. Clay making, glazing, and firing techniques are emphasized. Meets General Education Arts requirement.

# ART 224 Textiles Surface Design (3)

Controlled dyeing will be the core of this course. Experimentation with various surface processes such as batik, resist dyeing, printing and direct painting on cloth will be explored. Meets General Education Arts requirement.

# ART 232 Screen Printing (3)

Introduction to the techniques of screen printing, including cut paper, film, gluebased, and photographic stencil methods. Meets General Education Arts requirement. Prerequisite: ART 103 or 171 or Instructor's consent.

# ART 234 Weaving Techniques (3)

The course will allow the student to investigate various processes of interlacing. Both on loom and off loom techniques will be explored along with basketry techniques. Meets General Education Arts requirement.

# ART 237 Graphic Design I: Typography (3)

Introduction to the fundamental aspects of type design, including the use of standard typefaces and creative type forms as elements in graphic design. Meets General Education Arts requirement.

# ART 251 Photography I (3)

Introduction to the camera and darkroom. Emphasizes using the camera as a tool for seeing, understanding imagery, and composition. Meets General Education Arts requirement.

# ART 262 Constructon and Assemblage (3)

An introduction to constructed and assembled sculpture. Includes techniques of con-126 — Messiah College Catalog 2007–2008 struction in wood, steel, and mixed media. Meets General Education Arts requirement.

#### ART 263 Carving (3)

An introduction to carving in wood and stone, with an emphasis on the acquisition of basic skills and the development of form. Meets General Education Arts requirement.

# ART 271 Intermediate Drawing (3)

Continuation of study in observation and spacial organization and mixed media processes. Conceptional development is emphasized. Prerequisite: ART 171.

#### ART 282 Form, Space, and Media (3)

Introduction to the principles and processes of organizing materials in space. Meets General Education Arts requirement.

# ART 283 Furniture Design (3)

An introduction to the design and construction of furniture. Prerequisite ART 282 or ART 262 or Instructor's consent.

#### ART 291 Art Practicum (1–3)

Work experience under professional supervision in gallery, museum, curatorial, public arts groups, graphic arts, photo studios, ad agencies, printers, and other work experiences related to the visual arts. Open to art majors, sophomores and above, who have completed at least three art courses.

#### ART 312 Digital Studio (3)

Creation of work using digital technology. Focusing on image series, book structures, and large format printing. Meets the General Education Arts requirement.

#### ART 315 Painting II (3)

Exploration of both abstraction and observation with a view toward developing a personal direction for subject matter and use of materials. Prerequisite: ART 215.

#### ART 320 Advanced Ceramics (3)

Sustained work in one or two areas of ceramics to facilitate conceptual and technical growth. Prerequisite: ART 220 or 221.

#### ART 330 Intaglio and Relief Printmaking (3)

Introduction to the techniques of monotype, relief, and intaglio printmaking. Meets General Education Arts requirement.

#### ART 331 Lithography (3)

Introduction to the techniques of lithography on aluminum plates and lithographic limestone slabs. Meets General Education Arts requirement.

#### ART 334 Wearable Art (3)

Draping and flat patterning techniques of clothing construction will form the core of this course coupled with advancing sewing skills: both machine and hand stitching. The student will use this skill to create and embellish wearable art forms of various complexities. Meets General Education Arts requirement.

# ART 337 Graphic Design II: Digital Imaging and Typography (3)

Design and preparation of text and image for published communication. Prerequisite: ART 237 or Instructor's consent.

# ART 339 Illustration (3)

Consideration of the image as a means of communication. Emphasizes text/picture interaction, technique, and composition. Prerequisite: ART 271 or Instructor's consent.

# ART 347 Publication Portfolio (3)

Application of design principles to publication graphics. Students will be linked with non-profit and on-campus design needs. Prerequisite: ART 237; ART 337 or ART 411.

# ART 351 Photography II (3)

Emphasizes continued technical growth and using the photograph as a means of expression. Recent concepts in photography considered. Prerequisite: ART 251.

# ART 355 Elementary Curriculum Strategies (3)

Preparation for teaching visual arts in grades K–6. Examines children's artistic development and explores applicable art programs, materials, and teaching techniques. Includes observation and participation in the public schools. (Must be admitted to the Teacher Education Program.)

# ART 356 Secondary Curriculum Strategies (3)

Preparation for teaching visual arts in grades 7–12. Examines artistic development of adolescent learners and explores appropriate teaching strategies, materials, and art-making activities. Includes observation and participation in the public schools. (Must be admitted to the Teacher Educaton Program.)

# ART 360 Topics in Art (3)

Selected topics in art not currently included in course offerings. Topics may include special processes, unique projects, and theory.

# ART 364 Casting (3)

An introduction to casting in various materials including clay, plaster, concrete, resin-impregnated glass, and metals. Meets General Education Arts requirement.

# ART 371 Advanced Drawing (3)

Execution of original work with advanced technical proficiency. Prerequisite: ART 271.

# ART 372 Figure Drawing (3)

Introduction to the human figure as a subject drawing. Advanced techniques and experimentation with mixed media processes. Prerequisite: ART 171 and Instructor's consent.

# ART 401 Arts Management (3)

Examines the skills needed to run an arts organization, including fundraising, budgeting, grants writing, publicity, event planning, and board development. Cross-listed with MUSI 401 and THEA 401.

# ART 407 Visual Arts Curriculum and Instruction (3)

A seminar emphasizing disciplinary content issues that are specific to visual arts teaching. Areas of focus include curricular and instructional decision-making processes; classroom management strategies; assessment techniques; adaptations for exceptional learners; instructional technology applications; and professional development. Prerequisite: Admission to the Professional Semester.

# ART 411 Advanced Computer Art (3)

Creation of a body of work that demonstrates growth and maturity towards conceptual, technical, and aesthetic mastery of computer processes and application. Prerequisite: ART 211 or ART 312.

# ART 415 Painting III (3)

Continued development of individual techniques and imagery. Prerequisite: ART 315.

# ART 435 Computer Graphics and Multimedia (3)

Utilization of the computer as a design tool, including drawing, image manipulation, page layout, and multimedia programs. Prerequisite: ART 237; ART 337 or ART 411.

# ART 437 Graphic Design III: Advanced Typography and Design (3)

This course builds on Graphic Design I and II. The course brings together serious thought about design issues and solves demanding and complicated design problems. Prerequisite: ART 337.

# ART 438 Advanced Textile Processes (3)

Execution of a cohesive body of work demonstrating technical excellence in a specific area of study. Prerequisite: Any two of the following: ART 224, ART 234, ART 334.

#### ART 442 Advanced Printmaking (3)

Study in one process, with an emphasis on original imagery and technical accomplishment. Prerequisite: ART 103 or ART 171 and two of the following: ART 232, ART 330, ART 331.

# ART 462 Advanced Sculpture (3)

Execution of a body of work reflecting growth and maturity. Prerequisite: Any two of the following: ART 262, ART 263, or ART 364.

# ART 483 Advanced Graphics and Technology Studies (3)

Execution of original work in graphics and technology area with advanced technical proficiency in preparation for senior exhibition. Prerequisite: completion of 12 concentration credits.

# ART 485 Advanced Mixed Media Studies (3)

Execution of original work in the mixed media area with advanced technical profi-

ciency in preparation for senior exhibition. Prerequisite: completion of 12 concentration credits.

# ART 487 Advanced Two-Dimensional Studies (3)

Execution of original work in the two-dimensional area with advanced technical proficiency in preparation for senior exhibition. Prerequisite: completion of 12 concentration credits.

# ART 491 Independent Study (1-3)

Independent research or studio work under the supervision of an instructor. Approval must be obtained prior to enrollment.

# ART 493 Art Seminar (3)

Explores the relationship of the Christian faith to contemporary art and to the student's individual area of study. For senior art majors only.

# ART 494 Senior Exhibit (3)

Creation and exhibition of work from the student's area of concentration(s). Preparation of resumé, slides, and portfolio.

# ART 497, 498 Major Honors (3, 3)

Independent creative and/or research two-semester project or program for juniorand senior-level students who have a strong academic record for a minimum of five previous semesters of college study. Overall GPA of 3.5; GPA of 3.5 in the major; and departmental approval required for enrollment.

# ARTH 111 Introduction to Art History (3)

This course introduces students to the field of art history—what it is, what it does, and how it does it—by exploring methods of looking at, analyzing, evaluating, and contextualizing art and ways of articulating thoughts and instincts about art, as well as by examining issues of quality and beauty and developing personal criteria and judgment. (Studio and Art Education Majors only).

# ARTH 150 Art History I: Ancient through Medieval Art (3)

Survey of works of art and architecture from prehistory to the year 1400.

#### ARTH 151 Art History II: Renaissance through Contemporary Art (3)

Survey of works of art and architecture from the year 1400 to the present.

# ARTH 261 Art Historical Methodologies and Theories (3)

A survey of art historical approaches, a history of the discipline, and an introduction to the critical theories current in art history. Prerequisite: ARTH 150 or ARTH 151, or Instructor's consent.

# ARTH 302 19th- and 20th-Century Art (3)

Studies of selected topics in the visual arts in Europe and America from the age of revolution to the contemporary period.

# ARTH 303 Ancient and Early Christian Art (3)

Studies in the visual arts of the ancient world from the Paleolithic through the first #30turi@fofstah@stah@stantagrap@an208%zantium. Prerequisite: ARTH 150, ARTH 151, or Instructor's consent.

# ARTH 304 Medieval and Renaissance Art (3)

Studies in the visual arts from the Northern European art of the early Middle Ages through the Italian High Renaissance. Prerequisite: ARTH 150, ARTH 151, or Instructor's consent.

#### ARTH 305 Reformation and Baroque Art (3)

Studies in the visual arts in Europe and the New World from early 16th-century Germany through the Enlightenment. Prerequisite: ARTH 150, ARTH 151, or Instructor's consent.

#### ARTH 308 Museum Studies (3)

A course addressing the history and philosophy of the museum, responsible museum practices, and the design and installation of exhibitions, using the facilities and exhibition program of the Aughinbaugh Gallery and other area museums to provide interaction with art professionals and opportunities for practical application.

#### ARTH 309 History of Modern Art (3)

A chronological survey of modernism from the middle of the nineteenth century to the present.

#### ARTH 310 Topics in Non-Western Art (3)

Survey of one area of non-Western art, selected from one of the following areas: African, Asian (Chinese, Japanese, Korean, Oceanic), Indian and Islamic, and Ancient American. The course will consider objects and buildings as both artistic creations and cultural artifacts. Meets General Education Non-Western Studies requirement.

#### ARTH 312 Artists and the Theatre (3)

Examination of stage design and theatre architecture created by mainstream artists and architects from the late Middle Ages to the present.

#### ARTH 360 Topics in Art History (3)

Selected topics in art history not currently included in the course catalog.

#### ARTH 492 Art History Capstone (3)

Preparation of a substantial research paper on a theme chosen in consultation with the advisor to reflect the student's area of specialization. During the semester the students meet with the advisor and fellow majors to develop the paper and to explore the integration of faith and art historical learning; an appropriate reflection of that integration is incorporated in the paper.

# School of Education and Social Sciences

# Raeann R. Hamon, Ph.D., CFLE

Interim Dean

- Department of Education
- Department of Human Development and Family Science
- Department of Psychology
- Department of Sociology, Social Work, and Criminal Justice
- Early Learning Center
- Harrisburg Institute for Community Research and Collaborative Partnerships

The School of Education and Social Sciences prepares students to serve God in church, society, and their professions by applying their understanding of human thought and development, learning, social structures, and interactions to complex social issues and environments. The School consists of four academic departments, the Early Learning Center, and the Harrisburg Institute for Community Research and Collaborative Partnerships. Nine majors and 16 minors/concentrations within Education, Human Development and Family Science, Psychology, Sociology and Social Work and Criminal Justice partner in experiential learning and applied research opportunities with the Center and Institute. Benjamin Franklin said, "The great aim and end of all learning is service to society." The School of Education and Social Sciences prepares people-oriented people to better serve a broad spectrum of people groups.

# Harrisburg Institute for Community Research and Collaborative Partnerships

The Harrisburg Institute is a collaborative program of Messiah College linking urban learning and service through intentional community, coursework, and research. The College's downtown presence provides residential housing, classroom, and office space. The Institute is located at the corner of Dewberry and Blackberry, just south of Strawberry Square in the City of Harrisburg.

Education and Social Sciences

# EDUCATION

# Faculty

Kevin B. Zook, Ph.D. Chair, Department of Education

Professors D. Murk, K. Zook Associate Professors J. Barnes, S. Holmes, M. Gaither, V. Yoder Assistant Professors S. Fennell, J. Fisler, O. Mfum-Mensah, N. Patrick, A. Voelker

# Mission

The Department of Education provides opportunities for students to study the dynamic and complex field of education. In addition, the Department of Education oversees the Teacher Education Program and all of the Teacher Certification programs offered through Messiah College. The mission of the Messiah College Department of Education is to develop exemplary educators who apply their knowledge, skills, Christian faith, and ethical principles to decision making, reflective thinking, and problem solving in diverse learning environments.

# **Overview of Majors, Minors, and Teacher Certification Programs**

The Department of Education offers two majors that lead to a B.S. degree and Pennsylvania Instructional I teacher certification:

Early Childhood Education, N–3 Elementary Education, K–6

The Department also offers two dual certification programs:

Major in Elementary Education and complete certification requiremens for both Elementary (K–6) and Special Education (N–12)

Elementary and Early Childhood Dual Certification: Students major in either

Elementary Education or Early Childhood Education and complete requirements for both certification areas.

The Department of Education offers the following three minors: Education Minor (available to any Messiah College student) Early Childhood Education Minor (and Private Nursery School Certification) Socio-Cultural Perspectives on Education Minor

In addition to Elementary and Early Childhood Programs, Messiah College also offers several additional Teacher Education Programs leading to Pennsylvania Instructional I certification. For detailed program requirements, see the sponsoring academic department indicated for each.

7-12 Programs: Biology (Biological Sciences) Chemistry (Chemistry and Biochemistry) English (English) Mathematics (Mathematical Sciences) Social Studies (History) K-12 Programs: Art (Visual Arts) Environmental Education (must be combined with Biology Certification) ESL, English as a Second Language (English) Family and Consumer Science Education (Human Development and Family Science) French (Modern Languages) German (Modern Languages) Health and Physical Education (Health and Human Performance) Music (Music) Spanish (Modern Languages) Detailed information on 7-12 and K-12 Teacher Education Programs and teacher

Explore reducation on (-12) and N-12 reacher Education Programs and teacher education policies and procedures are provided later in the Teacher Education Program section.

# Majors

# **Elementary Education Major**

The Elementary Education program prepares students to teach kindergarten through grade six in both public and private schools. Through the academic program, faculty advising, and extensive field experiences, students are broadly prepared for effective teaching in elementary schools. Thinking, problem-solving, and decision-making capabilities are developed in critical areas such as instructional planning, instructional delivery, assessment, and classroom management. Particular attention also is given to subject matter preparation.

Effective elementary school teaching requires an extensive knowledge base that represents many curricular domains. Students develop this knowledge base by studying a wide variety of subjects such as English, psychology, sociology, history, philosophy, biology, fine arts, mathematics, physical science, language arts, health, social studies, and geography. In addition, students have the opportunity to deepen their knowledge of a particular subject of their choice by completing an 18-credit disciplinary focus.

**NOTE:** See the second part of this section, **Teacher Education Program**, for detailed information regarding specific policies and procedures that govern certification requirements for all teacher preparation programs, including the Elementary and Early Childhood Education Programs.

# Required Education Courses for ELED Major (43 credits) EDUC 120 The Teaching Profession (with Field Experience) (1) EDUC 201 Education and American Society (3) EDUC 203 Educational Psychology (3) One of the following: EDUC 223 Multicultural Literature for Children and Adolescents (3) EDUC 226 Children's Literature (3) EDUC 301 Reading: Curriculum and Instruction for Primary Grades (3) EDUC 302 Reading: Curriculum and Instruction for Intermediate Grades (with Field Experience Block) (3) EDUC 303 Mathematics: Curriculum and Instruction for Primary Grades (3) EDUC 304 Mathematics: Curriculum and Instruction for Intermediate Grades (with Field Experience Block) (3) EDUC 320 Managing Learning Environments (with Field Experience Block) (1) EDUC 330 Instructional Design and Assessment for Elementary Education and Early Childhood Education (3) EDUC 342 Social Studies: Curriculum and Instruction for Elementary School (3) EDUC 347 Science: Curriculum and Instruction for Elementary School (3) EDUC 420 Professional Issues in Education (2) EDUC 434 Student Teaching if Elementary Education and ECE(9) Required Supporting Courses for ELED Major (25 credits) BIOL 106 Life Science for Elementary Education (3) COSC 171 Problem Solving with Computers (3) MATH/STAT xxx General Education Mathematics/Statistics (3) PSYC/HDFS 310 Child Development (3) GEOG 103 Regional Geography of the World (3) One of the following:

HIST 141 U.S. History Survey to 1865 (3) HIST 142 U.S. History Survey since 1865 (3) HPED 224 Personal Health Strategies (3)

PHSC 102 Physical Sciences for Elementary Education (4)

# Required Disciplinary Focus for ELED Major (18 credits)

All students who major in Elementary Education must complete an 18-credit Disciplinary Focus to provide depth in an academic discipline other than Education. The Disciplinary Focus requirement can be satisfied through any of the following three options:

Option I – Completion of an approved college minor or dual teacher certification program. At least 12 credits must be distinct (i.e., may not overlap with General Education or any other courses completed for the major). The following Department of Education

minors also may be completed to satisfy the disciplinary focus requirement: Socio-Cultural Perspectives on Education Minor, Early Childhood Education Minor.

Option II – Completion of an Academic Specialization or Department of Education concentration (Special Education). 12 credits within a single academic discipline and six additional credits elected from academic disciplines other than Education. At least 12 of these 18 credits must be distinct (i.e., may not overlap with General Education or any other courses completed for the major). Overlapping courses (if any) must be included within the 12 discipline-specific credits. The six additional credits must be distinct and may not overlap with any other General Education or major requirements. A "discipline" is defined as courses from a single academic department or courses from two closely related departments (e.g., Psychology and Human Development and Family Science, Biology and Chemistry, History and Politics). Students must obtain approval from their advisors and the Department of Education Chair for all courses selected to complete the Academic Specialization option.

Option III – Distributive Pattern. Courses selected from more than one academic discipline. Available only with the approval of the Department of Education Chair.

#### Special Education Concentration (12 credits)

EDUC 107 Educating Learners with Special Needs (3)
EDUC 230 Behavior Intervention Strategies for Learners with Special Needs (with Field Experience) (3)
ECE 212 Language Development (3)
PSYC 409 Psychological Testing (3)

#### Elementary and Special Education Dual Certification Program

The Elementary and Special Education Dual Certification Program prepares students to teach in regular elementary classrooms or to serve as special education teachers. Students who complete the program are eligible for Pennsylvania Instructional I teacher certification in Elementary Education (K–6) and Special Education (N–12). Students who pursue Special Education certification must complete the dual certification program, majoring in Elementary Education. Completing the Special Education program satisfies the Disciplinary focus requirement for the ELED major. Students take their professional semester (including student teaching) in Elementary Education. They also are required to take the Dual Certification Internship (EDUC 436) to provide an additional practicum experience in Special Education. The internship is completed during a semester other than the professional semester and the semester in which students complete the upper-level field experience associated with EDUC 320, 302, and 304. To be eligible for the Special Education certification program, students must meet all the requirements for admission to the Teacher Education Program (TEP). In addition to satisfying all TEP admissions procedures and requirements, students who wish to pursue the ELED/SPED dual certification program must take and pass the introductory Special Education course, Educating Learners with Special Needs (EDUC 107), with a GPA of 3.0 (grade of B) or better. Written endorsement of the instructor of EDUC 107 is also required for admission to the Special Education certification program.

# Required Courses for ELED/SPED Dual Certification Program

All required Education courses for the ELED Major (43 credits)
All required supporting courses for the ELED Major (25 credits)
The following Special Education courses (22–28 credits):
EDUC 107 Educating Learners with Special Needs (3)
EDUC 230 Behavior Intervention Strategies for Learners with Special Needs (with Field Experience) (3)
ECE 212 Language Development (3)
EDUC 336 Instructional Strategies for Teaching Learners with Special Needs (with Field Experience) (3)
PSYC 409 Psychological Testing
PSYC/HDFS 311 Adolescent Development
EDUC 472 Special Education Internship (3–9)
EDUC 472 Special Education Seminar (1)

#### Early Childhood Education

The Early Childhood Education Program prepares students to teach pre-school, kindergarten, and grades 1 through 3 in public or private institutions. The major emphasis is on the growth and development of "the whole child" with developmentally appropriate instructional activities.

With an Early Learning Center on campus, Messiah College provides an authentic setting for experience in teaching and directing a pre-school. A unique and significant aspect of the program is that students not only teach, but learn how to manage groups of children as well. Student teachers assume the responsibilities of coordinating staff schedules, directing the center's curriculum, creating and teaching their own curriculum, and overseeing its total operation for a defined period of time.

**NOTE:** See the second part of this section, **Teacher Education Program**, for detailed information regarding specific policies and procedures that govern certification requirements for all teacher education programs, including the Early Childhood Education Program.

#### Required Education Courses for ECE Major (59 credits)

ECE 210 Introduction to Early Childhood Education (3)

- ECE 212 Language Development (3)
- ECE 221 Early Childhood Education Field Experience (1)
- ECE 306 Creative Expression (3)
- ECE 363 Developmental Programming: Curriculum and Instruction for Early Childhood (with Field Experience Block) (3)
- ECE 365 Theories of Early Learning (3)

ECE 415 Practices in Early Childhood Education (2)

ECE 465 Lab School Student Teaching (4)

EDUC 120 The Teaching Profession (with Field Experience) (1)

EDUC 201 Education and American Society (3)

EDUC 203 Educational Psychology (3)

One of the following:

EDUC 223 Multicultural Literature for Children and Adolescents (3) EDUC 226 Children's Literature (3)

EDUC 301 Reading: Curriculum and Instruction for Primary Grades (3)

EDUC 303 Mathematics: Curriculum and Instruction for Primary Grades (3) EDUC 320 Managing Learning Environments (with Field Experience Block) (1) EDUC 330 Instructional Design and Assessment for Elementary Education and Early Childhood Education (3) EDUC 342 Social Studies: Curriculum and Instruction for Elementary School (3) EDUC 347 Science: Curriculum and Instruction for Elementary School (3) EDUC 420 Professional Issues in Education (2) EDUC 434 Student Teaching if Elementary Education and ECE(9)

# Required Supporting Courses for ECE Major (25 credits)

BIOL 106 Life Sciences for Elementary Education (3)
COSC 171 Problem Solving with Computers (3)
MATH/STAT xxx General Education Mathematics/Statistics (3)
PSYC/ HDFS 310 Child Development (3)
GEOG 103 Regional Geography of the World (3)
HPED 224 Personal Health (3)
PHSC 102 Physical Sciences for Elementary Education (4)
One of the following: HIST 141 U.S. History Survey to 1865 (3)
HIST 142 U.S. History Survey since 1865 (3)

# Required Disciplinary Focus for ECE Major (6 credits)

All students who major in Early Childhood Education must complete a six-credit Disciplinary Focus to provide depth in an academic discipline other than Education. Students elect six credits from a single academic discipline (or two closely related disciplines) other than Education. The six credits may not overlap with any other General Education or major requirements. Course selections must be approved by the advisor and the Department of Education Chair.

#### Elementary and Early Childhood Education Dual Certification Program

Students may elect to complete certification requirements for both Elementary (K–6) and Early Childhood Education (N–3). Students major in either ELED or ECE for dual certification. Students complete student teaching in the Professional Semester for their selected major (ELED or ECE) and also complete a Dual Certification Internship (EDUC 436) for the additional certification area (ELED or ECE).

#### Required Courses for ELED/ECE Dual Certification Program

All required Education courses for ELED Major

All required Education courses for ECE Major

All required supporting courses for the ELED and ECE Major.

EDUC 436 Dual Certification Internship (3-9)

#### Philadelphia Semester for ELED and ECE Students

Students who are interested in learning more about how educational systems operate within an urban environment can participate in a Philadelphia Semester experience. The Philadelphia Semester includes provisions to meet General Education and Disciplinary Focus requirements as well as the opportunity to acquire school experience in an urban setting. Students who take the one-credit URBS 260 course also can satisfy the General Education Cross-Cultural requirement. The guidelines below provide a possible structure that students can use to plan a Philadelphia Semester that fits into their ELED or ECE programs. Students need to plan the Philadelphia Semester carefully in consultation with their advisors and must obtain prior College approval for all Temple courses.

One of the following field-based courses.
URBS 310 Urban Field Experience (3)
EDUC 393 Practicum in Education (1–3)*
*Students must arrange for a faculty sponsor and obtain prior approval from
Department of Education Chair.
12 to 15 credits selected from Temple or Messiah courses for any of the following categories.
Disciplinary Focus Electives
Required Supporting Courses for ELED or ECE Major
General Education
Electives (with advisor approval)
Required for General Education Cross Cultural Waiver.
URBS 260 Philadelphia Urban Cross-Cultural Course (1)

# **Minors and Concentrations**

The Department of Education offers three minors and one concentration.

#### Minors:

Education Minor Early Childhood Education Minor Socio-Cultural Perspectives on Education

# **Concentration:**

Special Education

#### Education Minor (18 credits)

The Education Minor is designed to provide students who are not seeking teacher certification the opportunity to explore a variety of topics relevant to the field of Education. The minor is intended to provide students with opportunities to pursue their professional aspirations, explore areas of personal interest, prepare for graduate study, and prepare for roles as informed parents and citizens. Students who take the minor are required to complete two core courses (6 credits). The remaining 12 credits are completed by electing ECE and/or EDUC courses. **The Education Minor does not lead to teacher certification, and students who complete the minor are not eligible for the Professional Semester, including student teaching.** Students are advised to refer to catalog course descriptions for specific course prerequisites.

<u>Required Courses (6)</u> EDUC 201 Education and American Society (3) EDUC 203 Educational Psychology (3)

Twelve (12) credits from the following:

Any 100-, 200-, or 300-level courses in EDUC and/or ECE, with the exception of the following: EDUC 318, EDUC 320, EDUC 362, ECE 221. Three (3) credits outside of EDUC and ECE may be elected with approval of the Department of Education Chair. Courses elected should represent areas of study that are relevant to the field of Education. Such topics may include (but are not limited to) the following: learning, cognition, human development, family relationships, literacy, social theory, assessment, social science research methods, philosophy, and public policy.

#### Socio-Cultural Perspectives on Education Minor (18 credits)

The Socio-Cultural Perspectives on Education Minor is designed to provide students with in-depth treatment of sociological and cultural variables that influence educational structures and processes. The minor provides opportunities for interested students to study educational processes and structures that are often associated with urban settings and environments that represent significant degrees of cultural diversity. Students take courses that explore social and theoretical perspectives as well as curricular and instructional perspectives. The minor culminates in a communitybased field experience that reflects the student's interests. Students have the option of completing the minor either at the Grantham campus (with field experience options in the Harrisburg area) or at the Philadelphia campus (with field experience options in Philadelphia).

#### Grantham Option:

EDUC 246 Socio-cultural Perspecties on Education (3)
EDUC 354 Comparative and International Education (3)
EDUC 355 Education and American Pluralism (3)
EDUC 357 Education Public Policy (3)
EDUC 362 Education Practicum: Socio-Cultural Variability (3)
One of the following:
SOCI 215 Introduction to Urban Sociology (3)
SOCI 355 Social Conflict, Justice and Peacemaking (3)
SOCI 356 Race, Ethnicity and Gender (3)
HDFS 341 Family Ethnicity and Human Services (3)
HDFS 383 Topics in Multicultural Family Studies (3)
One course from a related area, approved by Department of Education Chair (3)

#### Philadelphia Option:

EDUC 246 Socio-cultural Perspectives on Education (3) EDUC 354 Comparative and International Education (3) EDUC 355 Education and American Pluralism (3) EDUC 357 Education Public Policy (3) \*URBS 310 Urban Field Experience (3) \*One of the following from Temple University: AAS 4221 The Black Child: Development and Socialization (3) GUS 1021 Urban Society (3) GUS 1025 World Urban Patterns (3) GUS 4012 Urban Ethnicity (3) One course from a related area, approved by Department of Education Chair (3)

\*Taken at the Messiah College–Philadelphia Campus

# The Urban Semester in Philadelphia

Many of the 18 credits required to complete the Socio-Cultural Perspectives on Education Minor can be completed in a single semester at the Philadelphia Campus. In addition, some courses taken through the Urban semester also satisfy General Education Ethics and World Views requirements. The Urban Semester experience also satisfies the General Education Cross-Cultural requirement. For further information about the Urban Semester, interested students should contact their advisors, the EpiCenter, or the Director of Enrollment at the Philadelphia Campus.

# Early Childhood Education Minor (28 credits)

The Early Childhood Education Minor provides opportunities for students to explore a variety of topics relevant to the field of Early Childhood Education. The minor is available to any students/majors who are interested in working with young children. Course work and lab school experiences provide students with knowledge and skills to pursue their professional aspirations, explore areas of personal interest, prepare for graduate study, support their roles as informed parents and citizens, and prepare to teach in private childcare and preschool settings. The Early Childhood Education Minor does not lead to Pennsylvania teacher certification, but students who complete the minor are eligible for Private Nursery School Certification (N–3) through the Division of Private Academic Schools, Pennsylvania Department of Education. Students should contact the Division of Private Academic Schools for further information.

ECE 210 Introduction to Early Childhood Education (3) ECE 212 Language Development (3) ECE 221 Early Childhood Field Experience (1) ECE 363 Developmental Programming: Curriculum and Instruction for Early Childhood (with Field Experience Block) (3) ECE 365 Theories of Early Learning (3) ECE 415 Practices in Early Childhood Education (2) ECE 465 Lab School Student Teaching (4) PSYC/ HDFS 310 Child Development (3) Six credits from the following: BUSA 130 Personal Finance (3) EDUC 201 Education and American Society (3) EDUC 226 Children's Literature (3) EDUC 301 Reading: Curriculum and Instruction for Primary Grades (3) ECE 306 Creative Expression (3) HDFS 142 Introduction to Interpersonal Relations (3) HDFS 242 Parenting (3) HPED 224 Personal Health Strategies (3) HRM 120 Principles of Management (3)

# Special Education Concentration (12 credits)

Students majoring in ELED or ECE who wish to enhance their knowledge of special education without pursuing special education teacher certification may complete the Special Education Concentration. The Special Education Concentration does not require admission to the Teacher Education Program and does not lead to teacher certification.

EDUC 107 Educating Learners with Special Needs (3)
EDUC 230 Behavior Interventions for Learners with Special Needs (with Field Experience) (3)
ECE 212 Language Development (3)
PSYC 409 Psychological Testing (3)

# **Education Courses**

# EDUC 107 Educating Learners with Special Needs (3)

Introductory course on educational and psychological factors related to human exceptionality. Topics include historical and contemporary views of students with mental retardation, learning disabilities, emotional disturbance, sensory disorders, physical and health impairments, communication disorders, and intellectual gifts and talents.

# EDUC 120 The Teaching Profession (with Field Experience) (1)

Introduction to the professional roles and responsibilities of teachers. Requirements for teacher certification, introduction to resources for educators, development of a career portfolio, and program expectations for teacher education candidates will be examined. Field experiences include school-based observations and interactions with a variety of school personnel. (Pass/Fail grade only.)

# EDUC 201 Education and American Society (3)

Examines education in historical, philosophical, and sociological perspective, with emphasis on the relationship between schools and their social/cultural contexts.

# EDUC 203 Educational Psychology (3)

Study of theoretical concepts and principles necessary for understanding human thought and behavior in a wide variety of educational environments. Focus on variables related to teaching-learning processes: learning, memory, transfer, problem solving, motivation, growth and development, exceptionalities, instructional planning, assessment. Emphasis on research methodologies employed by educational psychologists and interpretation of empirical research findings. Meets General Education Social Science requirement. Cross-listed with PSYC 203.

# EDUC 223 Multicultural Literature for Children and Adolescents (3)

This course uses cross-cultural and parallel-cultural literature for children and adolescents to explore the culture and lives of African-Americans, Asian-Americans, Hispanic-Americans, Native Americans, Jewish-Americans, and selected international peoples. The students explore the issues and concerns facing people from different cultures living in a pluralistic society and how literature can be used to begin to understand the differences and similarities. Students in this course are asked to express their understandings in a variety of written forms.

# EDUC 226 Children's Literature (3)

Critical and extensive study of children's literature and its application to the classroom with attention to requirements of text, illustration, and historical development. Includes exploration of a variety of genres, socio-cultural considerations, censorship issues, and technology implications.

# EDUC 230 Behavior Intervention Strategies for Learners with Special Needs (with Field Experience) (3)

Students develop knowledge and skills related to management strategies appropriate for a range of teaching and learning environments. Major topics include preventive strategies, non-aversive approaches to learner management, behavior modification procedures for aggressive or non-compliant behaviors, social skills instruction, and developing learner self control. Field experience required (approximately 10 hours). Prerequisites: EDUC 107, EDUC 203 or taken concurrently.

# EDUC 246 Socio-Cultural Perspectives on Education (3)

Study of socio-cultural variability and diversity in educational settings. Theoretical, empirical, and applied analysis of the effects of cultural variables (e.g., socioeconomic, ethnic, racial, linguistic, familial) on teaching-learning processes, instructional resources, and educational systems within a variety of learning environments (e.g., urban, suburban, rural, transient). (Offered spring semesters only.)

# EDUC 301 Reading: Curriculum and Instruction for Primary Grades (3)

Introduction to reading theory for the primary grades. Emphasizes the transactional nature of the reading and writing process, the classroom teacher's role, approaches to early literacy practices, and the relationship between assessment and instruction. Includes the connection of reading, writing, speaking, and listening to the total curriculum. Prerequisites: EDUC 201, 203; admission to the Teacher Education Program for ELED and ECE majors. Also open to interested students who are not pursuing teacher certification.

# EDUC 302 Reading: Curriculum and Instruction for Intermediate Grades (with Field Experience Block) (3)

Examination of reading, writing, speaking, and listening in the elementary intermediate grades. Emphasis on concepts of literacy as students transition from "learning to read" to "reading to learn." Includes content-specific subjects, study skills, and the use of technology. Prerequisites: EDUC 301, 330. Must be taken at the Grantham campus. For ELED majors, concurrent registration with EDUC 304 and EDUC 320. Also open to interested students who are not pursuing teacher certification.

# EDUC 303 Mathematics: Curriculum and Instruction for Primary Grades (3)

Teaching strategies for mathematics in the primary grades including children's development of number ideas, problem solving, computation, calculator, and computer applications, and philosophy and content of primary math programs. Prerequisites: EDUC 201, 203, COSC 171; admission to the Teacher Education Program for ELED and ECE majors. Also open to interested students who are not pursuing teacher certification.

# EDUC 304 Mathematics: Curriculum and Instruction for Intermediate Grades (with Field Experience Block) (3)

Teaching strategies for math in the intermediate grades including integers, rationals, continuation of mathematical problem-solving, geometry, metrics, assessment, error diagnosis at pre-algebra level, use of calculators and computers in math programs and

philosophy and content of intermediate grade math programs. Prerequisites: EDUC 303, 330. Must be taken at the Grantham Campus. For ELED majors, concurrent registration with EDUC 302 and EDUC 320. Also open to interested students who are not pursuing teacher certification.

## EDUC 318 Secondary Learning Environments (with Field Experience) (1)

Junior-level field experience for secondary teacher education candidates which provides additional observation and development of understanding of teacher roles and functions in the public schools. Students are expected to connect theoretical ideas acquired inn prerequisite courses with actions and decision-making processes associated with effective teaching. Focus on instructional planning and continued portfolio development. Comparison of middle school and high school students and settings. Prerequisites: EDUC 120, 201, 203 and admission to the Teacher Education Program. Concurrent enrollment in EDUC 331. Must be taken at the Grantham Campus.

## EDUC 320 Managing Learning Environments (with Field Experience Block) (1)

Junior-level field experience for elementary and early childhood teacher education candidates which provides additional observation and practice of teacher roles and functions in the public schools. Focus on instructional planning, classroom management, and portfolio development. Prerequisites: EDUC 120, 201, 203, 330, and admission to the Teacher Education Program. Elementary Education Majors register concurrently with EDUC 302 and 304. Early Childhood Education Majors register concurrently with ECE 363. Must be taken at the Grantham Campus.

# EDUC 330 Instructional Design and Assessment for Elementary Education and Early Childhood Education (3)

Students develop instructional planning and assessment skills by applying a systems model of instructional design. Emphasis on thinking and decision-making processes necessary for developing instruction and evaluating the achievement of learning goals in elementary and early childhood learning environments. Topics include instructional goals, learning outcomes, content analysis, classroom assessment strategies, instructional objectives, instructional technology, instructional sequences, lesson planning, and unit planning. Prerequisites: EDUC 203. Concurrent enrollment with EDUC 301 and 303 for ELED and ECE majors. Admission to the Teacher Education Program for ELED and ECE majors. Also open to interested students who are not pursuing teacher certification.

## EDUC 331 Instructional Design and Assessment for Secondary Education (3)

Students develop instructional planning and assessment skills by applying a systems model of instructional design. Emphasis on thinking and decision-making processes necessary for developing instruction and evaluating the achievement of learning goals in secondary-level learning environments. Topics include instructional goals, learning outcomes, content analysis, classroom assessment strategies, instructional objectives, instructional technology, instructional sequences, lesson planning, and unit planning. Prerequisites: EDUC 203. Admission to the Teacher Education Program and concurrent enrollment in EDUC 318 for secondary, foreign language, and Art teacher certification students. Also open to interested students who are not pursuing teacher certification.

# EDUC 336 Instructional Strategies for Teaching Learners with Special Needs (with Field Experience) (3)

Examination and application of strategies and principles relevant to the design and delivery of effective instruction for learners with special needs. Organization of instruction and curricula across a variety of content areas appropriate for learners with cognitive and physical disabilities and social/emotional disorders, with emphasis on instructional delivery in both resource and inclusive settings. Required field experience component of approximately 60 hours. Prerequisites: EDUC 107, EDUC 230, EDUC 330 (or concurrent), Admission to Teacher Education Program.

# EDUC 342 Social Studies: Curriculum and Instruction for Elementary School (3)

Consideration is given to the aims, content, and organization of social studies appropriate to the elementary school and to methods and materials utilized in social studies. Prerequisites: EDUC 201, 203. Admission to the Teacher Education Program for ELED and ECE majors. Also open to interested students who are not pursuing teacher certification.

## EDUC 347 Science: Curriculum and Instruction for Elementary School (3)

A lecture and activity designed methods course based on the National Science Education Standards (NSES). Emphasis on development of critical thinking skills, inquiry-based learning activities, classroom laboratory/activity safety procedures, integration of science with other content areas, participation in environmental programs, and application of learning theories. Prerequisites: EDUC 201, 203, BIOL 106 and/or PHSC 102. Admission to the Professional Semester for ELED and ECE majors. Also open to interested students who are not pursuing teacher certification, with permission of the Department of Education Chair.

## EDUC 354 Comparative and International Education (3)

Analysis of historical, social, economic, political, and cultural influences on education and educational systems of nations and geographic regions around the world. Policies and practices of educational systems from capitalist, socialist, and "transitional" societies will be compared and contrasted, with emphasis on various dimensions of inequality (class, race/ethnicity, gender, religion, region), political stability, educational reform, and comparative research methodologies. Meets the General Education Pluralism requirement.

## EDUC 355 Education and American Pluralism (3)

An analysis of the role of American schools and universities in developing the concepts of American pluralism and national character. Current and historical perspectives on pluralism in American educational institutions are explored by examining social and educational issues related to race, ethnicity, gender, religion, and political ideology. Meets the General Education Pluralism requirement. (Alternate years, offered 2008-2009.)

## EDUC 356 Moral Education (3)

Attempts of American schools to facilitate moral development are examined, from colonial religious training to recent curriculum models and instructional strategies.

The relationship between moral education, ethical theory, and national moral debates is explored, with particular attention to the implications of contemporary moral issues for American educational institutions. Meets the General Education Ethics requirement. (Alternate years, offered 2007-2008.)

# EDUC 357 Education Public Policy (3)

Introduction to selected theoretical perspectives related to democratic living, institutional processes, moral character, classical and modern ethics, and biblical perspectives on ethics. Major course topics include how and why public policy poses ethical problems, especially within public institutions such as schools, and how classical and modern ethical theories and biblical perspectives can be applied to these problems. Particular focus on public policies related to socio-cultural diversity in educational environments. Meets the General Education Ethics requirement.

# EDUC 362 Education Practicum: Socio-cultural Variability (3)

Structured opportunities for students to experience educational environments that reflect significant degrees of learner diversity (e.g., socioeconomic, ethnic, racial, linguistic, familial). Students spend off-campus time observing, analyzing, assisting, and completing course assignments in the field. Class sessions engage students in group discussion, reflection, and problem-solving activities related to cultural variables within their particular field placements. Prerequisites: EDUC 246 or concurrent registration. Admission to the Teacher Education Program required for students pursuing teacher certification.

# EDUC 393 Practicum in Education (1-3)

Teaching-related experiences in classrooms and/or non-traditional setting which provide 1) opportunities for enhancing personal and/or professional skills, 2) acquisition and/or application of content knowledge and pedagogic experiences, 3) exploration of additional career opportunities available to teachers, 4) integration of theory and practice in varied settings with diverse audiences. Credit award is based on length and intensity of involvement as well as the number and depth of learning objectives/outcomes to be accomplished. (Pass/Fail grade only.)

# EDUC 420 Professional Issues in Education (2)

Considers educational issues in the following areas: classroom management, PDE regulations and school law, professional ethics, school administration, curriculum regulations, special needs learners, health-related issues, professional negotiations, and other current issues/trends in education. Prerequisite: Admission to the Professional Semester.

# EDUC 431 Student Teaching: Elementary HPED (5)

Observation and participation in teaching elementary health and physical education under the supervision of experienced cooperating teachers in nearby schools. (Pass/Fail grade only.) Prerequisite: Admission to Professional Semester.

# EDUC 432 Student Teaching: Secondary HPED (6)

Observation and participation in teaching middle or high school health and physi-

cal education under the supervision of experienced cooperating teachers in nearby schools. (Pass/Fail grade only.) Prerequisite: Admission to Professional Semester.

## EDUC 434 Student Teaching: Elementary and ECE (9)

Participation in teaching under the supervision of college faculty and experienced cooperating teachers in public schools. (Pass/Fail grade only.) Prerequisite: Admission to Professional Semester. Concurrent enrollment in EDUC 347 and 420.

## EDUC 435 Student Teaching: Secondary (9)

Participation in teaching in the area of certification under the supervision of College faculty and experienced cooperating teachers in public schools. (Pass/Fail grade only.) Prerequisite: Admission to Professional Semester. Concurrent enrollment in EDUC 420, PSYC/ HDFS 311, and discipline-specific Curriculum and Instruction course (ENGL 407, HIST 407, LANG 407, MATH 407, or BIOL/CHEM 407).

## EDUC 436 Dual Certification Internship (3-9)

Provides supervised, site-based experience beyond the primary Professional Semester/student teaching for students pursuing dual certification. Students design and deliver instruction, acquire professional skills and experiences, and perform teaching roles and responsibilities appropriate for the second area of certification. Students register for a minimum of 3 credits but may elect a maximum of 9 credits. Students must declare and plan for the internship at the time that they apply to the Professional Semester. (Pass/Fail grade only.)

## EDUC 437 Student Teaching: Art (9)

Practical experience in instructional planning and teaching art under the supervision of College faculty and experienced cooperating teachers in public schools. Includes both elementary and secondary levels. One semester (12 weeks) as assigned. (Pass/Fail grade only.) Prerequisite: Recommendation by the Department of Visual Arts and approval by the Teacher Education Program.

## EDUC 438 Student Teaching: Music (9)

Practical experience in teaching under supervision of a public school music department and the College staff. Includes both elementary and secondary levels in both vocal and instrumental music. One semester (12 weeks) as assigned. (Pass/Fail grade only.) Prerequisite: Recommendation by the Department of Music and approval by the Teacher Education Program.

## EDUC 472 Special Education Seminar (1)

In addition to exploring contemporary issues relevant to the delivery of special education services in a changing school environment, students will learn specific skills that facilitate communication and effective collaboration with school personnel, parents, and support personnel from relevant agencies. Professional issues, ethical practices, and the role of Christian faith will be examined. Prerequisites: EDUC 107, 230, 336, ECE 212, PSYC 409, concurrent enrollment in EDUC 436, Admission to Teacher Education Program.

## EDUC 491 Independent Study (1-3)

Selected topics in education taken independently with a faculty member.

## **Early Childhood Education Courses**

#### ECE 210 Introduction to Early Childhood Education (3)

Considers the total development of the young child in view of the impact on subsequent learning. Various theories and preschool programs are reviewed with special attention to their philosophies and objectives.

#### ECE 212 Language Development (3)

Principles of language development during early childhood years: theory, structure, semantics, and phonetics. Sociocultural influences and resultant implications, relationships of language development and reading readiness, and basic assumptions for a language development program.

#### ECE 221 Early Childhood Education Field Experience (1)

Designed to give the prospective early childhood education teacher direct experience in the Messiah College Early Learning Center through systematic classroom visitation and guided reflection on these experiences. Each student enrolled in ECE 221 will participate as an aide and an observer in the lab school setting under the direct supervision of the director of the lab school. A minimum of 20 hours of onsite field experience is required. (Pass/Fail grade only.) Concurrent enrollment with ECE 210, Introduction to Early Childhood Education.

#### ECE 306 Creative Expression (3)

Considers theoretical rationale and instructional strategies for incorporating creative activities into the early childhood curriculum. Students are involved in activities designed to encourage and promote creative thinking in early childhood learning environments. The accompanying field experience in the campus Early Learning Center provides opportunities for application of course content and reflection.(Offered J-term only.) Prerequisite: Admission to the Teacher Education Program or Instructor's consent.

# ECE 363 Developmental Programming: Curriculum and Instruction for Early Childhood (with Field Experience Block) (3)

Study of the theory and methods of building programs to facilitate the appropriate development of preschool children with special emphasis on operational and administrative procedures. Prerequisites: HDFS 310, ECE 210. Concurrent registration with EDUC 320 for ELED and ECE majors. Admission to the Teacher Education Program for ELED and ECE majors. Also open to interested students who are not pursuing teacher certification.

#### ECE 365 Theories of Early Learning (3)

Principles of early development related to the learner, learning process, and learning environment, including the theoretical bases of perception, concept development, intelligence and motivation. Includes one hour per week in a local kindergarten. Prerequisite: Admission to the Teacher Education Program for ELED and ECE majors. Also open to interested students who are not pursuing teacher certification.

## ECE 415 Practices in Early Childhood Education (2)

Considers the connection and application of theory and practice and enhances the student teaching experience through research of current issues, individualized projects, and self-evaluation. Concurrent enrollment with ECE 465.

## ECE 465 Lab School Student Teaching (4)

Daily observation and participation in a lab school setting including experience in planning, teaching, conferencing, and evaluating a preschool program. (Pass/Fail grade only.) Prerequisites: HDFS 310; ECE 210, 212, 363, 365.

The **Early Learning Center** is located in the lower level of Hostetter Chapel on the College campus, and offers year-round child care for College employees and students, and a half-day Lab School program open to the community. Under the supervision of the Director and Master level teachers, this NAEYC accredited program serves as a site for early childhood observations and pre-service teacher education. The Early Learning Center is dedicated to providing a model of high quality early childhood programming for the College and the community.

# **Teacher Education Program**

The Messiah College Department of Education and Teacher Education Program sponsor Pennsylvania Level I teacher certification in numerous content areas. For complete requirements of all secondary and K–12 teacher certification programs, please refer to the department in which that major is offered. The mission and themes of all certification programs are uniform and the policies and procedures which govern the Teacher Education Program are the same for all certification areas.

## Mission Statement and Program Outcomes

The mission of the Messiah College Teacher Education Program is to develop professional educators who . . .

- facilitate the learning and development of others consistently,
- reflect on thoughts and actions deliberately,
- apply essential knowledge effectively,
- learn continuously,
- care for people compassionately, and
- serve God and society faithfully.

Students who complete the Messiah College Teacher Education Program will demonstrate . . .

- 1. Christian faith and values in personal and professional life.
- 2. Professional attitudes that reflect an understanding of schools and a commitment to teaching.

- 3. Subject matter depth and an understanding of the relationships between and among curricular areas.
- 4. Theoretical knowledge of learning and related instructional practices that support learning.
- 5. Empirical inquiry skills such as observation, hypothesis-testing, data collection, and data analysis.
- 6. Acquisition, analysis, evaluation, and integration of new knowledge throughout professional practice.
- 7. Appropriate professional responses to the roles and responsibilities of individuals and organizations (e.g., teachers, students, families, school districts, communities) associated with educational environments.
- 8. Professional communication (speaking, writing, listening) and technology skills.
- 9. Reflective decision-making and problem-solving skills.
- 10. Instructional planning and assessment skills that facilitate equitable participation, an accepting and supportive learning environment, and maximum development for all learners.

To support our mission and to meet professional development standards, the following themes are integrated throughout all of the Department of Education's courses and teacher preparation programs:

- 1. <u>Assessment:</u> Collecting valid and reliable data to inform evaluation and decision-making processes.
- 2. <u>Technology and Information Literacy</u>: Applying a wide variety of instructional technologies and information resources to enhance instructional decision-making and effectiveness.
- 3. <u>Inclusion:</u> Creating and maintaining educational environments that promote learning opportunities for individuals who possess a variety of exceptionalities and disabilities.
- 4. <u>Multiculturalism</u>: Creating and maintaining educational environments that promote learning opportunities for individuals who represent a variety of racial, ethnic, and cultural backgrounds.
- 5. <u>The Christian Teacher</u>: Demonstrating Christian faith and values in all of the actions, judgments, and interpersonal relationships that are relevant to educational environments.

# **Policies and Procedures**

All students who pursue teacher certification must comply with established policies and procedures that regulate admission to, retention in, and certification through the Messiah College Teacher Education Program. A complete copy of the Teacher Education Program Handbook can be found on the program homepage: www.messiah.edu/teacher/.

The Teacher Education Program Handbook is the official and most current guide to

any program-related information. The following points are highlights of the major handbook-documented guidelines and, while viewed as the most significant items to be considered, they represent only a segment of the complete policies and procedures that govern a student's acceptance into and movement through the Teacher Education Program.

It is the student's responsibility to be fully aware of, and to comply with, all policies, procedures, and expectations required for admission to, retention in, and exit from the Teacher Education Program. Furthermore, students are ultimately responsible for following all policies and procedures related to the process of applying for the Pennsylvania Instructional I teaching certificate.

#### Admission to the Teacher Education Program

All students who intend to pursue a teacher preparation program are required to make formal application for admission to the Teacher Education Program by **November 1 of the sophomore year**. Transfer students should contact the Director of Teacher Education to determine when they should apply. Admission decisions are made by March 1 of each academic year. Applications of students who are not admitted by March 1 will automatically be reviewed again at the end of the spring semester.

Admission requirements are established by the Teacher Education Committee in compliance with regulations from the Commonwealth of PA and the Messiah College Teacher Education Program. Messiah College reserves the right to deny admission to any applicant determined to be unqualified for participation in the Teacher Education Program.

Four major criteria are evaluated for admission to the Teacher Education Program:

## GPA/Academic Performance

Minimum GPA's of 3.0 (both cumulative and in the major) are required for admission. The GPA for the major includes all courses prescribed by the academic major and all courses required for PA teacher certification.

Additionally, students must earn at least a "C–" in the first year seminar (or equivalent course), and COMM 106, Foundations of Public Communication (or equivalent course) two college level math courses, and one American/British literature course. Any course required for the major leading to teacher certification or for the teacher certification program in which students earn a grade lower than "C–" must be repeated.

## PRAXIS I Examination Scores

At the time of application, students must submit scores from the PRAXIS I Exam (PPST) administered by Educational Testing Service (ETS). For admission, scores must meet the passing level established by the Pennsylvania Department of Education.

#### **Character Clearances**

To comply with regulations established by public school districts and the Commonwealth of Pennsylvania, all applicants to the Teacher Education Program must secure periodic clearances through PA Act 34 (criminal check), PA Act 33/151 (child abuse check), and a clearance from the FBI. All of these clearances have application fees which are the responsibility of the student applicant.

Applicants are also screened by the College's Student Life and Academic Offices to ascertain that individuals are considered to be in good standing with each office and are in compliance with campus guidelines for personal behavior and academic integrity.

Students are advised to consult the Teacher Education Program Handbook for more detailed information and/ or contact the Director of Teacher Education with specific questions about admission to the Teacher Education Program.

#### Retention in the Teacher Education Program

Once admitted, students are considered members in good standing in the Teacher Education Program as long as all of the qualifications and performance standards required for admission to the program are maintained. Students who do not maintain all of the required qualifications and standards will be suspended from the program. Benefits of being admitted and retained in the program include, but are not limited to the following:

- Qualification for Continued Study. Students who have been admitted to the Teacher Education Program are eligible for advanced level education courses and field experiences. Students must have approved status to enroll in any 300-level EDUC course or any 300-level field-based certification course, regardless of the prefix of the course.
- Notification of Teacher Education Program Meetings and Events. Students who are admitted to the Teacher Education Program will automatically receive information about special meetings, informational sessions, application requirements for the Professional Semester, etc. Because much of this information is conveyed by means of e-mail, students are required to access their campus e-mail accounts regularly.

#### Admission to the Professional Semester

Students apply for admission to the Professional Semester (student teaching semester) during the junior year. All students are expected to file a formal application for admission to the Professional Semester by November 1 of the academic year prior to the one in which the Professional Semester will occur. To be considered for admission, students must:

• be admitted to the Teacher Education Program (normally occurs during the

sophomore year).

- continue to maintain all academic and character standards as stated in the Teacher Education Program handbook and which were required for admission to the Teacher Education Program.
- provide transcripts and evidence of successful completion (grade of "C–" or higher or faculty endorsement, as noted) of the following prerequisite courses: a. EDUC 120 The Teaching Profession (1)
  - b. EDUC 201 Education and American Society (3)
  - c. EDUC 203 Educational Psychology (3)
  - d. Upper Level Field Experiences (300/400 level field experiences required for teacher certification) as reported by course instructor or college supervisor.
- be required and endorsed for enrollment in the Professional Semester by their academic departments (i.e., the departments in which the academic majors are housed).

Acceptance in the Professional Semester may be revoked if at any time students do not maintain the minimum acceptable level of performance for all admission criteria, including performance in all Professional Semester courses.

Students are advised to consult the Teacher Education Program Handbook for more detailed information and/or contact the Director of Teacher Education with specific questions about admission to the Professional Semester.

# Institutional Recommendation for Pennsylvania Teacher Certification (Program Exit Requirements)

Students are eligible to be recommended for Pennsylvania Level I Teacher Certification after they have successfully completed all requirements for a Messiah College degree, demonstrated appropriate proficiency in the Professional Semester/student teaching experience, met all required health and character clearances, scored at or above the required level on the mandatory PRAXIS test(s), and have been endorsed for certification by the required offices of the College. Specific details for certification requirements and related processes are outlined in the Teacher Education Program Handbook. Students are expected to read and follow these posted guidelines and procedures. The Teacher Certification Officer will alert students to the timing and procedures for all testing and documentation required for the certification process. However, it is the student's responsibility to meet all requirements and deadlines to ensure that the process is executed successfully.

Students are advised to consult the Teacher Education Program Handbook/ Certification Link (www.messiah.edu/teacher/certification) for more detailed information and/or contact the Teacher Certification Officer with specific questions about the certification process.

## Post-Baccalaureate Teacher Certification Programs

Opportunities to obtain teacher certification only, without completing a Messiah College degree, are available for those who already possess at least the bachelor's degree from an accredited college or university. Such students must first apply for admission to the College (contact the Admissions Office for details) and then, if admitted, an individualized certification program will be developed by the Teacher Certification Officer and the Chair of the Department which houses the major in which certification will occur.

Admission to the College does not guarantee that the student will be admitted to the Teacher Education Program. Post-Baccalaureate Certification students must follow the same policies, procedures, application, and retention expectations as all other students. Once admitted to the College, such students must be continuously enrolled in Messiah College courses and must complete, at minimum, 12 credits of course work at the College before being considered for admission to the Teacher Education Program and/ or Professional Semester. For more detailed information, consult the certification website: www.messiah.edu/teacher/certification.

#### Field Experiences and Student Teaching

The location of Messiah College affords great opportunity for students to observe and teach in a wide variety of school settings. Within easy drive of the College are numerous suburban, rural, and urban school districts. The Teacher Education Program regularly places students in as many as twenty different school districts each year and enjoys positive, collaborative relationships with these districts.

Students are responsible for their own transportation to and from field experience and student teaching sites. No College transportation will be available to students who are enrolled in field-based courses or student teaching. In early courses, the College attempts to place students in schools with car pooling possibilities in mind. For upper level field experiences and student teaching, students are expected to have their own means of transportation.

# HUMAN DEVELOPMENT AND FAMILY SCIENCE

# Debra L. Berke, Ph.D., CFLE

Interim Chair, Department of Human Development and Family Science

# Faculty

Professors R. Hamon, D. Berke Associate Professor A. Hwang Assistant Professors E. Boyd-Soisson, M. Hollinger

Lecturer P. Johns

# **Majors and Minors**

The Department of Human Development and Family Science offers the following majors:

Family and Consumer Sciences Education (B.S.) Human Development and Family Science (B.A.)

The Department of Human Development and Family Science offers the following minors:

Children and Youth Services

Children and Youth Services for Human Development and Family Science Majors

Gerontology

Human Development and Family Science

Multicultural Families

Pre-Marriage and Family Therapy

Pre-Marriage and Family Therapy for Human Development and Family Science Majors

Women's Studies

# **Human Development and Family Science**

The Human Development and Family Science Major focuses on the development of the individual in the context of family and society with particular attention to interpersonal dynamics. This dynamic program is designed to prepare students for professional careers in a variety of human service areas, including family life education; leadership roles in church, school, and community; personal roles in family living; and graduate school (in marriage and family therapy, family studies, seminary, counseling, or related fields). Key content areas include human development, sexuality, interpersonal relationships, courtship and marriage, parenting, internal dynamics of families, ethics, family diversity, and family processes such as communication, decision making, and problem solving.

Students majoring in human development and family science take a series of core courses which provide a foundation for understanding the complex issues related to the family. The human development and family science curriculum covers the family life cycle, human development from conception to old age, the individual subsystems within the family (e.g., siblings, parent-child, marital couple), as well as families and their relationship with the external environment and other social systems. In addition, courses in methods of social research, statistics, community services, and family intervention provide the knowledge and skills necessary to either continue study in graduate school or seek employment immediately following graduation. Human development and family science students learn a variety of professional skills including, but not limited to, child observation, interviewing, genogram construction, agency analysis, family life education assessment and program development, as well as conducting and writing literature reviews and research reports.

Human development and family science majors may choose from a wide range of minors within the department such as children and youth services, gerontology, women's studies, multicultural families, and pre-marriage and family therapy, or minors outside the department such as Bible, business, communication, early childhood education, music, criminal justice, counseling, and Christian ministries. Students are encouraged to participate in off-campus practica or internships and will find opportunities for professionally supervised participation in family agencies, community mental health centers, adoption and foster care agencies, retirement facilities, hospitals, prisons, crisis intervention centers, drug and alcohol rehabilitation facilities, and other service agencies in the area.

#### **Career Opportunities**

Students graduating with a major in human development and family science who do not go on to graduate school typically seek employment as youth services workers, program directors, family life educators, child life specialists, foster care or adoption case managers, activities therapists, residential counselors, family services coordinators, family preservation workers, crisis intervention specialists, parent mentors, therapeutic support specialists, and counselors in public and private agencies dealing with family issues. For more career information, visit www.messiah.edu/departments/ family/graduates

Graduates of the Human Development and Family Science Major meet all the standards and criteria needed for the Provisional Certified Family Life Educator (CFLE) designation from the National Council on Family Relations, the premier professional organization for family scientists and practitioners. Professionals certified as Family Life Educators are nationally recognized as having knowledge and skills in each of the ten family life substance areas (e.g., ethics, internal dynamics of families, family life education methodology).

## Human Development and Family Science Major (51-53 credits)

HDFS 101 Foundations of Marriage and Family (3) HDFS 142 Introduction to Interpersonal Relations (3) HDFS 171 Introduction to Social Research (3) HDFS 242 Parenting (3) HDFS 244 Human Sexuality (3) HDFS 253 Community Services for Individuals and Families (3) HDFS 310 Child Development (3) HDFS 311 Adolescent Development (3) HDFS 312 Adult Development (3) HDFS 339 Dynamics of Family Interaction (3) HDFS 355 Marital Relationships (3) One of the following: HDFS 383 Topics in Multicultural Families (3) HDFS 386 Family Ethnicity and Human Services (3) HDFS 442 Strategies of Family Intervention (3) HDFS 494 Human Development and Family Science Seminar (3) One HDFS elective (3) STAT 269 Introductory Statistics (3) One of the following: GERO 231 Psychology of Aging (3) GERO 232 Sociology of Aging (3) Strongly recommended for first-year students: HDFS 099 Opportunities in Human Development and Family Science (1)

# Family and Consumer Sciences Education Major

The Family and Consumer Sciences (FCS) Education program, approved in November of 2003 by the Pennsylvania Department of Education, is an excellent preparation for those students who wish to be certified to teach family and consumer sciences in kindergarten through twelfth grade in public or private schools. The FCS education major is also a wonderful educational background for those who desire to pursue advanced education and become a school guidance counselor, since many schools prefer those with teaching experience for this role.

Crafted to meet the newly revised academic standards for family and consumer sciences education, the FCS major is a collaborative program which incorporates course work from a variety of disciplines across campus, including human development and family science; nutrition and dietetics; art; early childhood education; and education. The curriculum includes at least four public school and early learning center practicum/student teaching experiences throughout the four-year program.

Graduates of the Family and Consumer Sciences Education major meet all the stan-

Education and Social Sciences

Family and consumer science teachers are in great demand. Today and into the foreseeable future, there are more teacher openings than certified family and consumer science teachers available.

According to the Pennsylvania Association of Family and Consumer Sciences, FCS professionals "develop, integrate, and provide practical knowledge about the things of everyday life—human growth and development; personal behavior; housing and environment; food and nutrition; apparel and textiles; and resource management—that every individual needs every day to make sound decisions which contribute to a healthy, productive, and more fulfilling life" (www.pafcs.org/pafcswhatis.htm). In short, family and consumer sciences teachers enhance individual, family, and community well-being through the work that they do.

# Family and Consumer Sciences Education (93 credits)

HDFS 101 Foundations of Marriage and Family (3) HDFS 171 Introduction to Social Research (3) HDFS 242 Parenting (3) HDFS 244 Human Sexuality (3) HDFS 245 Family Resource Management (3) HDFS 253 Community Services for Individuals and Families (3) HDFS 307 Family and Consumer Sciences Curriculum and Instruction I (1) HDFS 310 Child Development (3) HDFS 312 Adult Development (3) HDFS 339 Dynamics of Family Interaction (3) One of the following: HDFS 383 Topics in Multicultural Families Studies (3) HDFS 384 Families in America (3) HDFS 386 Family Ethnicity and Human Services (3) HDFS 355 Marital Relationships (3) HDFS 494 Human Development and Family Science Seminar (3) ART 334 Wearable Art (3) CHEM 110 Chemical Science (4) COMM 104 Fundamentals of Interpersonal Communication (3) COSC 171 Problem Solving with Computers (3) ECE 221 Early Childhood Education Field Experience (1) ECE 363 Developmental Programming: Curriculum and Instruction for ECE (3) EDUC 120 The Teaching Profession (with Field Experience) (1) EDUC 201 Education and American Society (3) EDUC 203 Educational Psychology (3) EDUC 318 Secondary Learning Environments (with Field Experience) (1) EDUC 331 Instructional Design and Assessment for Secondary Educaton (3) NUTR 121 Food and Food Science (3)

NUTR 222 Nutritional Theory (3) STAT 269 Introductory Statistics (3) ENGL xxx American or British Literature (3) Professional Semester: HDFS 311 Adolescent Development (3) HDFS 407 Family and Consumer Sciences Curriculum and Instruction II (2) EDUC 420 Professional Issues in Education (2) EDUC 435 Student Teaching: Secondary (9) Children and Youth Services Minor (19 credits) Core: HDFS 101 Foundations of Marriage and Family (3) HDFS 310 Child Development (3) HDFS 311 Adolescent Development (3) Internship (4) 6 credits of electives from the following list: CHRM 235 Youth Ministries (3) ECE 212 Language Development (3) EDUC 223 Multicultural Literature for Children and Adolescents (3) EDUC 226 Children's Literature (3) HDFS 171 Introduction to Social Research (3) HDFS 242 Parenting (3) HDFS 253 Community Services for Individuals and Families (3) \*HDFS 382 Topics in Human Development and Family Science (3) HDFS 391 Family Service Practicum (3) HDFS 491 Independent Study (3) \*PSYC 382 Topics in Psychology (3) \*SOCI 382 Topics in Sociology (3) \*SOWK 382 Topics in Social Work (3) THEA 261 Theatre for Young Audiences (3) \*Departmental Topics and other possible courses must be approved by the Chair of the Department of Human Development and Family Science Children and Youth Services Minor for Human Development and Family Science Majors (19 credits) Core: HDFS 101 Foundations of Marriage and Family (3) HDFS 310 Child Development (3) Internship (4) 9 credits of electives from the following list: CHRM 235 Youth Ministries I (3) ECE 212 Language Development (3) EDUC 223 Multicultural Literature for Children and Adolescents (3) EDUC 226 Children's Literature (3) \*HDFS 382 Topics in Human Development and Family Science (3) HDFS 391 Family Service Practicum (3) HDFS 491 Independent Study (3)

\*PSYC 382 Topics in Psychology (3) \*SOCI 382 Topics in Sociology (3)

Education and Social Sciences

\*SOWK 382 Topics in Social Work (3) THEA 261 Theatre for Young Audiences (3) \*Departmental Topics and other possible courses must be approved by the Chair of the Department of Human Development and Family Science

## Gerontology Minor (18 credits)

GERO 218 Death, Grief and Caring (3)
GERO 231 Psychology of Aging (3)
GERO 232 Sociology of Aging (3)
GERO 251 Nutrition, Health and Biology of Aging (3)
One of the following:
GERO 391 Aging Practicum (3, 3) or Internship (6)
GERO 391 Aging Practicum (3) and HDFS 312 Adult Development (3)

#### Human Development and Family Science Minor (18 credits)

HDFS 101 Foundations of Marriage and Family (3) HDFS 242 Parenting (3) HDFS 244 Human Sexuality (3) HDFS 339 Dynamics of Family Interaction (3) HDFS 355 Marital Relationships (3) One of the following: GERO 231 Psychology of Aging (3) GERO 232 Sociology of Aging (3) HDFS 209 Life Span Development (3) HDFS 310 Child Development (3) HDFS 311 Adolescent Development (3) HDFS 312 Adult Development (3)

#### Multicultural Families Minor (18 credits)

Core required courses from the Grantham Campus: HDFS 101 Foundations of Marriage and Family (3) HDFS 383 Topics in Multicultural Family Studies (3) One of the following: HDFS 384 Families in America (3) HDFS 386 Family Ethnicity and Human Services (3) Recommended courses in Philadelphia through Temple University (Students will select **two** courses from the following list) AAS 3205 The Black Woman (3) AAS 3296 The Black Family (3) AAS 4221 The Black Child: Development and Socialization (3) LAS 2361 Peoples of Latin America (3) LAS 2072 Puerto Ricans in Philadelphia (3) AS 2001 Practical Asian Society and Culture (3) AS 3636 Asian Women in Transition (3) ANT 2396 Fundamentals of Cultural Anthropology (3) Experiential Requirement — one of the following: URBS 310 Urban Field Experience (3) HDFS 391 Family Service Practicum (3)

**NOTE:** Appropriate course substitutions may be made upon the approval of the Department of Human Development and Family Science.

#### Pre-Marriage and Family Therapy Minor (18 credits)

HDFS 101 Foundations of Marriage and Family (3)
HDFS 142 Introduction to Interpersonal Relations (3)
HDFS 339 Dynamics of Family Interaction (3)
HDFS 411 Marriage and Family Therapy (3)
PSYC 319 Abnormal Psychology (3)
Choose one of the following:
HDFS 355 Marital Relationships (3)
HDFS 382 Topics in Human Development and Family Science (as approved by the department) (3)
HDFS 386 Family Ethnicity and Human Services (3)
HDFS 391 Family Service Practicum (3)
PSYC 241 Group Dynamics (3)
SOCI/PSYC 365 Drug and Alcohol Addiction (3)

#### Pre-Marriage and Family Therapy Minor for Human Development and Family Science Majors (18 credits)

HDFS 101 Foundations of Marriage and Family (3)
HDFS 339 Dynamics of Family Interaction (3)
HDFS 411 Marriage and Family Therapy (3)
PSYC 319 Abnormal Psychology (3) *Choose two of the following:*HDFS 382 Topics in Human Development and Family Science (as approved by the department) (3)
HDFS 391 Family Service Practicum (3)
PSYC 241 Group Dynamics (3)
SOCI/PSYC 365 Drug and Alcohol Addiction (3)

#### Women's Studies Minor (18 credits)

HDFS/PSYC/ SOCI/WOMS 406 Contemporary Feminism (3) HDFS/PSYC/ SOCI/WOMS 342 Women and Men in American Society (3) Four of the following:

ENGL 144 19<sup>th</sup> Century British Women Writers (3) ENGL 176 20<sup>th</sup> Century Women's Literature (3) RELI 335 Gender and Christianity (3) SOCI 356 Race, Ethnicity, and Gender (3) THEO 354 Women Theologians in America (3)

**NOTE:** Appropriate course substitutions may be made with the approval by the Department of Human Development and Family Science.

#### GERO 218 Death, Grief and Caring (3)

Study of current attitudes toward death, dying, and grief. Approached from the perspective of how to deal with one's own and others' mortality and how caregivers can give support to the bereaved or terminally ill person. Cross-listed with HDFS 218.

#### GERO 231 Psychology of Aging (3)

Study focuses on the psychological stability and change experienced by older per-162 — Messiah College Catalog 2007–2008 sons. Topics include sensation and perception, intellectual functioning and learning, psychomotor skills, personality, and psychopathology as related to older persons. Cross-listed with PSYC 231.

## GERO 232 Sociology of Aging (3)

Comprehensive introduction to the field of social gerontology. Special emphasis given to the aged in the context of how the elderly both affect and are affected by our society. Includes study of demography, cultural values and diversity, sexuality, minority elderly, social problems, social institutions, and social programs. Cross-listed with SOCI 232.

## GERO 251 (formerly FAM 251) Nutrition, Health, and Biology of Aging (3)

Team-taught course, with time devoted to the areas of nutrition, health, and biology of the aging. Emphasizes maximizing the physiological condition of older persons.

## GERO 391 (formerly FAM 392) Aging Practicum (1-3)

Field experience for persons pursuing possible careers in the field of gerontology. Students work under professional supervision for a minimum of 40 hours per credit. Ten additional hours of reading and other integrative activities per credit required. Prerequisites: Instructor's consent, Department Chair, and Career Center for Vocation and Development.

# HDFS 099 (formerly FAM 103) Opportunities in Human Development and Family Science (1)

Introduction to the discipline of human development and family science, the faculty in this discipline, career possibilities following graduation, the academic advising process, the discipline's curriculum and its relationship to the general education curriculum, and the type of library research and writing style expected. (Pass/Fail grade only.)

# HDFS 101 (formerly FAM 110) Foundations of Marriage and Family (3)

An overview of the distinct perspective and content areas of the field of family science. The course will focus on the discovery and application of knowledge about the family, with special emphasis on multicultural diversity and Christian integration. Meets the General Education Social Science requirement.

## HDFS 142 (formerly FAM 142) Introduction to Interpersonal Relations (3)

Study of intrapersonal and interpersonal needs, goals, and behaviors in an effort to enhance interpersonal competence. Emphasis on teaching skills necessary to function more effectively in interpersonal situations and helping contexts.

## HDFS 171 (formerly FAM 171) Introduction to Social Research (3)

Introduction to human inquiry including the development of hypotheses and the role of theory in hypothesis development. A survey of research design, sampling, and possible data collection strategies. Prerequisite: An introductory course in the behavioral sciences. Cross-listed with PSYC 171.

# HDFS 205 (formerly FAM 205) Principles of Peer Relationships (1)

This course, designed for Resident Assistants and Apartment Life Coordinators, will

consider numerous essential components for effective peer relationships and helping skills based upon the premise that competent students know themselves, know others, and know Messiah College.

## HDFS 209 (formerly FAM 209) Life Span Development (3)

A developmental approach to the study of persons from conception to death. Attention is given to the physical, emotional, social, and cognitive development of the individual as well as to theoretical and methodological issues relevant to understanding different age groups. Applications are made to the contexts relevant to various stages of development. Recommended prerequisite: EDUC/PSYC 203, HDFS 101, or PSYC 101. Cross-listed with PSYC 209. Not for HDFS majors.

## HDFS 218 (formerly FAM 218) Death, Grief, and Caring (3)

Study of current attitudes toward death, dying, and grief. Approached from the perspective of how to deal with one's own and others' mortality and how caregivers can give support to the bereaved or terminally ill person. Cross-listed with GERO 218.

## HDFS 242 (formerly FAM 242) Parenting (3)

Overview of the parenting process in diverse cultural and familial structures. Examines mothering and fathering as well as the effects of parenthood on other family relationships. Identifies different parenting styles, theories, and psycho-educational programs and how these vary throughout the family life cycle. Prerequisite: HDFS 101 or Instructor's consent.

## HDFS 244 (formerly FAM 244) Human Sexuality (3)

Examination of sexual development, human reproduction, sexual functioning, gender, ethics, and attitudes. Investigation of sexual dysfunction and socio-psychological issues related to sexual expression.

## HDFS 245 (formerly FAM 245) Family Resource Management (3)

An examination of management basics such as decision making, time and energy management, work simplification, and critical thinking as they apply to the functioning of family systems through the life span. The student will acquire a thorough understanding of the acquisition, distribution, and utilization of resources as these relate to unique individual/family needs and wants. Prerequisite: HDFS 101 or Instructor's consent.

# HDFS 253 (formerly FAM 253) Community Services for Individuals and Families (3)

An overview of family policies and how the community responds to the needs of individuals and families. Major social agencies which serve individuals and families will be surveyed. Prerequisite: HDFS 101 or Instructor's consent.

## HDFS 307 (formerly FAM 307) FCS Curriculum and Instruction I (1)

Provides an examination of the spectrum of theories, techniques, methods, and approaches to the teaching of family and consumer sciences, with particular attention to the Pennsylvania Department of Education's Academic Standards and Guidelines for FCS. Students will be expected to develop instructional materials that could be used in classroom. Should be taken concurrent with EDUC 318.

Prerequisite: HDFS 101 and admission into the Teacher Education Program.

#### HDFS 310 (formerly FAM 310) Child Development (3)

A developmental approach to the study of the individual from the prenatal period through late childhood. Attention given to the physical, emotional, social, and cognitive development of the child as well as theoretical and methodological issues related to child development. Applications made to the family, peers, church, and culture. Prerequisite: EDUC/PSYC 203, HDFS 101, PSYC 101, or HDFS/PSYC 171. Cross-listed with PSYC 310.

#### HDFS 311 (formerly FAM 311) Adolescent Development (3)

A developmental approach to the study of the adolescent. Attention given to the physical, emotional, social, and cognitive development of the adolescent as well as theoretical and methodological issues. Applications made to the family, peers, schools, church, and culture. Prerequisite: EDUC/PSYC 203, HDFS 101, PSYC 101, or HDFS/PSYC 171. Cross-listed with PSYC 311.

#### HDFS 312 (formerly FAM 312) Adult Development (3)

A developmental approach to the study of the early and middle adult years. Attention given to the interaction of psychological, social, and physiological aspects as well as theoretical and methodological issues related to adult development. Prerequisite: EDUC/PSYC 203, HDFS 101, PSYC 101, or HDFS/PSYC 171. Cross-listed with PSYC 312.

#### HDFS 339 (formerly FAM 339) Dynamics of Family Interaction (3)

Study of interpersonal processes in the family and other intimate groups. Examination and application of family theory and family interaction patterns. Prerequisite: HDFS 101 and sophomore standing.

#### HDFS 340 (formerly FAM 340) Ethics and the Family (3)

An introduction to the applied field of family ethics, this course attempts to find rational solutions to specific moral problems embedded in the context of marital and/or familial relationships and explores implications for the larger social context. Students will study the application of ethical theories to the problems and questions specific to this area of human activity and will be introduced to the use of specific steps in the process of moral decision making. Meets the General Education Ethics requirement.

#### HDFS 342 (formerly FAM 342) Women and Men in American Society (3)

Introduction to key topics related to gender such as identity formation, work, family, sexuality, violence, class stratification, and religious orientation. Racial and cultural issues will be treated as they affect understanding of gender. Meets the General Education Pluralism requirement. Cross-listed with PSYC/SOCI/WOMS 342.

#### HDFS 355 (formerly FAM 355) Marital Relationships (3)

Examination of dating, mate selection, and marriage, including factors associated with marital satisfaction, stability, and dissolution. Prerequisite: HDFS 101 and sophomore standing.

# HDFS 382 (formerly FAM 382) Topics in Human Development and Family Science (3)

Selected topics in family science not currently included in course offerings. Possible topics may include families under stress, play, the history of the family, the family in later life, family violence, work and families, the family and media, women in relationships, family therapy, and family diversity. May be repeated for credit. Prerequisite: Three credits of HDFS courses or Instructor's consent.

## HDFS 383 (formerly FAM 383) Topics in Multicultural Family Studies (3)

Selected topics in multicultural families. Possible topics may include but are not limited to the study of African-American families, Asian-American families, and Latino families. May be repeated for credit. Meets General Education Pluralism requirement.

## HDFS 384 (formerly FAM 320) Families in America (3)

A socio-cultural study of family/household variations in the Americas; special emphasis on cultural and ethnic diversity and the adaptability of family/household forms to changing environmental contexts; historical and cross-cultural perspectives. Meets General Education Pluralism requirement and cross-listed with SOCI 384.

## HDFS 386 (formerly FAM 341) Family Ethnicity and Human Services (3)

This course provides an introduction to the cultural variations found in family structures, life cycle transitions, relational strengths and values as experienced within African American, American Indian, Asian American, and Latino families. Special attention will be given to the understanding of racism, ethnocentrism, and acculturation, as well as the role that cultural sensitivity may play in the assessment and delivery of human services. Meets the General Education Pluralism requirement.

## HDFS 391 (formerly FAM 391) Family Service Practicum (1-3)

Field experience for junior and senior human development and family science majors wishing to clarify vocational goals and gain hands-on experience. Students work under professional supervision for a minimum of 40 hours per credit. Ten additional hours of reading and other integrative activities per credit required. Prerequisites: Instructor's consent, Department Chair, and Career Center for Vocation and Development.

## HDFS 406 (formerly FAM 406) Contemporary Feminism (3)

Explores the contemporary women's movement in its historical, philosophical, political, and religious contexts. Ideas about the oppression of women and possible social remedies. Cross-listed with PSYC/SOCI/WOMS 406.

## HDFS 407 (formerly FAM 407) FCS Curriculum and Instruction II (3)

A seminar emphasizing disciplinary content issues that are specific to Family and Consumer Sciences teaching. Areas of focus include curricular and instructional decision-making processes; classroom management strategies; assessment techniques; adaptations for exceptional learners; instructional technology application; and professional development. Should be taken concurrent with EDUC 420, EDUC 435, and HDFS 311. Prerequisite: Admission to the Professional Semester and HDFS 307.

## HDFS 411 (formerly FAM 411) Marriage and Family Therapy (3)

This course is designed to introduce students to the evolution, perspectives, professional issues, and basic models of family therapy, with particular attention to foundational theoretical approaches dealing with systems theory. Students will learn basic concepts and interventions employed for dealing with relational patterns found between couples and families. Prerequisites: HDFS 101 and HDFS 339 or PSYC 323, or Instructor's consent.

## HDFS 442 (formerly FAM 442) Strategies of Family Intervention (3)

Investigation of contemporary models and methods for strengthening interpersonal and family relationships. Emphasizes family life education and family enrichment. Prerequisites: HDFS 339, 355.

## HDFS 491 (formerly FAM 491) Independent Study (1-3)

Junior and senior students with at least a 3.0 GPA in their major may select a problem for independent investigation in a special area of family science. Prerequisites: Instructor's consent and Department Chair.

# HDFS 494 (formerly FAM 494) Human Development and Family Science Seminar (3)

This course will encourage students to examine contemporary family problems in light of their Christian faith. As part of this process students will learn different skills in biblical interpretation as they analyze existing issues which affect family relationships. Consideration will also be given to how issues of faith may affect the practice and delivery of social services. Prerequisite: Senior status.

## HDFS 497, 498 (formerly FAM 497, 498) Major Honors (3, 3)

Independent research program for students who have a strong academic record for a minimum of five previous semesters of college study. Overall GPA of 3.5 and departmental approval required for enrollment.

## WOMS 342 Women and Men in American Society (3)

Introduction to key topics related to gender such as identity formation, work, family, sexuality, violence, class stratification and religious orientation. Racial and cultural issues will be treated as they affect understanding of gender. Meets the General Education Pluralism requirement. Cross-listed with HDFS/PSYC/SOCI 342.

# WOMS 356 Race, Ethnicity, and Gender (3)

Exploration of the concepts of race, ethnicity, and gender; introduction to theories of prejudice and discrimination; some discussion of historical and contemporary situations of racial and ethnic minorities in U.S. society; consideration of the issue of gender, particularly the role of women in contemporary society. Meets General Education Pluralism requirement. Cross-listed with SOCI 356.

## WOMS 406 Contemporary Feminism (3)

Explores the contemporary women's movement in its historical, philosophical, political, and religious contexts. Ideas about the oppression of women and possible social remedies. Cross-listed with HDFS/PSYC/SOCI 406.

# PSYCHOLOGY

# John A. Addleman, Ph.D.

Chair, Department of Psychology

# Faculty

Professors J. Addleman, J. Bechtold, R. Jacobsen, W. Seegobin Associate Professors L. Cable Assistant Professor C. Jantzi Senior Lecturer V. Lemmon

# **Majors and Minors**

The Department of Psychology offers the following majors: Biopsychology (B.S.) Psychology (B.A.) Concentration: Counseling Psychology (B.S.)

The Department of Psychology offers the following minors: Community Psychology Counseling Psychology

# Psychology

Each of the degrees in Psychology help students develop a more sophisticated understanding of the person. Psychology students will examine such mental phenomena as consciousness, perception, learning, memory, intelligence, interpersonal relations, motivation, and development in childhood, adolescence, and adulthood.

Students who want more flexibility in their degree may choose to pursue a B.A.

degree. Students who wish to earn a degree that is more directly related to science may choose to pursue a B.S. degree. Students who may wish to become counselors or seek an entry-level position in counseling-related field may choose to pursue the B.A. with a counseling concentration.

Some graduate schools prefer applicants who have a B.S. degree while other schools do not have a preference between the B.A. or the B.S. Students are encouraged to talk with their advisor at Messiah so that he or she can help them make the best decision about which degree to choose.

The B.S. in Biopsychology prepares students who are interested in any of the following fields: medicine, psychiatry, clinical psychology, cognitive neuroscience, psychopharmacology, neuropsychology, behavioral genetics, experimental psychology, evolutionary psychology, or comparative psychology. Most biopsychologists are trained experimental psychologists who have brought their knowledge of biology to the study of psychological phenomena. These phenomena include behavior and underlying psychological processes, such as learning, memory, perception, attention, motivation, emotion, and cognition.

The Department of Psychology offers both clinically oriented courses such as personality, counseling theories, psychological testing, and counseling techniques, and experimentally oriented courses such as biological basis of behavior, sensation and perception, cognition, and social psychology. In addition, courses in statistics, methods of social research, and experimental psychology provide students with the experiences and knowledge necessary to either continue their study in graduate school or seek employment immediately following graduation.

Psychology Majors can choose from a variety of minors such as Bible, business, communication, early childhood education, Christian ministries, or community psychology, gerontology, human development and family science, sociology, criminal justice, or anthropology. Students are encouraged to participate in a practicum or internship off campus, and will find opportunities for professionally supervised participation in community mental health centers, retirement facilities, hospitals, prisons, crisis intervention centers, drug and alcohol rehabilitation facilities, and other service agencies in the area.

## Biopsychology Major (61-63 credits)

One of the following series of courses (8–10 credits total):

- A. BIOL 150 Biology I (4)
  - BIOL 151 Biology II (2)
  - BIOL 152 Biology III (4)
- B. BIOL 185 Human Anatomy and Physiology I (4)
   BIOL 186 Human Anatomy and Physiology II (4)
- BIOL 281 Genetics (4)
- BIOL 387 Neuroscience (3)
- CHEM 105 General Chemistry I (4)
- CHEM 106 General Chemistry II (4)
- One of the following sets of courses (4-8 credits total):

- A. CHEM 204 Introduction to Organic Chemistry (4)
- B. CHEM 309 Organic Chemistry I (4)
- CHEM 310 Organic Chemistry II (4)
- Three to seven credits from the following courses:
  - BIOL 313 Developmental Biology (3)
  - BIOL 382 Microbiology for Health Professions (4)
  - BIOL 384 Pathophysiology (3)
  - BIOL 385 Physiology (4)
  - BIOL 386 Human Anatomy (4)
  - BIOL 412 Cell Biology (4)
  - BIOL 418 Introduction to Immunology (4)

# NOTE: Students must take 34–36 credits from the Biology and Chemistry component of the major.

- PSYC 101 Introduction to Psychology (3)
- PSYC 171 Introduction to Social Research (3)
- One of the following:
  - PSYC 271 Statistical Methods in Psychology (3)
  - STAT 269 Introductory Statistics (3)
- PSYC 209 Life Span Development (3)
- PSYC 350 Biological Basis of Behavior (3)
- PSYC 408 Experimental Psychology (3)
- Two of the following:
  - PSYC 204 Cognition (3)
  - PSYC 319 Abnormal Psychology (3)
  - PSYC 351 Sensation and Perception (3)
- One of the following:
  - BIOL 495 Capstone: Natural Sciences (3) PSYC 494 Psychology Seminar (3)
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#### Psychology Major (Bachelor of Arts - 46 credits)

Core Courses (34 credits): PSYC 101 Introduction to Psychology (3) PSYC 171 Introduction to Social Research (3) PSYC 209 Life Span Development (3) PSYC 271 Statistical Methods in Psychology (3) One of the following: ANTH 101 Introduction to Anthropology (3) SOCI 101 Principles of Sociology (3) One of the following: PSYC 204 Cognition (3) PSYC 226 Social Psychology (3) One of the following: PSYC 408 Experimental Psychology (3) PSYC 409 Psychological Testing (3) PSYC 441 History and Systems of Psychology (3) PSYC 494 Psychology Seminar (3) BIOL 258 Human Biology (4) PSYC elective (3)

PSYC 099 Opportunities in Psychology (1) is strongly recommended for first-year students

The remainder of the Psychology (BA) major requirements are fulfilled by either the following courses (Option A) or the Counseling Concentration (Option B).

Option A: Additional Psychology Courses (12 credits)

One of the following: PSYC 319 Abnormal Psychology (3) PSYC 323 Counseling Theories (3) PSYC 324 Personality (3) PSYC electives (9)

## Option B: Counseling Concentration (12 credits)

PSYC 241 Group Dynamics (3) PSYC 319 Abnormal Psychology (3) PSYC 323 Counseling Theories (3) PSYC 423 Counseling Techniques (3)

#### Psychology Major (Bachelor of Science - 46 credits)

PSYC 101 Introduction to Psychology (3) PSYC 171 Introduction to Social Research (3) PSYC 271 Statistical Methods in Psychology (3) One of the following: ANTH 101 Introduction to Anthropology (3) SOCI 101 Principles of Sociology (3) PSYC 204 Cognition (3) PSYC 350 Biological Basis of Behavior (3) PSYC 351 Sensation and Perception (3) PSYC 209 Life Span Development (3) One of the following: PSYC 319 Abnormal Psychology (3) PSYC 323 Counseling Theories (3) PSYC 324 Personality (3) PSYC 408 Experimental Psychology (3) PSYC 441 History and Systems of Psychology (3) PSYC 494 Psychology Seminar (3) PSYC electives (6) BIOL 258 Human Biology (4) Strongly recommended for first-year students: PSYC 099 Opportunities in Psychology (1) Community Psychology Minor (21 credits) One of the following: PSYC 101 Introduction to Psychology (3) SOCI 101 Principles of Sociology (3) One of the following: PSYC 171 Introduction to Social Research (3) SOCI 271 Research Methods (3) PSYC/SOCI 226 Social Psychology (3) PSYC 242 Community Psychology (3)

SOCI 242 Social Problems and Social Change (3)
PSYC/SOCI 391 Practicum\* (3)
One of the following:
CRIJ 282 Restorative Justice (3)
HDFS 253 Community Services for Individual and Family (3)
PSYC 319 Abnormal Psychology (3)
PSYC 323 Counseling Theories (3)
PSYC/SOCI 365 Drug and Alcohol Addiction (3)

\* The practicum should be associated with the Harrisburg Institute, and it must be approved by the Department of Psychology.

#### Counseling Minor (21 credits)

PSYC 101 Introduction to Psychology (3) PSYC 241 Group Dynamics (3) PSYC 319 Abnormal Psychology (3) PSYC 323 Counseling Theories (3) PSYC 423 Counseling Techniques (3) Any two of the following: HDFS/PSYC 209 Life Span Development (3) HDFS 218 Death, Grief, and Caring (3) HDFS 242 Parenting (3) HDFS 244 Human Sexuality (3) HDFS 382 Topics in Human Development and Family Science (3)\* HDFS 391 Family Service Practicum (3)\* PSYC/ SOCI 365 Drug and Alcohol Addiction (3) PSYC 391 Psychology Practicum (3)\*

\* All Practica and Topics courses require approval by the Department of Psychology in order to meet the minor requirement.

#### Psychology Minor (18 credits)

PSYC 101 Introduction to Psychology (3) One of the following: PSYC 209 Life Span Development (3) PSYC 310 Child Development (3) PSYC 311 Adolescent Development (3) PSYC 312 Adult Development (3) Two of the following: PSYC 204 Cognition (3) PSYC 226 Social Psychology (3) PSYC 350 Biological Basis of Behavior (3) PSYC 351 Sensation and Perception (3) One of the following: PSYC 323 Counseling Theories (3) PSYC 324 Personality (3) One PSYC elective (3)

#### PSYC 099 (formerly PSY 103) Opportunities in Psychology (1)

The purpose of this course is to introduce first-year students coming into the Psychology Major to the curriculum and opportunities within the department, the faculty of the department, career possibilities following graduation, the academic advising process, and the type of library research and writing style expected by the faculty in the department. (Pass/Fail grade only.)

# PSYC 101 (formerly PSY 111) Introduction to Psychology (3)

Introduction to modern psychology including its major theorists and methodologies and an overview of developmental, social, and abnormal psychology. Meets General Education Social Science requirement.

## PSYC 171 Introduction to Social Research (3)

Introduction to human inquiry including the development of hypotheses and the role of theory in hypothesis development. A survey of research design, sampling, and possible data collection strategies. Prerequisite: An introductory course in the behavioral sciences. Cross-listed with HDFS 171.

## PSYC 203 Educational Psychology (3)

Study of theoretical concepts and principles necessary for understanding human thought and behavior in a wide variety of educational environments. Focus on variables related to teaching-learning processes: learning, memory, transfer, problem solving, motivation, growth and development, exceptionalities, instructional planning, assessment. Emphasis on research methodologies employed by educational psychologists and interpretation of empirical research findings. Meets General Education Social Science requirement. Cross-listed with EDUC 203.

## PSYC 204 Cognition (3)

Survey of research and theory in the study of human thinking. The course covers the acquisition, representation, and use of knowledge with emphasis on the processes of attention, memory, language, and problem solving. Prerequisite: PSYC 101.

## PSYC 209 Life Span Development (3)

A developmental approach to the study of persons from conception to death. Attention is given to the physical, emotional, social, and cognitive development of the individual as well as to theoretical and methodological issues relevant to understanding different age groups. Applications are made to the contexts relevant to various stages of development. Recommended prerequisite: EDUC/PSYC 203, HDFS 101, or PSYC 101. Cross-listed with HDFS 209.

# PSYC 226 Social Psychology (3)

Study of the individual in relation to social influences and situations. Emphasis on methodology, social cognition, attitudes, conformity, attraction, persuasion, groups, altruism, aggression, and conflict resolution. Prerequisite: PSYC 101 or SOCI 101. Cross-listed with SOCI 226.

# PSYC 231 Psychology of Aging (3)

Study focuses on the psychological stability and change experienced by older persons. Topics include sensation and perception, intellectual functioning and learning, psychomotor skills, personality, and psychopathology as related to older persons. Cross-listed with GERO 231.

## PSYC 241 Group Dynamics (3)

Exploration of group process (including group structure and function, leadership, decision making, and problem solving) and group therapy (including intervention strategies). Learning methods will include both didactic and experiential components. (Offered Fall Semester only.)

#### PSYC 242 Community Psychology (3)

This course focuses on person-environment interactions and the ways society impacts individual and community functioning. Community Psychology attempts to address key social issues, including poverty, substance abuse, school failure, community development, delinquency, violence, and high risk behavior in a variety of settings, including clubs, churches, schools, families, agencies, and neighborhoods. Prerequisite: PSYC/HDFS/SOCI 101.

#### PSYC 243 Positive Psychology (3)

This course examines the scientific study of optimal human functioning. Students will learn what factors have been found to help people flourish and grow. Time will be spent helping students discover some of their own strengths and how they can be optimized. Prerequisite: PSYC/HDFS/SOCI 101.

## PSYC 244 Cross Cultural Psychology (3)

This course examines many of the common topics in psychology from an international, multicultural perspective. Students also learn what factors lead to differences in human characteristics across cultures. Prerequisite: PSYC/HDFS/SOCI 101.

## PSYC 245 Forensic Psychology (3)

This course provides an understanding of the relationship between psychology and law by showing how psychological research and theory can inform the legal process. Some specific areas of study in forensic psychology include data gathering and operations (police work, investigation), legal proceedings (expert witnesses, competency and psychological assessment, jury selection), and institutionalization. Prerequisite: PSYC/HDFS/SOCI 101.

#### PSYC 271 Statistical Methods in Psychology (3)

This course provides a foundational background in the use and application of key statistical methods used in psychology. Students will learn to handle data and critically evaluate the appropriate statistical methods for presenting data within the field of psychology. The basic principles of probability, descriptive statistics, inferential statistics, and the use of statistical software appropriate to psychology will be taught. Prerequisite: PSYC 171 and one math course.

## PSYC 310 Child Development (3)

A developmental approach to the study of the individual from the prenatal period through late childhood. Attention given to the physical, emotional, social, and cognitive development of the child as well as theoretical and methodological issues

related to child development. Applications made to the family, peers, church, and culture. Prerequisite: EDUC/PSYC 203, HDFS 101, PSYC 101, or PSYC/HDFS 171. Cross-listed with HDFS 310.

## PSYC 311 Adolescent Development (3)

A developmental approach to the study of the adolescent. Attention given to the physical, emotional, social, and cognitive development of the adolescent as well as theoretical and methodological issues. Applications made to the family, peers, schools, the church, and the culture. Prerequisite: EDUC/PSYC 203, HDFS 101, PSYC 101, or PSYC/ HDFS 171. Cross-listed with HDFS 311.

## PSYC 312 Adult Development (3)

A developmental approach to the study of the early and middle adult years. Attention given to the interaction of psychological, social, and physiological aspects as well as theoretical and methodological issues related to adult development. Prerequisite: EDUC/PSYC 203, HDFS 101, PSYC 101, or PSYC/ HDFS 171. Cross-listed with HDFS 312.

## PSYC 319 Abnormal Psychology (3)

Study of the genetic and environmental causes of psychopathology. Major psychiatric syndromes are discussed with emphasis on preventive therapies. Prerequisites: PSYC 101 or HDFS 101 and 3 additional PSYC credits.

## PSYC 323 Counseling Theories (3)

Study of various theoretical approaches to counseling, including psychoanalysis, cognitive-behavioral therapies, and person-centered therapy. Prerequisites: PSYC 101.

## PSYC 324 Personality (3)

Systematic study of the structure, organization, and determination of personality including a survey of the major contemporary personality theories. Prerequisites: PSYC 101 and three additional PSYC credits.

## PSYC 342 Women and Men in American Society (3)

Introduction to key topics related to gender such as identity formation, work, family, sexuality, violence, class stratification, and religious orientation. Racial and cultural issues will be treated as they affect understanding of gender. Meets the General Education Pluralism requirement. Cross-listed with HDFS/SOCI/WOMS 342.

## PSYC 350 Biological Basis of Behavior (3)

Study of the relationship between the physiological and psychological bases of behavior, with emphasis on the control of movement, perception, learning, emotion, and motivation by the central nervous system. Students will participate in simulated research activities to explore and illustrate key principles and ideas. Prerequisites: PSYC 101 and BIOL 150, BIOL 185, or BIOL 258.

## PSYC 351 Sensation and Perception (3)

A detailed examination of the theories and research pertaining to various sensory and perceptual processes. Methodological and physiological issues are carefully examined. Students will participate in simulated research activities to explore and

# PSYC 365 Drug and Alcohol Addiction (3)

Examines the use of legal and illegal drugs in America, including production, distribution, marketing, consumption, addiction, assessment, policy and treatment programs. Cross-listed with SOCI 365.

# PSYC 382 Topics in Psychology (3)

Selected topics in psychology not currently included in course offerings. Possible topics may include cross-cultural psychology, psychology of religion, advanced experimental research, and moral development. May be repeated for credit. Prerequisite: Three credits in psychology or Instructor's consent.

# PSYC 391 Psychology Practicum (1-3)

Field experience for junior and senior psychology majors wishing to clarify vocational goals. Students work under supervision of a professional for a minimum of 40 hours per credit. Ten additional hours of reading and other integrated activities per credit required. Prerequisites: Instructor's consent, Department Chair, and Internship Center.

# PSYC 406 Contemporary Feminism (3)

Explores the contemporary women's movement in its historical, philosophical, political, and religious contexts. Ideas about the oppression of women and possible social remedies. Cross-listed with HDFS/SOCI/WOMS 406.

# PSYC 408 Experimental Psychology (3)

In-depth study of human behavior, the formulation of research problems and hypotheses, research design, statistical inference, decision making, and writing research reports. Prerequisites: 9 credits PSYC courses, PSYC/ HDFS 171, and STAT 269 or PSYC 271.

# PSYC 409 Psychological Testing (3)

An overview of the use of psychological tests and observational techniques in the assessment of individuals. Prerequisite: 9 credits of PSYC courses.

# PSYC 423 Counseling Techniques (3)

Investigation of basic counseling techniques and situations with emphasis on skill development and application. Prerequisite: PSYC 323. (Offered Spring Semester only.)

# PSYC 441 History and Systems of Psychology (3)

History of the development of psychology with an examination of the conceptual bases of current psychological systems. Prerequisites: PSYC 101 and junior or senior status.

# PSYC 491 Independent Study (1-3)

Junior and senior students with at least a 3.0 GPA in their major may select a problem for independent investigation in a special area of psychology. Prerequisites: Instructor's consent and Department Chair.

## PSYC 494 Psychology Seminar (3)

Discussion and analysis of the relationship between psychology and the Christian faith. Considers how Christian perspectives inform, critique, and further a professional orientation in psychology. Prerequisite: Senior status.

## PSYC 497, 498 Major Honors (3, 3)

Independent research program for students who have a strong academic record for a minimum of five previous semesters of college study. Overall GPA of 3.5 and departmental approval required for enrollment.

# SOCIOLOGY, SOCIAL WORK, AND CRIMINAL JUSTICE

# Ronald J. Burwell, Ph.D.

Chair, Department of Sociology, Social Work, and Criminal Justice

# Faculty

Professors R. Burwell, J. Eby, J. Paris, T. Peterson Associate Professor D. Heath-Thornton Assistant Professor C. Seitz Lecturer K. Keith

# **Majors and Minors**

The Department of Sociology, Social Work and Criminal Justice offers the following majors:

Criminal Justice (B.A.) Social Work (B.S.W.) Sociology (B.A.) Concentrations: Criminal Justice Cultural Anthropology

The Department of Sociology, Social Work, and Criminal Justice offers the following minors:

Anthropology Criminal Justice Human Services Sociology Urban Studies

# Sociology/Anthropology/Criminal Justice/Urban Studies

Sociology is the study of social behavior and human groups, focusing primarily on the influence of social relationships on people's attitudes and behaviors. Sociology focuses on why and how societies are established and change. Sociology's subjects range from institutions like the family and religion; social movements and collective behavior; crime and deviance; divisions such as class, race, ethnicity, and gender; as well as topics such as sociology of sport, sociology of work, and the sociology of politics.

In addition to offering courses in sociology, the Department of Sociology, Social Work, and Criminal Justice also offers course work in areas such as anthropology, criminal justice, and urban studies. Anthropology is the study of humanity, biologically and culturally, including an emphasis on humans as culture builders. Anthropology emphasizes a non-ethnocentric approach to comparing cultures and traditions enabling students to understand and appreciate cultural diversity. Criminal justice focuses on particular problems of group life, the causal analysis of deviance and crime, and societal responses to such, including crime control, justice systems, punishment, and corrections. Studies in criminal justice include critical evaluation of policies and programs that deal with crime as well as ethical issues, and prepare graduates for employment in a variety of criminal justice fields.

Study in the areas of sociology, anthropology, criminal justice, and urban studies prepares students for a wide variety of career options including human services, criminal and juvenile justice, business, government service, urban planning, research, and community development. In addition, these areas are also appropriate pre-professional programs for law, the ministry, and social work. Sociology majors and those interested in anthropology, criminal justice, and urban studies are encouraged to spend one semester at the Philadelphia Campus.

In addition to completing a group of core courses, sociology majors complete the sociology major by taking additional sociology courses or by selecting one of two specialized concentrations: criminal justice or cultural anthropology.

## Criminal Justice Major (59 credits)

CRIJ 101 Introduction to Criminal Justice (3) CRIJ 201 Introduction to Law Enforcement (3) CRIJ 259 Criminal Law and Court Procedures (3) CRIJ 282 Restorative Justice (3) CRIJ 307 Comparative Criminal Justice Systems (3) CRIJ 309 Juvenile Delinguency (3) CRIJ 348 Ethics in the Criminal Justice System (3) CRIJ 362 Criminology (3) CRIJ 366 Corrections: Incarceration, Probation, Parole (3) CRIJ 367 Victimology (3) CRIJ 450 Criminal Justice Field Experience Preparation (1) CRIJ 452 Criminal Justice Seminar (1) CRIJ 455 Criminal Justice Field Experience (3) PSYC 101 Introduction to Psychology (3) SOCI 101 Principles of Sociology (3) SOCI 271 Research Methods (3)

SOCI 281 Data Analysis and Social Statistics (3)
Four of the following:
BIBL 291 Issues of War, Peace, and Social Justice in Biblical Texts (3)
CRIJ 382 Topics in Criminal Justice (3)
SOCI 242 Social Problems and Social Change (3)
SOCI 335 Social Conflict, Justice, and Peacemaking (3)
SOCI 356 Race, Ethnicity, and Gender (3)
SOCI 365 Drug and Alcohol Addiction (3)
SOWK 365 Human Diversity and Social Interaction (3)

#### Criminal Justice Minor (18 credits)

CRIJ 101 Introduction to Criminal Justice (3) SOCI 242 Social Problems and Social Change (3) One of the following: CRIJ 309 Juvenile Delinquency (3) CRIJ 362 Criminology (3) One of the following: CRIJ 282 Restorative Justice (3) CRIJ 307 Comparative Criminal Justice Systems (3) CRIJ 367 Victimology (3) Six credits Criminal Justice elective (6)

#### Sociology Major Core (18 credits)

- SOCI 101 Principles of Sociology (3)
- SOCI 271 Research Methods (3)
- SOCI 332 Sociological Theory (3)
- SOCI 441 Contemporary Issues in Sociology (3)
- SOCI 442 Sociology Thesis (3)

One of the following (Understanding Cultures):

ANTH 101 Introduction to Cultural Anthropology (3)

ANTH 221 Native American Cultures (3)

ANTH 325 Ethnographic Fieldwork (3)

ANTH 382 Selected Topics in Anthropology (3)

#### The remainder of the sociology major requirements are fulfilled by either the following courses (21 credits) or one of the two specialized concentrations (21 or 24 credits):

SOCI 281 Data Analysis and Social Statistics (3)
One of the following:
CRIJ 101 Introduction to Criminal Justice (3)
SOCI 226 Social Psychology (3)
SOWK 120 Introduction to Social Welfare Social Work (3)
One of the following:
SOCI 242 Social Problems and Social Change (3)
SOCI 335 Social Conflict, Justice, and Peacemaking (3)
SOCI 356 Race, Ethnicity, and Gender (3)
One of the following:
SOCI 215 Introduction to Urban Sociology (3)
SOCI 341 Religion and Society (3)

SOCI 384 Families in America (3) Nine credits SOCI electives (9) **NOTE:** At least eighteen (18) credits used to meet requirements must be 300- or 400-level courses.

#### Sociology with Criminal Justice Concentration (24 credits)

CRIJ 101 Introduction to Criminal Justice (3) CRIJ 259 Criminal Law and Court Procedures (3) CRIJ 282 Restorative Justice (3) CRIJ 362 Criminology (3) SOCI 242 Social Problems and Social Change (3) SOCI 281 Data Analysis and Social Statistics (3) *Two of the following:* CRIJ 309 Juvenile Delinquency (3) CRIJ 366 Corrections: Incarceration, Probation, Parole (3) CRIJ 367 Victimology (3) CRIJ 367 Victimology (3) CRIJ 382 Topics in Criminal Justice (3) SOCI 365 Drug and Alcohol Addiction (3) SOWK 120 Introduction to Social Welfare and Social Work (3) Approved CRIM courses at Temple University *Criminal Justice Field Experience (4) including:* 

CRIJ 450 Criminal Justice Field Experience Preparation (1)

CRIJ 455 Criminal Justice Field Experience (3)

#### Cultural Anthropology Concentration (21 credits)

ANTH 101 Introduction to Cultural Anthropology (3)\*

ANTH 221 Native American Cultures (3)

ANTH 325 Ethnographic Fieldwork (3)

LING 309 Linguistics (3)

Twelve additional hours of upper-level courses approved by the cultural anthropology concentration advisor chose from ANTH 382 Topics courses, Interdisciplinary courses, and/or Temple University courses.

**NOTE:** At least 18 credits used to meet requirements must be 300-or 400-level courses.

\*Overlaps with core

#### Anthropology Minor (18 credits)

ANTH 101 Introduction to Cultural Anthropology (3)

ANTH 221 Native American Cultures (3)

ANTH 325 Ethnographic Fieldwork (3)

Three courses (9 credits) from the following:

ANTH 325 Ethnographic Fieldwork (3) (up to 6 credits)

ANTH 382 Topics in Anthropology (3) (up to 6 credits)

ANTH 391 Anthropology Practicum (3)

LING 309 Linguistics (3)

Interdisciplinary Studies Courses (up to 9 credits; courses to be approved by Anthropology Minor advisor)

Students pursuing the Anthropology Minor are encouraged to spend a semester at

Education and Social Sciences

Human Services Minor (18 credits) Department of Sociology, Social Work and Criminal Justice

This minor introduces students to the human service system and is intended for students in any major who want background and experience in human services and working with people within a context of social policy, human development, diversity, and interaction with individuals and groups.

SOWK 120 Introduction to Social Welfare and Social Work (3) SOWK 221 Human Behavior in Social Environment (3) SOWK 420 Social Work Policies in the US (3) One of the following: (Social Context Cluster) HRM 120 Principles of Management (3) SOWK 365 Human Diversity and Social Interaction (3) SOCI 242 Social Problems and Social Change (3)\* SOCI 356 Race, Ethnicity, and Gender (3) CRIJ 362 Criminology (3)\* CRIJ 367 Victimology (3)\* One of the following: (Skills in the Helping Professions Cluster) HDFS 142 Introduction to Interpersonal Relations (3) PSYC 241 Group Dynamics (3) PSYC 323 Counseling Theories (3)\* One of the following: HDFS, PSYC, or SOCI practicum (3)\* SERV 231/232 Studies in Service Learning (4)\* Internship (4) NOTE: Students also need to be attentive to specific pre-requisites required for each course listed.

\* indicates prerequisite or instructor approval required

#### Sociology Minor (18 credits)

SOCI 101 Principles of Sociology (3)
SOCI 271 Research Methods (3)
SOCI 242 Social Problems and Social Change (3)
SOCI 332 Sociological Theory (3)
Six additional credits of SOCI or ANTH courses (6)

#### Urban Studies Minor (18 credits)

Core Course (taken by all students) (3) It is recommended students begin with SOCI 215, then courses from studyareas in the following order: Theories and Concepts, Issues, Research Methods, Applications, and Theological Reflections Study-Areas (15 credits) Theories and Concepts (3) Issues (3) Research Methods (3)

Applications (3) Theological Reflections (3) Core Course SOCI 215 Introduction to Urban Sociology Theories and Concepts. One of the following: CRIJ 282 Restorative Justice ECON 312 Economic Development HIST 355 U.S. Urban History\* P-URBS 301 World-View Perspectives of City Life\* SOCI 332 Sociological Theory\*\* SOCI 356 Race, Ethnicity and Gender SOWK 365 Human Diversity and Social Interaction OR one of the following Temple University courses: GUS 1021 Urban Society: Race, Class and Community (3) GUS 1025 World Urban Patterns (3) GUS 1031 Geography of World Affairs (3) GUS 1052 Introduction to the Physical Environment (4) GUS 1171-77 Urban Affairs (2) GUS 2025 American Place (3) GUS 2032 Urban Systems in a Global Economy (3) GUS 2051 Urban Environment (3) GUS 2071 Geography of the United States and Canada (3) GUS 4014 Urban Social Geography (3) GUS 4015 Geographical Basis of Land Use Planning (3) Issues One of the following: BIOL 216 Issues in Environmental Science\* CRIJ 309 Juvenile Delinquency\*\* ECON 110 Economics of Social Issues \* ECON 117 Issues in Environmental Economics \* EDUC 246 Socio-Cultural Perspectives on Education EDUC 355 Education and American Pluralism \* HDFS 253 Community Services for Families \*\* HDFS 342 Women and Men in American Society\* HDFS 386 Family Ethnicity and Human Services \* P-IDSA 200 Eco-Footprints of Post-Metropolis Life \* POLI 320 Ethnic and Racial Politics in America \* POLI 323 Public Policy\*\* PSYC 242 Community Psychology \*\* SOCI 242 Social Problems and Social Change\*\* SOCI 334 Population and Environmental Issues\* THEA 363 Theatre for Social Change\* URBS 382 Issues in Urban Studies\* URBS 382 Preparing for Public Service OR one of the following Temple University courses: GUS 1951 Environment and Society (3) GUS 2021 Philadelphia Neighborhoods (3) GUS 2073 African Development (3)

GUS 3011 Historical Geography of North America (3) GUS 3016 Contemporary Issues in City Planning (3) GUS 3025 Urban Crime Patterns (3) GUS 3051 Environmental Policy Issues (3) GUS 3052 Environmental Problems in Asia (3) GUS 3054 Energy, Resources and Conservation (3) GUS 3073 Geography of Travel and Tourism (3) GUS 3076 Metropolitan Tokyo (3) GUS 3096 Urban Policy Analysis (3) GUS 4018 Economic Development Planning for Cities (3) GUS 4021 Urbanization in Developing Areas (3) GUS 4044 Urban Housing (3) GUS 4056 Political Ecology (3) GUS 4075 Regional Development in the Third World (3) GUS 4097 Gender, Race, Class and the City (3) Research Methods One of the following: ANTH 325 Ethnographic Fieldwork\* POLI 243 Political Research Methods SOCI 271 Social Science Research Methods\*\* SOWK 385 Introduction to Research in Social Work OR one of the following Temple University courses: GUS 3062 Fundamentals of Geographic Information Systems GUS 4197 Research Methods in Geography and Urban Studies Applications One of the following: P-URBS 310 Urban Field Experience SOCI 281 Data Analysis and Social Statistics\*\* SERV 231/232 Foundations of Service, Mission, and Social Change Internship Harrisburg Institute Philadelphia Campus Washington, D.C. Practicum Grantham Campus Harrisburg Institute Philadelphia Campus OR one of the following Temple University courses: GUS 4061 Cartographic Production GUS 4065 Applications in Geographic Information Systems Theological Reflections One of the following: BIBL 293 The Bible and Social Ethics\*\* CHRM 360 Models of Christian Ministry in the City\*\* P-URBS 319 Practical Theology of the Urban Church\* SOCI 341 Religion and Society\* THEO 207 African-American Theology\* THEO 221 Faith and Society\*

Other Related Courses

#### P-IDCC 260 Urban Cross-Cultural\*

- \* This course meets a General Education requirement.
- \*\* This course requires a fulfillment of a pre-requisite or approval from instructor.

#### ANTH 101 Introduction to Cultural Anthropology (3)

Holistic, comparative approach to the study of humankind that draws on a variety of disciplines such as archeology, linguistics, and ethnology to understand the nature of culture. Topics include cultural diversity and adaptive strategies, language, personality, marriage and kinship, religious beliefs and rituals, politics, economics, art, types of groups, social change, and issues of culture contact and cultural survival. Meets General Education Social Science requirement.

#### ANTH 221 Native American Cultures (3)

Focus on indigenous peoples of the Americas, primarily those of North America; a study of diversity within Native American cultures and points of similarity; emphasis on worldviews and the central place of spirituality; attention to the richness of indigenous cultures, and the dialectical relationship with socio-economic-historical contexts; emphasis on culture decimation and resilience, and the role of revitalization movements; focus on contemporary Native American cultures manifested in primary source materials. Meets General Education Non-Western Studies requirement.

#### ANTH 325 Ethnographic Fieldwork (3-4)

Introduction to and application of ethnographic fieldwork methods, focusing on participant observation and interviewing; immersion in a selected culture scene, seeking participants' assigned meanings, definitions of/making sense of the situation, culminating in a written ethnography. Prerequisite: ANTH 101 or approved substitute, or Instructor's consent.

#### ANTH 382 Topics in Anthropology (3)

Selected topics in anthropology not currently included in course offerings. Possible topics may include the study of ethnographies on a variety of cultures, urban anthropology, anthropology of religion, comparative family studies, and others. May be repeated for credit. Prerequisite: 3 credits in anthropology or Instructor's consent.

#### ANTH 391 Anthropology Practicum (1-3)

Field experience for juniors and seniors in the area of anthropology. Experience may be in areas such as museum settings, archeological and ethnographic fieldwork and applied anthropology. Students work under professional supervision for a minimum of 40 hours per credit. Ten additional hours of reading and other integrative activities per credit required. Prerequisite: Instructor's consent, Department Chair, and Career Center for Vocation and Development.

#### CRIJ 101 (formerly SOC 111) Introduction to Criminal Justice (3)

Evolution of the adult criminal justice system, primarily in the U.S., focus on Pennsylvania, with some attention to cross-cultural comparison and contrast; issues in defining "criminal" and "justice"; critical discussion of steps and processes in criminal justice system and various public demands for change. Meets General Education Social Science requirement.

#### CRIJ 201(formerly SOC 211) Introduction to Law Enforcement (3)

The course examines historical and contemporary practices and trends in law enforcement concerning the role of police personnel in relationship to community, courts, corrections, and constitutional limitations. The following aspects of the police occupation are discussed: necessary qualifications to become a police officer, recruitment process, job analysis, the selection methods, and the police training practices.

#### CRIJ 259 (formerly SOC 359) Criminal Law and Court Procedures (3)

Evolution of and difficulties in defining and codifying criminal law; discussion and ramifications of key laws/cases for practitioners in adult and juvenile justice systems; rationale for and issues in multi-level (centralized and decentralized) systems; basic legal terminology for practitioners in law enforcement, court services, and corrections. Prerequisite: CRIJ 101.

#### CRIJ 282 (formerly SOC 368) Restorative Justice (3)

A study of a biblical model of justice and how it can be applied to the current criminal justice system, focusing on the restoration of harms caused by crime to the victims, community, and offender; examining the responsibilities of each in the restorative process and the role of the Christian community in implementing changes.

#### CRIJ 307 (formerly SOC 361) Comparative Criminal Justice Systems (3)

This course examines the criminal justice systems from different countries and cultural influences comparing and contrasting those systems with one another and with the criminal justice system in the United States. The focus is on the diversity of legal approaches and philosophies of justice that exist across the globe with special attention to the ways that culture, religion, politics, and economics influence social control mechanisms. Prerequisite: CRIJ 101.

#### CRIJ 309 (formerly SOC 364) Juvenile Delinquency (3)

This course will examine the sociological and criminological phenomena of juvenile delinquency and explore the historical development of the juvenile justice system. Students will gain a basic understanding of juvenile delinquency by analyzing the scope of the problem, interpreting theories of causation and resolution, and evaluating current programming in this field. Prerequisite: CRIJ 101 or SOCI 101.

#### CRIJ 348 (formerly SOC 348) Ethics in the Criminal Justice System (3)

An introduction to ethical issues relating to various aspects of the criminal justice system such as the morality of the types of punishment, the death penalty, justice in the courts, and police conduct.

#### CRIJ 362 (formerly SOC 267) Criminology (3)

Focuses on causes and meaning of crime, with emphasis on adults. Patterns of criminal behavior, including property crimes, violent crimes, organized crime, white-collar crime, and victimless crime. Critical assessment of criminal justice system as a response to crime. Prerequisite: CRIJ 101 or SOCI 101.

**CRIJ 366 (formerly SOC 366) Corrections: Incarceration, Probation, Parole (3)** Evolution of and debates concerning community and non-community based correctional programs; relationships between correcting, reforming, rehabilitating, and punishing; tensions between protection of public safety and rights of the accused; evaluation of incarceration, probation, parole, diversion, alternate, and restorative justice programs; issues in "proactive" and "reactive" debate. Prerequisite: CRIJ 101.

#### CRIJ 367 (formerly SOC 367) Victimology (3)

The relationship between victims of crime and the criminal justice system. Includes an analysis of the characteristics of crime victims, victim reporting and non-reporting patterns, treatment of victims by the various segments of the criminal justice system, victim assistance programs, and the issue of compensation and/or restitution for victims of crime. Prerequisite: CRIJ 101.

#### CRIJ 382 (formerly SOC 383) Topics in Criminal Justice (3)

Selected topics in criminal justice not currently included in course offerings. Possible topics may include women in the criminal justice system, comparative law enforcement, ethics and criminal justice, and international justice issues. May be repeated for credit. Prerequisite: CRIJ 101, three additional credits in criminal justice courses, and Instructor's consent.

#### CRIJ 450 (formerly SOC 490) Criminal Justice Field Experience Preparation (1)

Students will prepare for internship with emphasis on site selection, résumé writing, interview techniques, and networking. Prerequisite: Department permission.

#### CRIJ 452 (formerly SOC 450) Criminal Justice Seminar (1)

This course will be taken concurrently with CRIJ 455 Criminal Justice Field Experience. Students will process and analyze internship experiences and integrate these with theory and theological and ethical concerns. A systematic analysis of the functioning of the criminal justice system is stressed. Prerequisite: CRIJ 450 and Department permission.

#### CRIJ 455 (formerly SOC 492) Criminal Justice Field Experience (3)

The internship involves placement of 120 hours per semester under close professional supervision in a criminal justice agency. The experience is designed to further the student's integration of theoretical orientations with practice. Students, agency supervisors, and the coordinator of Criminal Justice will develop an individual learning contract. Prerequisite: CRIJ 450 and Department permission.

#### SOCI 101 Principles of Sociology (3)

The study of humans in their social environment, with the goal of accumulating fundamental knowledge about human behavior, the structure of society, and social phenomena. Included is an introduction to sociological research methods and logic of inquiry. Some sections include a community service-learning option. Meets General Education Social Science requirement.

#### SOCI 215 Introduction to Urban Sociology (3)

Survey of the spread of global urbanization from pre-industrial times until today. Emphasis placed on understanding urban life in different cultures and societies, with analysis of urban problems and possibilities in a broad range of countries. Attention will be given to the role of the church in shaping urban cultures and vice versa.

#### SOCI 226 Social Psychology (3)

Study of individuals in relation to group and social influences. Emphasis on social change, social norms, conformity, attitudes, propaganda, and public opinion. Cross-listed with PSYC 226. Prerequisite: PSYC 101 or SOCI 101.

#### SOCI 232 (formerly SOC 231) Sociology of Aging (3)

Comprehensive introduction to the field of social gerontology. Special emphasis given to the aged in the context of how the elderly both affect and are affected by our society. Includes study of demography, cultural values and diversity, sexuality, minority elderly, social problems, social institutions, and social programs. Cross-listed with GERO 232.

#### SOCI 242 Social Problems and Social Change (3)

The application of sociological theory, methods, and critical thinking to the description and analysis of social problems and change such as: war and militarism, terrorism, sexual variance, drug and alcohol abuse, availability and quality of healthcare, crime and delinquency, violence, concentration of power and opportunity, poverty, family issues, population growth, environment decimation, race and gender inequality, homelessness, mental illness; focus on U.S. society, with some cross-cultural emphasis. Prerequisite: SOCI 101 or Instructor's consent.

#### SOCI 271 Research Methods (3)

Introduction to the basic research methods used by sociologists. Topics include: research design, sampling, hypothesis development, literature review, the role of theory, the philosophy of empirical research, and rules of evidence. The course is an overview and includes both quantitative and qualitative methods. Prerequisite: SOCI 101 or a general education social science elective or Instructor's consent.

#### SOCI 281 Data Analysis and Social Statistics (3)

Basic introduction to the analysis of data including a user's approach to statistical tools in social research and analysis. Students will learn to use computers and a statistical package for analyzing and processing data. The course will include a significant research project leading to public presentation of the results. Prerequisite: SOCI 271 or Instructor's consent.

#### SOCI 332 Sociological Theory (3)

The study of major theories and theorists which attempt to develop a science of society to explain and understand social structures and human behavior; may include functionalism, structuralism, conflict, Marxism, social exchange, symbolic interaction, ethnomethodology/phenomenology, network, and sociobiology and other theories; emphasis on how various theoretical perspectives impact and alter our understanding of social reality, its causation, and our responsibilities toward it. Prerequisite: SOCI 101.

#### SOCI 334 Population and Environmental Issues (3)

An introduction to the issues, both national and global, that relate to population trends, policies, and the environment. Students should leave this course with a basic understanding of demographic methods and techniques; familiarization with the three components of population studies: fertility, mortality and migration; a general knowledge of population policy issues, and a heightened awareness of the interactions between the environment and human society. Emphasis will be placed on the Christian perspective of population and environmental issues as well as the role of the church in population and environmental solutions. Meets the General Education Science, Technology and the World requirement.

#### SOCI 335 Social Conflict, Justice, and Peacemaking (3)

A study of social conflict and strategies for preventing and resolving destructive conflicts. Particular attention will be given to ethical and moral perspectives on justice, conflict and conflict resolution. The course will draw on literature and perspectives from Sociology, philosophical and theological ethics, and peace and conflict studies. The course will include case studies and "hands-on" exercises to develop skills for resolving personal and group conflict. Meets General Education Ethics requirement.

#### SOCI 341 Religion and Society (3)

Analysis of religion as a social phenomenon in diverse societies and time contexts. Theories of the origin, nature, and functions of religion, including classic and contemporary approaches of its study; some considerations of the nature of socio-religious groups in the United States. Meets General Education Pluralism requirement.

#### SOCI 342 Women and Men in American Society (3)

Introduction to key topics related to gender such as identity formation, work, family, sexuality, violence, class stratification, and religious orientation. Racial and cultural issues will be treated as they affect understanding of gender. Meets General Education Pluralism requirement. Cross-listed with HDFS/PSYC/WOMS 342.

#### SOCI 343 Amish Culture and Society (3)

An in-depth exploration of the Amish of North America. The course will focus on the cultural values of the Amish as well as their patterns of social organization. Topics will include religious values, social structure, social change, conflicts with the state, gender and family issues, the use of technology, educational practices, occupational patterns and the process of social change in this distinctive religious subculture. Special attention will be given to comparative analyses between Amish society and mainstream American culture and society.

#### SOCI 356 Race, Ethnicity, and Gender (3)

Exploration of the concepts of race, ethnicity, and gender; introduction to theories of prejudice and discrimination; some discussion of historical and contemporary situations of racial and ethnic minorities in U.S. society; consideration of the issue of gender, particularly the role of women in contemporary society. Meets General Education Pluralism requirement. Cross-listed with WOMS 356.

#### SOCI 365 Drug and Alcohol Addiction (3)

Examines the use of legal and illegal drugs in America, including production, distribution, marketing, consumption, addiction, assessment, policy and treatment programs. Cross-listed with PSYC 365.

#### SOCI 382 Topics in Sociology (3)

Selected topics in sociology not currently included in course offerings. Possible topics may include social change, social stratification, political sociology, and sociology of gender. May be repeated for credit. Prerequisite: Three credits in sociology or Instructor's consent.

#### SOCI 384 (formerly SOC 320) Families in America (3)

A socio-cultural study of family/household variations in the Americas; special emphasis on the cultural and ethnic diversity and the adaptability of family/household forms to changing environmental contexts; historical and cross-cultural perspectives. Meets General Education Pluralism requirement. Cross-listed with HDFS 384.

#### SOCI 391 Sociology Practicum (1-3)

Field experience for junior and senior sociology majors wishing to clarify vocational goals. Students work under professional supervision for a minimum of 40 hours per credit. Ten additional hours of reading and other integrative activities per credit required. Prerequisite: Instructor's consent, Department Chair, and Career Center for Vocation and Development.

#### SOCI 406 Contemporary Feminism (3)

Explores the contemporary women's movement in its historical, philosophical, political, and religious contexts. Ideas about the oppression of women and possible social remedies. Cross-listed with HDFS/PSYC/WOMS 406.

#### SOCI 441 Contemporary Issues in Sociology (3)

A capstone course for sociology majors. The specific content may vary from year to year but will include consideration of contemporary trends in sociological theory, sociological analysis of contemporary issues and reflection on the relevance of study in sociology for various professions and graduate study. The course will also offer students the opportunity to consider how their faith might relate to their studies in sociology. (Offered Spring Term only.) Prerequisite: Instructor's consent.

#### SOCI 442 Sociology Thesis (1-3)

Senior students in sociology will be required to complete a thesis. The thrust may be theoretical, qualitative, quantitative, evaluative, or problem/policy oriented. The format will be worked out in consultation with the instructor and must have an overt theoretical base which articulates how sociological and/or anthropological theory helps make sense of the topic selected. Students may elect to register for the course over two semesters with a maximum of 3 credits per semester with the total not exceeding 4 credits. Students must earn a total of at least 3 credits. Prerequisites: SOCI 332 and Instructor's consent.

#### SOCI 491 Independent Study (1-3)

Junior and senior students with at least a 3.0 GPA in their major may select a problem for independent investigation in a special area of sociology. Prerequisites: Instructor's consent and Department Chair.

#### SOCI 497, 498 Major Honors (3, 3)

Independent research program for students who have a strong academic record for a minimum of five previous semesters of college study. Overall GPA of 3.5 and departmental approval required for enrollment.

#### Social Work

The goal of the social work program is to integrate knowledge, values, and skills for competent generalist social work practice and/or admission to graduate school. The social work program provides a professional foundation through field placement and required volunteer experiences. Social work graduates are prepared to work effectively with individuals, families, groups, organizations and communities in a variety of public and private settings.

The social work program at Messiah College is accredited by the Council on Social Work Education (CSWE) and graduates are eligible to apply for advanced standing in many graduate schools of social work in the United States, thereby reducing the number of credits required for the Master's in Social Work degree. Social work graduates are eligible for licensing or certification in states which license bachelor's level social workers.

#### Social Work Major (76 credits)

ANTH 101 Introduction to Cultural Anthropology (3) BIOL 258 Human Biology (4) HDFS, PSYC, or SOCI elective (3) HIST 142 U.S. History Survey Since 1865 (3) PSYC 101 Introduction to Psychology (3) SOCI 101 Principles of Sociology (3) SOWK 120 Introduction to Social Welfare and Social Work (3) SOWK 250 Helping Processes I: Practice with Individuals (4) SOWK 221 Human Behavior in the Social Environment (3) SOWK 360 Helping Processes II: Practice with Families (4) SOWK 365 Human Diversity and Social Interaction (3) SOWK 372 Helping Processes III: Practice with Groups (3) SOWK 382 Topics in Social Work (3) SOWK 385 Introduction to Research in Social Work (3) SOWK 420 Social Welfare Policies in the U.S. (3) SOWK 475 Helping Processes IV: Practice with Communities and Organizations (3) SOWK 484 Preparation for Field Practice (1) SOWK 485 Seminar in Social Work Practice(3) SOWK 490 Field Practice in Social Work (12)

#### SOWK 120 (formerly SOW 121) Introduction to Social Welfare and Social Work (3)

Exploration of social welfare as an institution and social work as a profession, both of which have grown from our common human needs and social problems in modern, industrial society. Meets the General Education Social Science requirement.

#### SOWK 221 Human Behavior in the Social Environment (3)

Examination of the person as a bio-psycho-social-spiritual-cultural being and the processes by which human development occurs throughout the life cycle. There will be an exploration of the dynamic interrelationships between biological, psychological, spiritual, and environmental factors that come into play when assessing individuals within a social framework. Content will utilize current research and empirically based theories to focus on the interactions of individuals, groups, society, and economic systems.

# SOWK 250 (formerly SOW 203) Helping Processes I: Practice with Individuals (4) This is the first course offered in the practice series and is designed to introduce students to the philosophy and characteristics of helping relationships within the generalist framework in Social Work. It introduces have relationship huilding

eralist framework in Social Work. It introduces basic relationship building, communication, social work principles and values, critical thinking and problem solving skills for use with any client system (individual, family, group, organization, community), but has a primary focus on working with individuals within a social context. A one-day per week practicum experience runs concurrent with course work and offers an opportunity for students to begin understanding, evaluating, and assessing practice. Limited to Social Work majors or Instructor's consent. Prerequisites: SOWK 120 and SOWK 221.

#### SOWK 360 (formerly SOW 204) Helping Processes II: Practice with Families (4)

This course is the second offered in the practice series and will begin to develop specific helping skills for generalist Social Work practice. Topics will include the problem-solving model, and will develop interviewing, assessment, treatment planning and evaluation skills. Family developmental issues will be addressed. A primary focus of this course will be the development of a knowledge base and the skills necessary to provide Social Work intervention with families at risk. A one-day per week practicum experience runs concurrent with course work. Limited to Social Work majors or Instructor's consent. Prerequisite: SOWK 250.

#### SOWK 365 Human Diversity and Social Interaction (3)

This course is designed to introduce and sensitize students to the forms, practices and effects of racism, discrimination (cultural, religious, gender, sexual orientation) and other forms of oppression and economic deprivation. It will examine the historical and theoretical foundations of discrimination as an ideology. Specifically, the role and complex interplay of systems and oppression in education, human services, hous-

ing, law, business, prisons and other institutions will be discussed. Focus will also be placed on the central themes and role of Social Work in addressing these issues and will integrate social and economic justice content grounded in an understanding of distributive justice, and human and civil rights. The course will develop the concept of the need to promote an understanding, affirmation and respect for people of diverse backgrounds. This course meets the General Education Pluralism requirement.

#### SOWK 372 Helping Processes III: Practice with Groups (3)

This is the third class in a series of practice courses in Social Work. The course examines the dynamics of the small group. Various theoretical conceptualizations of the role of the Social Worker in the group are discussed. Concepts such as group dynamics, norms, and roles are examined. Group leadership skills for planning, facilitating, and evaluating groups will be developed and practiced. Content will include identifying and implementing group related empirically based interventions and services designed to achieve client and community goals. There is also a focus on the interplay between Social Work and community groups. Limited to Social Work majors or Instructor's consent. Prerequisite: SOWK 360

#### SOWK 382 Topics in Social Work (3)

Provides the opportunity for the program to offer courses of major interest not covered by other required courses.

#### SOWK 385 (formerly SOW 390) Introduction to Research in Social Work (3)

An introduction to the philosophy, concepts, principles, and methods of empirical research in Social Work. Characteristic stages and formats of social research are reviewed, with the primary aim of developing beginning competence in the critical assessment of published research and the use of research methods in the field of Social Work. Emphasis will be on the development of an understanding of a scientific, analytic, and ethical approach to building knowledge for practice. Both quantitative and qualitative methods will be presented. There will also be a focus on developing a student's ability to use research methods for the purposes of evaluation in Social Work practice, programs, and policies. This course should be taken in the junior or senior year.

#### SOWK 420 (formerly SOW 322) Social Welfare Policies in the U.S. (3)

This course will introduce students to the arena of social welfare policy and the sociopolitical environment in which welfare policy takes place. A primary intent of the class is to develop an essential capacity for the examination and critical analysis of the dynamics of social welfare policy. Selected areas of policy will be examined using theoretical and analytical principles that have broad application. The enrichment of the student's understanding of the central role of policy in social welfare and the enhanced ability to scrutinize and evaluate current and proposed policies are primary course objectives. Course will focus on the implementation of advocacy strategies to combat discrimination and to promote social and economic justice.

#### SOWK 475 (formerly SOW 391) Helping Processes IV: Practice with Communities and Organizations (3)

This course is the fourth class offered in the practice series and is an integral part of

generalist social work practice. It is designed to develop the skills and abilities of students to practice macro social work. The primary focus will be on the interrelationships between the environment, agency structures and general service delivery systems. Students will develop specific community organizing and networking skills. A strong component of this course will focus on program evaluation and community assessment and intervention. Limited to Social Work Majors or Instructor's consent. Prerequisite: SOWK 360.

#### SOWK 484 Preparation for Field Practice (1)

This course is designed to prepare students for entering their senior year field practice experience. Student and agency expectations will be discussed regarding objectives, procedures, roles and responsibilities as well as relevant practice issues such as record keeping, stress management, and use of supervision in practice. Practical information regarding agency placements will be reviewed. Final coordination and student interviews with prospective placement will occur during this course. (Offered J-term of senior year only.) Prerequisites: Completion of all degree requirements except SOWK 485 and SOWK 490.

#### SOWK 485 Seminar in Social Work Practice (3)

This course focuses on the knowledge, principles and skills of social work services. Emphasis is placed on generalist social work practice and utilizing a strength perspective in service delivery. Focus will be on the integration of models of service delivery with different client systems. Course will incorporate the values of the profession and analyze ethical dilemmas and the ways which they affect practice, services and clients. (Offered Spring Semester of Senior year only.) Prerequisites: Completion of all degree requirements. Runs concurrently with SOWK 490.

#### SOWK 490 Field Practice in Social Work (12)

This course provides specific Social Work service delivery in selected social welfare and related agencies. Students will receive a minimum of four hundred hours of practice experience. Opportunities will be provided to connect social work theory with practice and to develop social work skills with various client systems within an agency context utilizing theory based practice knowledge. Prerequisites: Completion of all degree requirements. Runs concurrently with SOWK 485.

#### SOWK 497, 498 Major Honors (3, 3)

Selected topics in urban studies not currently included in course offerings. Possible topics may include public service in urban settings, urban families, issues and change in the Harrisburg urban context. May be repeated for credit. Prerequisite: Three credits in sociology or urban studies or Instructor's consent.

#### URBS 382 Topics in Urban Studies (3)

Selected topics in urban studies not currently included in course offerings. Possible topics may include public service in urban settings, urban families, issues and change in the Harrisburg urban context. May be repeated for credit. Prerequisite: Three credits in Sociology or Urban Studies or Instructor's consent.

### School of Health and Natural Sciences

Gerald D. Hess, Ph.D. Interim Dean

- Department of Biological Sciences
- Department of Chemistry and Biochemistry
- Department of Health and Human Performance
- Department of Nursing
- Department of Nutrition and Dietetics
- Pre-Professional Health Programs
  - Pre-Medical Programs
  - Pre-Allied Health Programs
  - Pre-Physical Therapy Programs
- The Oakes Museum

The School of Health and Natural Sciences is committed to providing premier undergraduate educational programs in health and natural sciences that are intellectually stimulating, experientially rich, and faith affirming. Students are equipped with the cognitive, technical, and professional competencies required to become science savvy citizens, excel in vocations related to health, science, and medicine, and to understand how their chosen field relates to societal needs, ethical issues, and our shared Christian faith. Our goal is to prepare students to use their knowledge and abilities in health and natural sciences to: know God and make Him known, care for creation, transform society, and serve humankind.

### **BIOLOGICAL SCIENCES**

Gary Emberger, Ph.D.

Interm Chair, Department of Biological Sciences

#### Faculty

Professors E. Davis, G. Emberger, G. Hess, J. Makowski Associate Professors S. Boyce, D. Foster, S. Holmes, E. Lindquist, L. Mylin Assistant Professors J. Erikson, J. Harms, M. Shin Research Fellow P. Thuma Lecturer J. Billman

#### **Majors and Minors**

Environmental Science

The Department of Biological Sciences offers the following majors: Biology (B.S.) Biology with Teaching Certification (B.S.) Biochemistry and Molecular Biology (Biology Concentration). [Interdisciplinary major. Refer to Department of Chemistry and Biochemistry for more information on Chemistry concentration.] Biopsychology (B.S.) [Interdisciplinary major. Please refer to the Department of Psychology for more information about this major.] Environmental Science (B.S.) Environmental Studies (B.A.) Concentrations: Pre-Environmental Law Environmental Public Policy The Department of Biological Sciences offers the following minors: Biology Biology for Environmental Science Majors

Biological Sciences — 197

Environmental Science for Biology Majors Environmental Studies

Pre-Professional Health Programs Pre-Medical Pre-Allied Health Pre-Physical Therapy

Special Programs AuSable Institute of Environmental Studies

#### **Program Options**

The Department of Biological Sciences seeks to provide students with an understanding of the sciences that will enable them to continue study in graduate school, medical school, the allied health field, or immediately seek employment in a variety of settings in industry, business, education, and government. The unique advantage of studying biological science at Messiah is that students work in the context of a Christian liberal arts education. Thus, while investigating the world around them, they also study themselves and their Creator. The Department places special emphasis on integrating the knowledge and methods of the sciences with what Christian faith teaches about people and their place in the universe.

Messiah College has outstanding facilities for the study of the biological sciences. The Jordan Science Center together with the Kline Hall of Science offers wellequipped laboratories, research facilities, computer facilities, much instrumentation including transmission and scanning electron microscopes, an NMR and HPLC, a greenhouse, and The Oakes Museum. The 400-acre campus includes woodlands, fields, and the Yellow Breeches Creek, affording excellent opportunities for field experiences. Field trips are a regular part of many courses, and special science courses have been offered in places such as Florida, Zambia, the Galapagos Islands, the Amazon Basin, Belize, and the American Southwest Desert.

Biological Science Majors find a variety of research opportunities available. These enable students to combine theory with different experimental techniques both in the lab and the field. Internships are available which give students practical experience in their selected profession. Seniors are strongly encouraged to complete a "professional" experience prior to graduation. In most cases this will involve a field or laboratory research project or honors project under the direction of a faculty member. Other students will do an off-campus research internship or serve as senior laboratory assistants.

Messiah is affiliated with AuSable Institute of Environmental Studies in Mancelona, Michigan. The Department encourages science students to participate in the various programs offered by the Institute near the Great Lakes in Michigan; on Puget Sound in the Pacific Northwest; Nairobi, Kenya; and in south India. Financial assistance is available to students wishing to study at AuSable during the summer.

#### Pre-Medical, Pre-Allied Health, and Pre-Physical Therapy Programs

Many students preparing for careers in health care professions choose to major in Biology. For more information about the Pre-Medical, Pre-Allied Health, or Pre-Physical Therapy Programs at Messiah College, please refer to the Pre-Professional Health Programs section of this Catalog.

#### Biology

The Biology Major provides a strong foundation in the biological sciences, including a broad background in zoology and botany and opportunities for focused studies in more specialized areas ranging from entomology to molecular biology and from neuroscience to human anatomy. The major also includes supporting courses in chemistry and mathematics. Graduates with a biology degree will be well-prepared for further studies and specialization in graduate schools, medical and veterinary schools, and other health career programs. Students following this major are also prepared to seek immediate employment in a variety of settings requiring the skills and knowledge of a biology major.

Biology majors interested in a teaching career should follow the secondary teaching certification curriculum for biology. This curriculum prepares them to teach biology in grades 7 to 12 and receive Pennsylvania State Certification. Biology, chemistry, and a physics course provide a sound basis for teaching biology, and education courses provide the tools needed for teaching. The program culminates in a 12-week student teaching experience in a selected public school.

#### Biology Major (66-67 credits)

BIOL 150 Biology I (4) BIOL 151 Biology II (2) BIOL 152 Biology III (4) BIOL 261 Ecology (3) BIOL 281 Genetics (4) One of the following (Integrative Biology): BIOL 313 Developmental Biology (3) BIOL 385 Physiology (4) BIOL 386 Human Anatomy (4) BIOL 387 Neuroscience (3) BIOL 418 Introduction to Immunology (4) One of the following (Cellular Biology): BIOL 381 Microbiology (4) BIOL 382 Microbiology for Health Professions (4) BIOL 412 Cell Biology (4) BIOL 413 Molecular Biology (4) CHEM 410, 411 Biochemistry I, Biochemistry Laboratory (3, 1) One of the following (Plant Biology): BIOL 321 Mycology (4)

BIOL 332 Plant Taxonomy (4) BIOL 334 Plant Ecology (4) BIOL 335 Plant Propagation (3) Five to seven additional BIOL elective credits (total of 34 BIOL credits) CHEM 105, 106 General Chemistry I, II (4, 4) CHEM 309, 310 Organic Chemistry I, II (4, 4) One of the following: MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) PHYS 201 Introductory Physics I (4) STAT 269 Introductory Statistics (3) One of the following: PHIL 231 History of Philosophy (3) PHIL 241 Problems in Philosophy (3) BIOL 495 Capstone: Natural Sciences (3) Biology with Secondary Teaching Certification (88-89 credits) BIOL 150 Biology I (4) BIOL 151 Biology II (2) BIOL 152 Biology III (4) BIOL 261 Ecology (3) BIOL 281 Genetics (4) One of the following (Integrative Biology): BIOL 313 Developmental Biology (3) BIOL 385 Physiology (4) BIOL 386 Human Anatomy (4) BIOL 387 Neuroscience (3) BIOL 418 Introduction to Immunology (4) One of the following (Cellular Biology): BIOL 381 Microbiology (4) BIOL 382 Microbiology for Health Professions (4) BIOL 412 Cell Biology (4) BIOL 413 Molecular Biology (4) CHEM 410, 411 Biochemistry I, Biochemistry Laboratory (3, 1) One of the following (Plant Biology): BIOL 321 Mycology (4) BIOL 332 Plant Taxonomy (4) BIOL 334 Plant Ecology (4) BIOL 335 Plant Propagation (3) One to three additional BIOL elective credits (total of 30 BIOL credits) CHEM 105, 106 General Chemistry I, II (4, 4) CHEM 204 Introduction to Organic Chemistry (4) One of the following: MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) PHYS 201 Introductory Physics I (4) STAT 269 Introductory Statistics (3) One of the following:

PHIL 101 Problems in Philosophy (3)
PHIL 102 History of Philosophy (3)
BIOL 495 Capstone: Natural Sciences (3)
EDUC 120 The Teaching Profession (with Field Experience) (1)
EDUC 201 Education and American Society (3)
EDUC 203 Educational Psychology (3)
EDUC 318 Secondary Learning Environments (with Field Experience) (1)
EDUC 331 Instructional Design and Assessment for Secondary Education (3)
ENGL xxx American or British Literature (3)
Professional Semester
PSYC 311 Adolescent Development (3)
BIOL 407 Secondary Science Curriculum and Instruction (2)

EDUC 420 Professional Issues in Education (2)

EDUC 435 Student Teaching: Secondary (9)

#### Certification in Environmental Education (101–104 credits)

Available only to students who also complete biology certification\*

\*This certification will permit a Biology Secondary Education student to become certified in Environmental Education at the K–12 level with minimal additional course work. In addition to meeting all requirements for Biology with Secondary Teaching Certification, the following are required:

BIOL 271 Ecological Field Techniques (3)
BIOL 274 Environmental Science (3)
BIOL 315 Environmental Ethics (3)
BIOL 392 Environmental Education Practicum (3)
Plus one of the following: BIOL 345 Entomology (4)
BIOL 356 Ornithology (4)
BIOL 358 Herpetology (4)

**NOTE:** BIOL 315 meets the General Education Ethics requirement. Also, one of the biology courses can be applied toward the required 30 hours of biology. As a result, Certification in Environmental Education requires only three additional courses beyond that required for Biology Secondary Teaching Certification.

#### Biology Minor (20 credits)

BIOL 150 Biology I (4) BIOL 151 Biology II (2) BIOL 152 Biology III (4) Ten credits of BIOL courses approved for the Biology Major (10)

#### Biology Minor for Environmental Science Majors (18 credits)

Two of the following Integrative Biology courses: BIOL 313 Developmental Biology (3) BIOL 385 Physiology (4) BIOL 386 Human Anatomy (4) BIOL 387 Neuroscience (3) BIOL 418 Introduction to Immunology (4) Two of the following Cellular Biology courses: BIOL 381 Microbiology (4) BIOL 382 Microbiology for Health Professions (4) BIOL 412 Cell Biology (4) BIOL 413 Molecular Biology (4) CHEM 410, 411 Biochemistry I, Biochemistry Lab (3, 1)

Two to four credits of BIOL (or other) courses approved for the Biology Major (2–4)

#### BIOL 102 Bioscience (3)

Introductory course designed for students who are non-science majors. Emphasis is on major principles and concepts. Two lectures and three hours of laboratory per week. Meets General Education Laboratory Science requirement. Does not meet Department of Biological Sciences major requirement.

#### BIOL 106 Life Science for Elementary Education (3)

Selected topics in the life sciences designed for Elementary Education Majors. Emphasis is on the underlying concepts of biology which impact our daily lives as well as human interaction with the environment. Two lectures and three hours of laboratory each week. Along with PHSC 102, BIOL 106 meets General Education Laboratory Science requirement for Elementary Education Majors only.

#### BIOL 117 Field Biology of South-Central Pennsylvania (3)

A field-oriented course introducing students to the natural history of the animals and plants of south-central Pennsylvania, their field identification, adaptations to changing seasons, and stewardship. Two lectures and three hours of laboratory weekly. Meets General Education Laboratory Science requirement. Does not meet Department of Biological Sciences major requirement.

#### BIOL 150 Biology I (4)

The first in a sequence of three courses, Biology I is required of all majors in the Department of Biological Sciences. Taken concurrently with CHEM 105, BIOL 150 provides an interdisciplinary approach to science education—integrating concepts from biology, chemistry, environmental science, nutrition, mathematics, and writing—using the Yellow Breeches stream as the central focus of student study and research. Students are provided the opportunity to develop critical-thinking skills by solving real-world problems associated with stream ecosystems. Other emphases include the nature of science, classification of life, animal diversity, and genetics. Three hours of lecture and three hours of laboratory per week. Meets General Education Laboratory Science requirement.

#### BIOL 151 Biology II (2)

The second in a sequence of three courses which introduce science majors to the fundamental principles of the life sciences. Using an open-ended, problem-solving approach, this lecture course places particular emphasis on physiology, developmental biology, and cellular biology.

## Health and Natural Sciences

#### BIOL 152 Biology III (4)

The third in a sequence of three courses designed to introduce science majors to the foundational principles of the life sciences. This course includes emphases on cellular respiration and on aspects of plant biology such as photosynthesis, plant diversity, plant anatomy, and physiology. Biology III provides students with additional opportunities to enhance analytical skills through open-ended lab experiments and problem-solving situations. Three hours of lecture and three hours of laboratory per week.

#### BIOL 185, 186 Human Anatomy and Physiology I, II (4, 4)

Structure and function of the human body from both a cellular and systemic perspective. Three lectures and three hours of laboratory per week. Intended for majors in the health sciences but does not meet Department of Biological Sciences major requirements. Meets General Education Laboratory Science requirement.

#### BIOL 189 Genetics for Health Professions (3)

Study of Human Genetics as applied to health and disease, including treatment of disease and ethical, legal and social implications of using genetic techniques. Three lectures per week.

#### BIOL 212 Introduction to Horticulture (3)

Introduction to the science and art of growing fruits, vegetables, flowers, and ornamental plants. Topics include identification, propagation, cultural requirements, and improvement of horticultural crops. Two lectures and three hours of laboratory per week. Meets General Education Laboratory Science Requirement.

#### BIOL 216 Issues in Environmental Science (3)

A broad interdisciplinary examination of the issues surrounding environmental sustainability and stewardship. The course includes an examination of the scientific method as it applies to the study of ecosystem structure and function. Ethics, economics and public policy are examined as they relate to resource use, population growth, food production, pollution, biodiversity protection, and energy consumption. Central to the discussion are Judeo-Christian perspectives on environmental stewardship as they pertain to responsible/sustainable living. Meets General Education Science, Technology, and the World requirement. Does not count toward Biology or Environmental Science major/minor.

#### BIOL 218 Health Care in the Developing World (3)

This course will allow students to develop a working knowledge of the types of health care available in various parts of the world as well as an understanding of the disease patterns and access to health care for those people living in the poorer and underdeveloped parts of the world. Meets General Education Science, Technology, and the World requirement.

#### BIOL 258 Human Biology (4)

Major principles of human structure and function, including genetics, reproduction, development, and ecology. Three lectures and three hours of laboratory per week. Meets General Education Laboratory Science requirement. Does not meet Department of Biological Sciences major requirement.

#### BIOL 261 Ecology (3)

The ecosystem as a basic concept, the interactions of organisms with each other and the non-living environment, and the implications for human well-being. Three lectures per week. Prerequisite: BIOL 150 or CHEM 105 or Instructor's consent.

#### BIOL 269 Ecology of South Florida in Winter (3)

On-site study of the unique and fragile south Florida ecosystem emphasizing the ecology of the Everglades. Three-week January Term camping experience provides many opportunities to observe the flora and fauna of a subtropical ecosystem. Prerequisite: Science Major or Instructor's consent.

#### BIOL 271 Ecological Field Techniques (3)

Introduction to the use of field research methods, field measurements, landscape and population analysis, and landscape mapping. One lecture and two field/laboratory sessions weekly. Prerequisite: BIOL 261 or concurrent registration.

#### BIOL 274 Environmental Science (3)

An in-depth examination of the issues surrounding environmental sustainability and stewardship. Ethics, economics and public policy are examined as they relate to resource use, population growth, food production, pollution, biodiversity protection, and energy. Central to the discussion are Judeo-Christian perspectives on environmental stewardship as they pertain to responsible/sustainable living. Prerequisite: BIOL 261 or Instructor's consent.

#### BIOL 281 Genetics (4)

Fundamentals of classical, molecular, and population genetics, with application to plant and animal breeding and to humans. Three lectures and three hours of laboratory per week. Prerequisite: BIOL 150, BIOL 151, BIOL 152, or BIOL 185.

#### BIOL 290 Topics in Field Biology (3)

Three-week natural history travel courses offered in January or May. Courses in recent years included Desert Ecology of South Western United States, Natural History of New Zealand, and Tropical Forest Ecology of Panama. Each on-site course will emphasize field identification, natural history, and ecology of the local bird, mammal, reptile, invertebrate, and plant species within the context of their local ecosystem. Prerequisite: BIOL 261 or Instructor's consent.

#### BIOL 297 Tropical Biology: Latin America (3)

A three-week, on-site, intensive examination of tropical ecosystems including their structure, function, biodiversity, conservation, and stewardship. Identification of the local flora and fauna will be emphasized. Prerequisite: BIOL 261.

#### BIOL 313 Developmental Biology (3)

Principles of animal development, with major emphasis on vertebrate embryology. Additional topics: growth, differentiation, and metamorphosis. Two lectures and three hours of laboratory per week. Prerequisite: BIOL 281. (Alternate years, offered 2007–2008.)

#### BIOL 315 Environmental Ethics (3)

A seminar course contrasting Judeo-Christian and Humanistic views of environmen-

tal ethics. Emphasis will be placed on developing an individual ethic within a Biblical framework of stewardship. Issues will include pollution, resource use, human population, and the connection of environmental stewardship with issues of justice in developing countries. Meets General Education Ethics requirement.

#### BIOL 321 Mycology (4)

Survey of the fungi-emphasizing identification of local species, classification, biological, and economic importance. Three lectures and three hours of laboratory per week. Prerequisite: BIOL 152. (Alternate years, offered 2008–2009.)

#### BIOL 332 Plant Taxonomy (4)

Principles of classification with special reference to local flora, including plants of horticultural interest. Techniques of collection, identification, and preservation of plants. Three lectures and three hours of laboratory per week. Prerequisite: BIOL 152.

#### BIOL 334 Plant Ecology (4)

Study of changes in plant form, function, community composition, and community diversity across environmental gradients. Emphasizes study of regional vegetation through research projects. Three hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 261 or Instructor's consent. (Alternate years, offered 2007-2008.)

#### BIOL 335 Plant Propagation (3)

Principles and practices of asexual and sexual plant propagation: horticultural crop improvement. Two lectures and three hours of laboratory per week. Prerequisite: BIOL 152. (Alternate years, offered 2008-2009.)

#### BIOL 345 Entomology (4)

Survey of the insects emphasizing their biological and economic aspects as well as their taxonomic characteristics. Three lectures and three hours of laboratory per week. Prerequisite: BIOL 150.

#### BIOL 356 Ornithology (4)

Study of the class Aves emphasizing structure and classification. The ecology, behavior, and song of birds is examined. Two lectures and three hours of laboratory per week. (Alternate years, offered 2008–2009.)

#### BIOL 358 Herpetology (4)

Study of amphibians and reptiles with emphasis on anatomy, development, physiology, reproductive biology, behavior, ecology, and systematics. Laboratory will emphasize field observation, identification, and research. Three lectures and three hours of laboratory per week. Prerequisite: BIOL 150. (Alternate years, offered 2007-2008.)

#### BIOL 360 Topics in Biology (3-4)

Selected topics in biology not currently included in course offerings. May be repeated for credit. Prerequisites: Determined by Instructor.

#### BIOL 362 Aquatic Biology (4)

A comprehensive course on the taxonomy and ecology of aquatic insects, plants, fish, amphibians, and reptiles. The community structure of this aquatic biota and their roles in the ecosystem is addressed. Identification of the biota common to south central Pennsylvania's lentic and lotic ecosystems. Three lectures and three hours of laboratory per week. Prerequisite: BIOL 150. (Alternate years, offered 2008–2009.)

#### BIOL 367 Conservation Biology (3)

Examines conservation issues associated with the loss of the world's biodiversity including the threats to biological diversity, the value of biological diversity, and the design/implementation of protection strategies including national and international environmental public policy. Prerequisite: BIOL 261.

#### BIOL 373 Electron Microscopy I (1)

Laboratory experience emphasizing ultramicrotomy, staining, and photography as related to use of the transmission electron microscope. Prerequisite: Instructor's consent. (Priority given to Junior/Senior Biology Majors; limit of six students per semester.)

#### BIOL 381 Microbiology (4)

A study of microorganisms, viruses, and immunology. Designed for those in science majors, including dietetics and environmental science. Laboratory emphasizes food and environmental microbiology and biotechnology as well as standard microbiology lab techniques. Three lectures and three hours lab per week. Prerequisite: CHEM 105, CHEM 111 or Instructor's consent.

#### BIOL 382 Microbiology for Health Professions (4)

A study of microbiology, with emphasis on clinical and epidemiological applications, including immunology. Designed for those students entering health professions. Laboratory sessions include standard microbiology lab techniques as well as exercises related to medical technology. Three lectures and three hours lab per week. Prerequisite: CHEM 105, CHEM 111 or Instructor's consent.

#### BIOL 384 Pathophysiology (3)

Alterations of the homeostatic process associated with human diseases. Three hours of lecture per week. Prerequisite: BIOL 185 and 186 or BIOL 385 and 386.

#### BIOL 385 Physiology (4)

Functional processes, including osmoregulation, excretion, metabolism, and transport and control systems, with strong emphasis on human physiology. Three lectures and three hours of laboratory per week. Prerequisite: CHEM 105 or Instructor's consent.

#### BIOL 386 Human Anatomy (4)

A study of the gross anatomy of the human. Extensive laboratory experience in the dissection of a human cadaver and selected mammalian organs. Utilization of computer software to supplement dissection of the human body. Two lectures and six hours of laboratory per week. Prerequisite: BIOL 150.

#### BIOL 387 Neuroscience (3)

Fundamentals of anatomy and physiology of the human nervous system. Emphasis on motor control, sensory input, the special senses, and behavior, including disease and dysfunction. Additional topics may include sleep, learning and memory, and neural development. Three lectures per week. Prerequisite: BIOL 150, BIOL 151 or Instructor's consent.

#### BIOL 391 Biology Practicum (1-3)

Realities of the biological field through direct participation. May involve experience as a lab assistant, assistance with faculty research, or off-campus employment. Open to juniors and seniors in the Department of Natural Sciences. Maximum of 3 credits per semester with the total not exceeding 4 credits.

#### BIOL 392 Environmental Education Practicum (3)

This course engages participants in curriculum development and implementation specific to environmental education over a variety of student age groups. Emphasis is on reviewing existing environmental education materials, drafting lesson plans specific to the practicum setting, and implementing these plans. Prerequisites or concurrent enrollment: EDUC 120, EDUC 201, BIOL 261, and BIOL 274.

#### BIOL 393 Research Methods (1)

Offered during the Fall and Spring semester for third-year students. The course will focus on research methodology including advanced literature searching, experimental design, and modeling. Students working under the guidance of a departmental faculty member will select a research topic, conduct a thorough literature review, and write a thesis proposal. One lecture per week. Prerequisites: Junior standing and 3.0 GPA or departmental consent. Cross-listed with CHEM/NUTR 393.

#### BIOL 407 Secondary Science Curriculum and Instruction (2)

A seminar emphasizing disciplinary content issues that are specific to biology, chemistry, or environmental education teaching. Areas of focus include curricular and instructional decision-making processes; classroom management strategies; assessment techniques; adaptations for exceptional learners; instructional technology applications; and professional development. Concurrent enrollment with EDUC 420, EDUC 435, and PSYC/HDFS 311. Prerequisite: admission to the Professional Semester. Cross-listed with CHEM 407.

#### BIOL 412 Cell Biology (4)

Study correlating cell structure and cell function. Emphasizes current literature in molecular and cellular biology. Fundamentals of microtechnique in laboratory. Three lectures and three hours of laboratory per week. Prerequisite: BIOL 281. (Alternate years, offered 2008–2009.)

#### BIOL 413 Molecular Biology (4)

Emphasizes research techniques and recent advances in molecular genetics including the structure, organization, expression, and manipulation of the gene. Experiments in recombinant DNA methodology include cloning, transformation, restriction analyses, PCR, site directed mutagenesis, and DNA sequence analysis. Three lectures and four hours of laboratory each week. Prerequisite: BIOL 281.

#### BIOL 417 Molecular Genetics (4)

Selected topics illustrating the molecular genetics of eukaryotic and prokaryotic organisms and viruses will be surveyed with an emphasis on primary research publications. Three lectures and three hours of laboratory each week. Prerequisite: BIOL 413.

#### BIOL 418 Introduction to Immunology (4)

Introduction to the immune system with emphasis on the host's interaction with an environment which contains many potentially harmful microbes. Control and specificity of the adaptive immune system are illustrated by studying structure and function of antibodies and T cell receptors, development of immune cells, response to immunization, allergy, autoimmunity, graft rejection and immunity to tumors. Three hours of lecture and three hours of laboratory per week. Prerequisites: BIOL 281; BIOL 382; CHEM 204 or CHEM 309. (Alternate years, offered 2008–2009.)

#### BIOL 421 Evolutionary Theory (3)

A survey and assessment of evolutionary theory and an exploration of its application to biological systems and its implications for Christian faith. Topics will focus on development of the theory from Darwin's postulates of natural selection through Fisher's mathematics of the selective process, Mayr's synthesis with modern genetics, Gould's reflection on the necessity of optimization, and recent advances in molecular systematics. Three hours of lecture and discussion per week. Prerequisites: BIOL 261 and BIOL 281, or Instructor's consent.

#### BIOL 422 Senior Research (1-3)

Offered during the fall and spring semester for fourth year students. Students will carry out the research project proposed in the Research Methods course under the direction of a faculty mentor. The semester culminates with the submission of a written thesis and an oral presentation to a departmental gathering that is advertised campuswide. Prerequisites: Senior year standing and completion of the BIOL 393 Research Methods or Instructor's consent. Maximum of 3 credits per semester with the total not exceeding 5 credits. Cross-listed with CHEM/NUTR 422.

#### BIOL 491 Independent Study (1-3)

Independent study or research under the supervision of an instructor whose approval must precede the student's enrollment. (Offered on demand.)

#### BIOL 495 Capstone: Natural Sciences (3)

Historical, philosophical, and ethical aspects of the biological sciences, with some discussion of various models for relating science and Christian faith. Open only to Senior majors in the Departments of Biological Sciences and Chemistry and Biochemistry and to Biopsychology majors. Cross-listed with CHEM 495. Prerequisite: PHIL 101 or PHIL 102.

#### BIOL 497, 498 Major Honors (2-3, 2-3)

Independent research program for students who have a strong academic record for a minimum of five previous semesters of college study. Overall GPA of 3.5, BIOL 393

#### **Biochemistry and Molecular Biology, Biology Concentration**

The Biochemistry and Molecular Biology Major integrates studies in biology and chemistry for a strong foundation in the structure and function of macromolecules and an understanding of fundamental molecular processes of life. A common core of foundational courses from the traditional disciplines of chemistry and biology prepares the student for advanced coursework in one of two related concentrations (Biology or Chemistry concentrations). Supporting courses in mathematics and physics are included in the major. Laboratory components common to most of the courses will provide opportunities to manipulate and analyze genes and their protein products. Computers and specialized software allow the student to visualize complex molecular structures such as proteins and DNA or to simulate experiments to compare with results obtained in the laboratory.

The Biology concentration of the Biochemistry and Molecular Biology Major emphasizes the study of genes and how their products control and organize living systems (single cells to whole organisms) and allow organisms to adapt to their environment. The structure and function of informational, enzymatic and structural macromolecules will be studied with respect to how genes are regulated and how their products catalyze and control metabolic processes needed to sustain life. Students completing this major will be well prepared to continue their education in graduate programs or medical school, or to seek immediate employment in a variety of settings.

Please refer to the Department of Chemistry and Biochemestry for more information about the Chemistry concentration for this major.

#### Biochemistry and Molecular Biology Major (70 - 72 credits)

Core Courses (41 credits) BIOL 151 Biology II (2) BIOL 281 Genetics (4) BIOL 413 Molecular Biology (4) CHEM 105 General Chemistry I (4) CHEM 106 General Chemistry II (4) CHEM 309 Organic Chemistry I (4) CHEM 310 Organic Chemistry II (4) CHEM 410 Biochemistry I (3) CHEM 411 Biochemistry Laboratory (1) CHEM 412 Biochemistry II (4) CHEM/BIOL 495 Capstone: Natural Sciences (3) MATH 111 Calculus I (4) One of the following General Education courses: PHIL 101 Problems in Philosophy (3) PHIL 102 History of Philosophy (3) Biology Concentration (29 – 31 credits)

BIOL 150 Biology I (4) BIOL 152 Biology III (4) BIOL 412 Cell Biology (4) STAT 269 Introductory Statistics (3) One of the following: PHYS 201 Introductory Physics I (4) PHYS 211 General Physics I (4) Six to Eight credits from selected BIOL, CHEM or PHYS courses: BIOL 261 Ecology (3) Biol 313 Developmental Biology (3) BIOL 321 Mycology (4) BIOL 332 Plant Taxonomy (4) BIOL 345 Entomology (4) BIOL 356 Ornithology (4) **BIOL 358 Herpetology** BIOL 360 Topics in Biology: Medicinal Plants BIOL 381 or BIOL 382 Microbiology (4) BIOL 384 Pathophysiology (3) BIOL 385 Physiology (4) BIOL 386 Human Anatomy (4) BIOL 387 Neuroscience (3) BIOL 418 Introduction to Immunology BIOL 422 Senior Research (2-3) CHEM 221 Chemical Analysis I (3) CHEM 321 Chemical Analysis II (4) CHEM 337 Physical Chemistry I (3) CHEM 409 Advanced Organic Chemistry (3) PHYS 202 or PHYS 212 Introductory or General Physics II (4)

#### **Environmental Science**

The environmental science curriculum provides a strong background for students planning a career in the environmental field. It is the recommended major for students who will enter graduate programs in such fields as ecology, environmental science, environmental law, environmental public policy, regional planning, landscape architecture, conservation biology, the marine sciences, etc. It also provides an excellent background for those planning to directly enter the rapidly expanding environmental job market after college. Environmental science is an interdisciplinary curriculum drawing heavily from biology and chemistry with important contributions also from ethics, theology, economics, and mathematics.

The recommended curriculum for the biology and environmental science major is identical the first year to provide maximum flexibility for students. Important features included in the environmental science curriculum are the internship/research experience and required participation (minimum of one course) at AuSable Institute of Environmental Studies, located in northern Michigan. Information on the AuSable program is available from the Department Office or your environmental sci-

#### Environmental Science Major (71-73 credits)

ASI 350 Environmental Ethics (4)-AuSable Institute course\*\* One of the following: BIOL 315 Environmental Ethics (3) ASI 350 Environmental Ethics (4)-AuSable Institute course\*\* BIOL 150 Biology I (4) BIOL 151 Biology II (2) BIOL 152 Biology III (4) BIOL 261 Ecology (3) BIOL 271 Ecological Field Techniques (3) BIOL 274 Environmental Science (3) BIOL 281 Genetics (4) CHEM 105 General Chemistry I (4) CHEM 106 General Chemistry II (4) CHEM 204 Introduction to Organic Chemistry (4)\* CHEM 340 Environmental Chemistry (4)\* One of the following:\*\* BIOL 321 Mycology (4) BIOL 332 Plant Taxonomy (4) One of the following:\*\* BIOL 345 Entomology (4) BIOL 356 Ornithology (4) BIOL 358 Herpetology (4) Nine credits approved electives (9) One of the following: MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) STAT 269 Introductory Statistics (3) One of the following: PHIL 101 Problems in Philosophy (3) PHIL 102 History of Philosophy (3) BIOL 495 Capstone: Natural Sciences (3)

\*All Environmental Science Majors must take CHEM 204 and CHEM 340. Those students intending to enter graduate school and whose work will involve a significant amount of chemical emphasis should substitute CHEM 309, 310 for CHEM 204.

\*\*All Environmental Science Majors are required to complete one course at AuSable Institute. Majors are encouraged to do an internship and/or research experience. Various AuSable Institute and Temple University courses can be substituted for major course requirements with the approval of the advisor or the Department Chair.

Environmental Science Minor (20 credits)

BIOL 150 Biology I (4) BIOL 152 Biology III (4) BIOL 261 Ecology (3)BIOL 274 Environmental Science (3)Six credits of BIOL (or other) courses approved for the Environmental Science Major (6)

#### Environmental Science Minor for Biology Majors (18 credits)

BIOL 271 Ecological Field Techniques (3) BIOL 274 Environmental Science (3) One of the following: BIOL 321 Mycology (4) BIOL 332 Plant Taxonomy (4) One of the following: BIOL 345 Entomology (4) BIOL 356 Ornithology (4) BIOL 358 Herpetology (4) Four credits of BIOL (or other) courses approved for the Environmental Science

Four credits of BIOL (or other) courses approved for the Environmental Science Major (4)

#### **Environmental Studies**

Environmental Studies is an interdisciplinary major for students preparing for a career in environmental law or environmental public policy. It provides students with scientific knowledge as well as comprehension of the institutions and processes in which policy decisions are crafted and implemented. The major offers a choice of concentrations in two areas: Public Policy and Pre-Environmental Law. Both areas offer a strong background for students planning to enter law/graduate school or for post-graduation employment at the interface of environmental science and policy. The major is jointly administered by the Department of Biological Sciences and Department of Biological Sciences.

#### Environmental Studies Major (75-76 credits)

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Core Courses
BIOL 150 Biology I (4)
BIOL 151 Biology II (2)
BIOL 152 Biology III (4)
BIOL 261 Ecology (3)
BIOL 271 Ecological Field Techniques (3)
BIOL 274 Environmental Science (3)
BIOL 281 Genetics (4)
BIOL 315 Environmental Ethics (3)
BIOL 367 Conservation Biology (3)
Seven to eight credits of approved electives chosen from the following:
BIOL 290 Topics in Field Biology (3)
BIOL 321 Mycology (4)
BIOL 332 Plant Taxonomy (4)
BIOL 334 Plant Ecology (4)
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BIOL 345 Entomology (4) BIOL 356 Ornithology (4) BIOL 358 Herpetology (4) BIOL 362 Aquatic Biology (4) GIS 245 Introduction to Geographic Information Systems (3) 300- or 400-level AuSable Institute or Temple University (4) One of the following: PHIL 101 Problems in Philosophy (3) PHIL 102 History of Philosophy (3) BIOL 495 Capstone: Natural Sciences (3) CHEM 110 Chemical Science I (3) ENGL 174 Literature and the Environment (3) STAT 269 Introductory Statistics (3) Students select from one of two concentrations: Pre-Environmental Law Concentration (24 credits) ECON 117 Issues in Environmental Economics (3) POLI 113 American Government (3) POLI 214 American Constitutional Law (3) POLI 243 Political Research Methods (3) PHIL 220 Introduction to Logic (3) Two of the following courses: BUSA 381 Business Law I or BUSA 382 Business Law II (3) POLI 316 Constitutional Civil Liberties (3)

POLI 392 Pre-Law Practicum (3)\*

One of the following courses: POLI 323 Public Policy (3) POLSCI 3152 U.S. Environmental Policy (3)\*\*

#### Environmental Public Policy Concentration (24 credits)

ECON 117 Issues in Environmental Economics (3) POLI 113 American Government (3) POLI 212 International Politics (3) POLI 213 Comparative Politics (3) POLI 243 Political Research Methods (3) POLI 323 Public Policy (3) Six credits from the following: POLSCI 3152 U.S. Environmental Policy (3)\*\* POLI 495 Internship in Political Research (6)\* American Studies Program – Washington, D.C. (6)\*

**NOTE:** A minimum of 18 credits in either concentration MUST be at the 300-level or higher. Temple University courses starting at 2xxx count as 300-level courses.

\*Practica and internships must have an environmental focus \*\*Courses taken at the Messiah College-Philadelphia Campus in conjunction with Temple University.

#### Environmental Studies Minor (22-25 credits)

BIOL 261 Ecology (3)
BIOL 274 Environmental Science (3)
BIOL 315 Environmental Ethics (3)
ECON 117 Issues in Environmental Economics (3)
POLI 113 American Government (3)
POLI 323 Public Policy (3) *Two of the following:*ENGL 174 Literature and the Environment (3)
IDST 200 Topics: Appropriate Technology (3)
INTE 394 Internship (4) or Departmental Practicum (1–3)

#### Grantham Campus

Messiah offers a full curriculum of environmental courses at its Grantham Campus.

BIOL 261 Ecology

BIOL 269 Ecology of South Florida in Winter

BIOL 271 Ecological Field Techniques

BIOL 274 Environmental Science

BIOL 297 Tropical Biology: Latin America

**BIOL 315 Environmental Ethics** 

BIOL 321 Mycology

- BIOL 332 Plant Taxonomy
- BIOL 334 Plant Ecology
- BIOL 345 Entomology
- BIOL 356 Ornithology
- BIOL 358 Herpetology
- BIOL 362 Aquatic Biology
- BIOL 367 Conservation Biology
- BIOL 391 Biology Practicum
- BIOL 392 Environmental Education Practicum
- BIOL 393 Research Methods
- BIOL 422 Senior Research

BIOL 491 Independent Study

CHEM 340 Environmental Chemistry

ECON 117 Issues in Environmental Economics

ENGL 174 Literature and the Environment

GIS 245 Introduction to Geographic Information Systems

INTE 394 Internship and Monthly Seminar

INTE 395 Internship and Weekly Seminar

#### Philadelphia Campus

Messiah's affiliation with Temple University provides the opportunity for students to live at Messiah's Philadelphia Campus and to enroll in courses at the Philadelphia Campus or across the street at Temple University. Access to Temple's courses (which are officially treated as Messiah courses) provides Messiah students with the depth and breadth of a major university curriculum. Many excellent courses are available for environmental science students including the following:

Geology

Introduction to Hydrology

Environmental Resources Perspectives on Energy Geographic Basis of Land Use Planning Fundamentals of Cartography Cartographic Production Applications in Geographic Information Systems Map and Air Photo Interpretation Energy Resources and Conservation Urban Policy Analysis Environmental Policy Issues Problems of Environmental Quality Environment and Development Marine Environments I Marine Environments II Marine Ecology

#### AuSable Campus

Messiah College has a formal affiliation with AuSable Institute of Environmental Studies. AuSable's main campus is in northern Michigan with branch campuses on Whidbey Island, Washington; in Africa near Nairobi, Kenya; and in South India in Tamil Nadu. This affiliation allows Messiah College to include AuSable courses within the Messiah catalog and for our students to pay at Messiah's tuition rate. AuSable functions as Messiah College's field station. Each year between 20 and 30 Messiah students participate in AuSable courses. Students seeking more information should consult the AuSable Catalog or their web page at www.AuSable.org.

Winter Biology Winter Stream Ecology **Environmental Ethics** Natural History in Spring Ornithology Woody Plants Land Resources Ecological Agriculture Field Botany Advanced Field Botany Plant Ecology Alpine Ecology Forest Ecology Animal Ecology Aquatic Biology Natural History of the Pacific Northwest Marine Invertebrates Marine Stewardship (ecology) Marine Mammals Limnology Global Development and Ecological Sustainability Insect Biology and Ecology Fish Biology Field Geology

Environmental Chemistry Bioregional Models for Environmental Stewardship Restoration Ecology Ecology of the Indian Tropics Birds and Mammals of South India Tropical Mountain Ecology Development and Ecological Sustainability in Africa Birds of the African Tropics Mammals of East Africa

#### Additional Department of Biological Science Courses

#### ESS 201 Earth and Space Science (3)

This course provides a broad introduction to the six content areas of basic scientific principles of Earth and Space Science: tectonics and internal Earth processes, Earth materials and surface processes, history of the Earth and its life forms, Earth's atmosphere and hydrosphere, and astronomy. Conceptual learning of processes, "how we know," are emphasized. The basic principles of biology, chemistry, physics, and mathematics as they relate to the interactions among the lithosphere, hydrosphere, atmosphere, and biosphere are emphasized in the course. Two lectures and three hours of laboratory each week. Meets General Education Laboratory Science requirement.

#### GEOL 152 Geology (3)

Consideration of fundamental and historical aspects of geology. Two lectures and three hours of laboratory per week. Meets General Education Laboratory Science requirement.

#### GIS 245 Introduction to Geographic Information Systems (3)

A Geographical Information System (GIS) is a cross-disciplinary computer-based data processing program designed to manage and analyze spatial information. ArcView GIS is a PC-based software package used for visualizing, exploring, querying, editing, and analyzing data linked to geographic locations. The emphasis of this course is on software training and use of technology in order to provide students with a core base and general skills on which they can build further expertise in GIS. Two lectures and three hours of lab per week. Students from all majors are welcome. Prerequisites: Familiarity with MS Windows, spreadsheets and databases.

# CHEMISTRY AND BIOCHEMISTRY

#### Roseann K. Sachs, Ph.D.

Chair, Department of Chemistry and Biochemistry

## Faculty

Professors K. Oberholser, R. Sachs, N. Shank Associate Professors J. Melton, A. Reeve, R. Schaeffer Senior Lecturer I. Noble

# **Majors and Minors**

- The Department of Chemistry and Biochemistry offers the following majors: Biochemistry and Molecular Biology - Chemistry Concentration(B.S.) Chemistry (B.S.) Chemistry with Teaching Certification (B.S.)
- The Department of Chemistry and Biochemistry offers the following minor: Chemistry

Pre-Professional Health Programs Pre-Medical Pre-Allied Health Pre-Physical Therapy

# **Program Options**

The Department of Chemistry and Biochemistry seeks to provide students with an understanding of the chemical sciences that will enable them to continue study in graduate school, medical school, the allied health field, or immediately enter a profession in teaching or in the chemical or pharmaceutical industry. The unique advantage of studying chemistry at Messiah is that students work in the context of a Christian liberal arts education. Thus, while investigating the world around them, they also study themselves and their Creator. The Department places special emphasis on integrating the knowledge and methods of the sciences with what Christian faith teaches about people and their place in the universe.

Messiah College has outstanding facilities for the study of the chemistry and biochemistry. The new Jordan Science Center together with the Kline Hall of Science offers well-equipped laboratories, research facilities, computer facilities, much instrumentation including an NMR, IR, GC-MS, HPLC, and a computer laboratory.

Chemistry and biochemistry majors are encouraged to take advantage of research opportunities available to them at the College. Involvement in a research project allows a student to apply the theory and skills that have been learned in earlier courses to the exploration of something new and is often the highlight of a student's academic work. Internships are available which give students practical experience in their selected profession. All majors are required to take the Educational Testing Service's Major Field Test during their senior year.

# **Pre-Medical and Pre-Allied Health Programs**

Many students preparing for careers in health care professions choose to major in Chemistry or Biochemistry. For more information about the Pre-Medical or Pre-Allied Health Programs at Messiah College, please refer to the Pre-Professional Health Programs section of this catalog.

# Chemistry

With many sciences such as ecology, medicine, material science, and food science turning increasingly to chemistry for explanations and understanding of their disciplines, many students are looking at careers in chemistry. The Chemistry Major curriculum includes courses in general chemistry, organic chemistry, chemical analysis, physical, and inorganic chemistry, and offers a variety of electives making it possible to tailor the program to the individual's interests and needs. Students not only learn the theory of instrumentation used in chemical research, but have hands-on experiences in the laboratory in which they become familiar with these techniques.

For students interested in teaching chemistry in grades seven to twelve, the chemistry secondary teaching curriculum should be followed. Upon successful completion of this program and a 12-week student teaching experience, students receive certification by the state of Pennsylvania.

#### Chemistry Major (66-67 credits)

CHEM 105 General Chemistry I (4) CHEM 106 General Chemistry II (4) CHEM 221 Chemical Analysis I (3) CHEM 309 Organic Chemistry I (4) CHEM 310 Organic Chemistry II (4)

CHEM 321 Chemical Analysis II (4) CHEM 337 Physical Chemistry I (3) CHEM 338 Physical Chemistry II (4) CHEM 342 Advanced Synthesis Lab (2) CHEM 361 Inorganic Chemistry (4) CHEM 390 Junior Chemistry Seminar (1) CHEM 490 Senior Chemistry Seminar (1) Three credits CHEM electives (3) One of the following: PHIL 101 Problems in Philosophy (3) PHIL 102 History of Philosophy (3) CHEM 495 Capstone: Natural Sciences (3) MATH 111 Calculus I (4) MATH 112 Calculus II (4) PHYS 211 General Physics I (4) PHYS 212 General Physics II (4) One of the following: Three credits COSC elective (3) MATH 211 Calculus III (4) STAT 269 Introductory Statistics (3) Chemistry with Secondary Teaching Certification (90-93) credits) CHEM 105 General Chemistry I (4)

CHEM 106 General Chemistry II (4)

CHEM 221 Chemical Analysis I (3) CHEM 309 Organic Chemistry I (4) CHEM 310 Organic Chemistry II, (4) CHEM 321 Chemical Analysis II (4) CHEM 337 Physical Chemistry I (3) One of the following: CHEM 338 Physical Chemistry II (4) CHEM 342 Advanced Synthesis Lab (2) CHEM 361 Inorganic Chemistry (4) CHEM 390 Junior Chemistry Seminar (1) CHEM 490 Senior Chemistry Seminar (1) Three credits CHEM electives (3) One of the following: PHIL 101 Problems in Philosophy (3) PHIL 102 History of Philosophy (3) CHEM 495 Capstone: Natural Sciences (3) BIOL 151 Biology II (2) MATH 111 Calculus I (4) PHYS 211 General Physics I (4) PHYS 212 General Physics II (4)

One of the following:

COSC 171 Problem Solving with Computers (3)

COSC 181 Computer Programming I (3)

MATH 112 Calculus II (4)

STAT 269 Introductory Statistics (3) ESS 201 Earth and Space Science (3) ENGL xxx American or British Literature (3) EDUC 120 The Teaching Profession (with Field Experience) (1) EDUC 201 Education and American Society (3) EDUC 203 Educational Psychology (3) EDUC 318 Secondary Learning Environments (with Field Experience) (1) EDUC 331 Instructional Design and Assessment for Secondary Education (3) **Professional Semester** CHEM 407 Secondary Science Curriculum and Instruction (2) PSYC 311 Adolescent Development (3) EDUC 420 Professional Issues in Education (2) EDUC 435 Student Teaching: Secondary (9) The general education Non-western requirement will be waived for students taking Global Christian Theology as their Christian Beliefs course.

#### Chemistry Minor (22 credits)

CHEM 105, 106 General Chemistry I, II (4, 4)
One of the following: CHEM 204 Introduction to Organic Chemistry (4)
CHEM 309, 310 Organic Chemistry I, II (4, 4)
Six to ten credits CHEM courses approved for the Chemistry Major (6–10)
NOTE: CHEM 410, 411, 412 cannot be counted in both the Biology Major and the Chemistry Minor. CHEM 495 cannot count toward a Chemistry minor.

#### CHEM 102 Chemistry for Living (3)

Consideration of various concepts basic to chemistry and the impact of chemistry on the current world scene. For non-science majors, assuming no high school chemistry. Two lectures and three hours of laboratory per week. Meets General Education Laboratory Science requirement.

#### CHEM 105 General Chemistry I (4)

Solution chemistry, stoichiometry, chemical analysis, atomic structure and chemical bonding, the periodic table, and states of matter. The laboratory experience utilizes a discovery approach. Three lectures and three hours of laboratory per week. Prerequisite: high school chemistry. Meets General Education Laboratory Science requirement.

#### CHEM 106 General Chemistry II (4)

Kinetics and thermodynamics of chemical reactions, types of chemical reactions, equilibrium and applications in aqueous solution, and electrochemistry. Three lectures and three hours of laboratory per week. Prerequisite: CHEM 105.

#### CHEM 110 Chemical Science (4)

Principles of chemistry for allied health majors. Topics include the periodic table, chemical bonding, stoichiometry, chemical equilibria and molecular structure and properties of organic and biological molecules. Three lectures and three hours of laboratory per week. Meets General Education Laboratory Science requirement.

## CHEM 204 Introduction to Organic Chemistry (4)

Essential foundations of organic chemistry for students needing one semester of organic chemistry as preparation for biochemistry. Includes natural and synthetic substances, their properties, reactions, and preparation. Three lectures and three hours of laboratory per week. Prerequisite: CHEM 106 or Instructor's consent.

#### CHEM 221 Chemical Analysis I (3)

The theoretical basis and techniques necessary to accurately and precisely measure the chemical composition of natural and artificial materials. Specific topics include: experiment design, sampling, and validation of results with the supporting statistics; gravimetric and titrimetric analysis with supporting acid-base and solubility chemical equilibrium theory; introduction to instrumental techniques including molecular spectroscopy (UV-Vis), and chromatographic methods (GC and HPLC). Two lectures and four hours of laboratory per week. Prerequisite: CHEM 106 or equivalent.

#### CHEM 222/322 Independent Research (1-3)

Independent experimental research intended for sophomores and juniors under the direction of a faculty mentor. One to two credits of research will culminate in a written report, with the option of presenting a poster at a campus research symposium. Students taking three credits of research in one academic year must complete the written report and a poster presentation for the fall or spring research symposium. A maximum of 3 credits of research can count towards the chemistry, biochemistry, or chemistry education major, as elective credits. Any additional credits in 222, 322 or 422 will have to be taken as College-wide free electives. Prerequisite: Mentoring Instructor's consent.

#### CHEM 309 Organic Chemistry I (4)

The characterization and chemistry of simple carbon compounds as organized by functional group. This includes nomenclature, three-dimensional structure, physical properties, reaction mechanisms, kinetics, thermodynamics, reactions, and NMR and IR spectroscopy. Three lectures and four hours of laboratory per week. Prerequisite: CHEM 106.

#### CHEM 310 Organic Chemistry II (4)

The characterization of carbon compounds with increasing complexity. Emphasis will be on the chemistry of aromatic compounds, carbonyl compounds, amines, and biological molecules, which contain multiple functional groups. This includes nomenclature, physical properties, reaction mechanisms, kinetics, thermodynamics, reactions, multi-step syntheses, and the integration of all spectroscopy for the structure determination of organic molecules. Three lectures and one four-hour laboratory per week. Prerequisite: CHEM 309.

#### CHEM 321 Chemical Analysis II (4)

A continuation of the theoretical basis and techniques necessary to accurately and precisely measure the chemical composition of natural and artificial materials. Specific topics include: an expansion of experiment design, sampling, and validation of results with the supporting statistics; titrimetric analysis with supporting com-

pleximetric and oxidation-reduction chemical equilibrium theory; introduction to instrumental techniques including atomic spectroscopy (AAS, AES, and APS), chromatographic methods (GC/MS and HPLC), and electrochemical methods. Three lectures and three hours of laboratory per week. Prerequisite: CHEM 221, 310, 337 or Instructor's consent.

## CHEM 337 Physical Chemistry I (3)

Macroscopic studies of chemical systems, involving thermodynamics, chemical equilibria, electrochemistry, and chemical kinetics. Three lectures per week. Prerequisites: CHEM 106 and MATH 108 or 111.

## CHEM 338 Physical Chemistry II (4)

Thermodynamics of multicomponent systems; quantum mechanics as applied to atoms, molecules, and collections of molecules. Laboratory experiments illustrate principles and theories from all areas of physical chemistry. Three lectures and three hours of laboratory per week. Prerequisite: CHEM 337. (Alternate years, offered 2008–2009.)

## CHEM 340 Environmental Chemistry (4)

The chemistry of surface and ground water, the atmosphere, and the geosphere, how these interact with each other and the biota, with particular emphasis on the impact of human activity. The laboratory consists of analytical methods used to measure pollutants in these parts of the environment. Three lectures and one three-hour laboratory per week. Prerequisite: CHEM 204, CHEM 309 or Instructor's consent.

## CHEM 342 Advanced Synthesis Lab (2)

One four-hour laboratory and one seminar per week. Laboratory will consist of the synthesis and analysis of organic and inorganic chemicals. The seminar includes instruction in writing and discussion of the results of synthesis and analysis. Course will be writing intensive. Concurrent or prerequisite: CHEM 321. (Alternate years, 2007–2008.)

## CHEM 360 Topics in Chemistry (3-4)

Selected topics in chemistry not currently included in course offerings. May be repeated for credit. Prerequisites: Determined by Instructor.

## CHEM 361 Inorganic Chemistry (4)

Periodic variation of physical and chemical properties of the elements; bonding, structure, and spectroscopy of inorganic compounds, including coordination compounds; types of inorganic reactions. Three lectures and three hours of laboratory per week. Concurrent or prerequisite: CHEM 337. (Alternate years, offered 2007–2008.)

## CHEM 390 Junior Chemistry Seminar (1)

An introduction to the chemical literature, including the nature of the chemical literature, the process of doing a literature search, and the reading and critiquing of current papers. Students will give oral presentations based on papers in the literature. The course also includes a unit on chemical safety. Prerequisite: Junior Standing. Required of all chemistry, chemical education and biochemistry and molecular biology-chemistry concentration majors.

#### CHEM 391 Chemistry Practicum (1-3)

Exposure to the chemical field through direct participation. May involve experience as a laboratory assistant for a course, as an instrumentation assistant, or off-campus employment. Open to juniors and seniors in the departments of the natural sciences. Maximum of 3 credits per semester with the total not exceeding 4 credits. These credits cannot count towards the chemistry elective. Instructor's consent required.

#### CHEM 393 Research Methods (1)

Offered during the fall and spring semester for third-year students. The course will focus on research methodology including advanced literature searching, experimental design, and modeling. Students working under the guidance of a departmental faculty member will select a research topic, conduct a thorough literature review, and write a thesis proposal. One lecture per week. Prerequisites: Junior standing and 3.0 GPA or departmental consent. Cross-listed with BIOL/NUTR 393.

#### CHEM 407 Secondary Science Curriculum and Instruction (2)

A seminar emphasizing disciplinary content issues that are specific to biology, chemistry, or environmental education teaching. Areas of focus include curricular and instructional decision-making processes; classroom management strategies; assessment techniques; adaptations for exceptional learners; instructional technology applications; and professional development. Concurrent enrollment with EDUC 420, EDUC 435, and PSYC/HDFS 311. Prerequisite: admission to the Professional Semester. Cross-listed with BIOL 407.

#### CHEM 409 Advanced Organic Chemistry (3)

Application of molecular orbital theory, thermodynamics and kinetics to the determination of organic reaction mechanisms and identification of reactive intermediates. Prediction of reaction mechanisms as applied to both organic and biological systems. Advanced spectroscopy of organic compounds. Prerequisite: CHEM 310. (Alternate years, January term, 2009).

#### CHEM 410 Biochemistry I (3)

Types of biochemical compounds with emphasis on structure/function relationship, e.g., bioenergetics, catabolism, human nutrition. Chemistry, biochemistry, and biology majors who are taking this course as part of their major requirements must take both the lecture and laboratory portion of this course. Three lectures per week. Prerequisite: CHEM 204 or 309 and 310 or Instructor's consent.

#### CHEM 411 Biochemistry Laboratory (1)

Isolation and purification of proteins, lipids, and carbohydrates; qualitative and quantitative analysis of biological compounds and enzyme kinetics. Chemistry, biochemistry, and biology majors who are taking this course as part of their major requirements must take both the lecture and laboratory portion of this course. Three hours of laboratory per week.

#### CHEM 412 Biochemistry II (4)

Anabolic reactions of organisms including DNA replication, RNA transcription, and protein synthesis with an emphasis on reading the current literature. Three lec-

tures and three hours of laboratory per week. Prerequisite CHEM 410. (Alternate years, 2007–2008.)

#### CHEM 422 Senior Research (1-3)

Offered during the fall and spring semester for fourth year students. Students will carry out the research project proposed in the Research Methods course under the direction of a faculty mentor. Faculty and students will meet during the semester for progress updates and to discuss other topics as needed. The semester will typically culminate with the submission of a written thesis and an oral presentation to an open departmental gathering that is advertised campuswide. Prerequisites: Senior year standing and completion of the CHEM 393 Research Methods or Instructor's consent. Maximum of 3 credits per semester with the total not exceeding 5 credits. Cross-listed with BIOL/NUTR 422.

## CHEM 461 Organometallic Chemistry (3)

Survey of organometallic compounds and their reactions. Course will examine bonding in organometallic complexes, reactivity of the metal to carbon bond, ligand substitution reactions, oxidative addition and reductive elimination reactions, and homogeneous catalysis. Three lectures per week. Prerequisite: CHEM 337 and CHEM 361. (Alternate years, Spring 2008.)

#### CHEM 490 Senior Chemistry Seminar (1)

Advanced work in the chemical literature to include leading class discussions on selected papers. Attendance at departmental seminars is required. The course also includes a unit on professional ethics in chemistry and biochemistry, as well as instruction on career planning. The Educational Testing Service's Major Field Test in Chemistry will be administered in this course and is a requirement for graduation. Prerequisite: Senior Standing or consent of instructor. Required of all chemistry, chemical education and biochemistry and molecular biology-chemistry concentration majors.

## CHEM 491 Independent Study (1-3)

Independent study of an advanced topic under the supervision of an instructor whose approval must precede the student's enrollment. This course rubric is not intended for laboratory research. These credits may count towards the chemistry elective. Offered on demand. Instructor's consent required.

## CHEM 495 Capstone: Natural Sciences (3)

Historical, philosophical, and ethical aspects of the natural sciences, with some discussion of various models for relating science and Christian faith. Open only to Senior majors in the Departments of Biological Sciences and Chemistry and Biochemistry and to Biopsychology majors. Prerequisite: PHIL 101 or 102.

## CHEM 497, 498 Major Honors (2-3, 2-3)

Independent research program for students who have a strong academic record for a minimum of five previous semesters of college study. Overall GPA of 3.5, CHEM 393 Research Methods, and departmental approval required for enrollment.

# **Biochemistry and Molecular Biology, Chemistry Concentration**

The Chemistry Concentration of the Biochemistry and Molecular Biology Major emphasizes a molecular understanding of biological processes. A fascination with atomic and molecular structure and function, as it controls the processes of life itself, is a sure indication that this major may be the one for you. Courses in this major consider the structure and function of nucleic acids, proteins, lipids, and carbohydrates, and how these molecules mediate chemical processes in the cell. In addition, a student in this concentration will be taught both qualitative and quantitative methodologies needed in order to fully probe how molecular structure causes changes in biological processes. A thorough understanding of the biology of microorganisms, the application of both classical and modern genetics to living systems, and the transformation of molecular information in biological systems completes this major.

The completion of this major provides considerable versatility to a student, who will be well qualified to work in any area of biochemistry, molecular biology, or biotechnology. In addition, the hands-on use of analytical instrumentation throughout this program will allow a student to easily succeed in a career in chemical analysis. These positions are abundant for Bachelor's level scientists and include applications in environmental chemistry and forensic science. Furthermore, this major is well suited for students planning to pursue a career in medical school, or some other allied health profession. Finally, the Chemistry Concentration of the Biochemistry and Molecular Biology major is outstanding preparation for a student planning to attend graduate school in biochemistry or molecular biology, as well as interdisciplinary areas such as biophysics, neuroscience, genetics, cell biology and immunology.

Please refer to the Department of Biological Sciences for more information about the Biology concentration for this major.

#### Biochemistry and Molecular Biology Major (72 - 73 credits)

Core Courses (41 credits) BIOL 151 Biology II (2) BIOL 281 Genetics (4) BIOL 413 Molecular Biology (4) CHEM 105 General Chemistry I (4) CHEM 106 General Chemistry II (4) CHEM 309 Organic Chemistry I (4) CHEM 310 Organic Chemistry II (4) CHEM 410 Biochemistry I (3) CHEM 411 Biochemistry Laboratory (1) CHEM 412 Biochemistry II (4) CHEM/BIOL 495 Capstone: Natural Sciences (3) MATH 111 Calculus I (4) One of the following General Education courses: PHIL 101 Problems in Philosophy (3) PHIL 102 History of Philosophy (3)

Chemistry Concentration (31 – 32 credits) CHEM 221 Chemical Analysis I (3) CHEM 321 Chemical Analysis II (4) CHEM 390 Junior Chemistry Seminar (1) CHEM 490 Senior Chemistry Seminar (1) PHYS 211 General Physics I (4) PHYS 212 General Physics II (4) One of the following: CHEM 337 Physical Chemistry I (3) CHEM 409 Advanced Organic Chemistry (3) Two of the following: BIOL 381 or BIOL 382 Microbiology (4) BIOL 412 Cell Biology (4) BIOL 417 Molecular Genetics (4) One of the following: MATH 112 Calculus II (4) STAT 269 Introductory Statistics (3)

# Additional Department of Chemistry and Biochemistry Courses

#### PHSC 102 Physical Sciences for Elementary Education (4)

Selected topics in the physical sciences designed for Elementary Education Majors. Three lectures and three hours of laboratory per week. Along with BIOL 106, PHSC 102 meets General Education Laboratory Science requirement for Elementary Education majors only.

# HEALTH AND HUMAN PERFORMANCE

Jack T. Cole, M.E. Chair, Department of Health and Human Performance

# Faculty

Professors D. Miller, S. Wentzell

Associate Professors J. Gustafson, S. Kieffer

Assistant Professors K. Hansen-Keiffer, K. Heck, R. Murray, L. Swivel, J. Cole

Instructors S. Bush

Senior Lecturer W. Cheesman

*Lecturer* J. Rodkey

# **Majors and Minors**

The Department of Health and Human Performance offers the following majors: Adventure Education (B.A.) Athletic Training (B.A.) Health and Exercise Science (B.A.) Concentrations: Health and Fitness Pre-Physical Therapy Sport Management (B.A.)

The Department of Health and Human Performance offers a major that leads to a B.A. degree and Pennsylvania Instructional I teacher certification: Health and Physical Education, K–12

The Department of Health and Human Performance offers the following minors: Adventure Education Athletic Training Coaching Health and Exercise Science Sport Management

# **General Education Activities Courses**

General Education Courses (All activity courses are Pass/Fail grade only.) ADED 114 Canoeing (1) ADED 137 Ropes and Initiatives Course (1) ADED 181 Caving (1) ADED 182 Rock Climbing (1) PHED 101 Introduction to Wellness (2) PHED 102 Intercollegiate Sports (1) PHED 103 Adapted Physical Education (1) PHED 104 Swimming for the Non-Swimmer (1) PHED 106 Aquatic Aerobics (1) PHED 107 Beginning Racquetball (1) PHED 109 Beginning Volleyball (1) PHED 112 Beginning Tennis (1) PHED 114 Square Dance (1) PHED 115 Beginning Skiing and Snowboarding I (1) PHED 117 Self-Defense (1) PHED 118 Expressive, Creative Movement (1) PHED 119 Aerobics (1) PHED 120 Golf, Badminton (1) PHED 121 Soccer, Softball (1) PHED 122 Flag Football, Basketball (1) PHED 123 Strength Training and Conditioning (1) PHED 124 Safety and R.A.D. Systems for Women (1) PHED 125 Equestrian Skills (1)

- The following courses require beginning level skills:
- PHED 105 Intermediate Swimming (1)
- PHED 108 Intermediate Racquetball (1)
- PHED 110 Intermediate Volleyball (1)
- PHED 113 Intermediate Tennis (1)
- PHED 116 Skiing and Snowboarding II (1)

The following course requires intermediate level skills: PHED 111 Advanced Volleyball (1)

## PHED 101 Introduction to Wellness (2)

An introduction to the key elements of wellness from a Christian perspective including active participation in a regular individual fitness program with particular emphasis on cardiovascular endurance, flexibility, and muscular strength. Other issues relating to wellness will also addressed. Majors in this department are designed to accommodate a variety of interests and vocational choices. The options include the following:

- 1. Health and Physical Education (Teacher Certification, Grades K-12)
- 2. Health and Exercise Science (for those desiring careers in corporate fitness, exercise physiology, cardiac rehabilitation, physical therapy)
- 3. Athletic Training (for those desiring to pursue certification in athletic training)
- 4. Adventure Education (for those desiring to work as an adventure educator in an outdoor setting such as camps, college programs, ropes courses, or youth at risk programs)
- 5. Sport Management (for those desiring careers in the sports industry)

In addition to the above, five minors are available: Athletic Training; Coaching; Adventure Education; Health and Exercise Science; and Sport Management. All Health and Human Performance Majors must satisfy standards of physical and motor fitness as prescribed by the department.

All Health and Physical Education Teaching Certification Majors and Athletic Training Majors must be formally approved for acceptance into these major programs. During the second semester of the sophomore year all students must make a formal application to be approved by the Department faculty.

Upon admission into any of the majors offered by the Department, all students are required to:

- 1. Join a state or national professional organization.
- 2. Athletic Training majors are required to join state and national professional organizations.

Additionally, students are expected to meet the following requirements:

- 1. Students must achieve the following GPA prior to senior class standing: Health and Physical Education—refer to Student Teaching Handbook.
- 2. Current certification in CPR/First Aid during the professional semester for Health and Physical Education Majors.
- 3. Provide own transportation for the Health and Exercise Science and Sport Management Practicum and Internship, Athletic Training practicum, Health and Physical Education student teaching experience or Recreation Practicum and Internship.
- 4. Show proof of certain immunizations when necessary.

The facilities to support these majors are both modern and convenient. Indoor facilities include a natatorium, a weight training center, racquetball courts, indoor running track, fitness facility, and two large gymnasiums. Outdoor facilities include fields for both intramural and intercollegiate athletics, an eight-lane, all-weather, metric track, ten all-weather tennis courts, fitness trail, high ropes course, and low initiatives.

A variety of career and professional options are available to students selecting these majors, including but not limited to the following: public and private school teaching, athletic training, sports industry, exercise specialist, corporate fitness, cardiac rehabilitation, exercise physiologist, private club operations, health club instruction,

outdoor adventure activities.

Sports participation is allowed by approval of the athletic training program director.

# **Health and Physical Education**

Health and Physical Education Major – Teacher Certification (88–91 credits)
BIOL 185, 186 Human Anatomy and Physiology I, II (4, 4)
PSYC 310 Child Development (3)
HPED 156 Team Sports (1)
HPED 158 Racquet Sports (1)
HPED 164 Recreational and Rhythmical Activities (1)
HPED 165 Individual Sports (1)
HPED 170 Concepts of Conditioning (1)
HPED 175 Developmental Gymnastics (1)
<b>ONE</b> of the following sets of requirements: $(0-3)$
1) HPED 195 First Aid and CPR and one of the following:
HPED 189 Emergency Water Safety (1)
HPED 192 Water Safety Instructor (2)
2) Competency* in First Aid and CPR and one of the following:
HPED 189 Emergency Water Safety (1)
HPED 192 Water Safety Instructor (2)
3) HPED 193 Lifeguarding/First Aid/CPR (2) or Lifeguarding competency*
HPED 223 Community Health Strategies (3)
HPED 224 Personal Health Strategies (3)
HPED 227 Foundations of Physical Education (3)
HPED 229 Motor Learning (3)
HPED 232 Teaching Adapted Physical Education (3)
HPED 236 Medical Aspects of Sport (3)
HPED 305 Contemporary Issues in Health (3)
HPED 309 Curriculum and Instruction in Elementary Physical Education (3)
HPED 312 Curriculum and Instruction in Secondary Physical Education (3)
HPED 321 Kinesiology (3)
HPED 322 Exercise Physiology (3)
HPED 326 Curriculum and Instruction in Health Education (3)
HPED 422 Assessment in Health and Physical Education (2)
HPED 423 Principles of Administration (3)
One of the following:
HPED 329 Sport in Society (3)
HPED 333 Principles of Coaching (3)
Three credits of MATH/COSC/STAT xxx General Education Mathematics/
Computer Science/Statistics (3)
COSC 171 Problem Solving with Computers $(3)$
EDUC 120 The Teaching Profession (1)
EDUC 201 School and American Society (3)
EDUC 203 Educational Psychology (3)
EDUC 431 Elementary Student Teaching (5)
EDUC 432 Secondary Student Teaching (6)
HPED 433 Student Teaching Seminar (1)

\*Competency as defined by the American Red Cross

All students who pursue teacher certification must comply with established policies and procedures that regulate admissions to, retention in, and certification through Messiah College's Teacher Education Program. A complete copy of the Teacher Education Program Handbook can be found on the program homepage www.messiah.edu/academic/teacher/teach.htm. To reach the handbook site easily, visit the Messiah homepage, click on <u>Academics</u>, and then on <u>Teacher Education Program</u>.

Three major criteria are evaluated for admission:

- A. GPA/academic performance
- B. character references
- C. endorsements/references

When admitted to the College, all students who intend to pursue a teacher preparation program are identified with a "pre" status. All such students are required to make formal application for admission to the Teacher Education Program by November 1 of the sophomore year.

Students apply for admission to the Professional Semester (student teaching semester) during the junior year. Students are expected to file a formal application for admission to the Professional Semester by November 1 of the academic year prior to the one in which the Professional Semester will occur.

Refer to pages 160–161 for additional Teacher Certification requirements.

#### Health and Exercise Science Major (57-60 Credits for Health and Fitness Concentration; 73-78 Credits for Pre-Physical Therapy Concentration)

Core Requirements: HPED 170 Concepts of Conditioning (1) HEXS 101 Introduction to Health and Exercise Sciences (1) HPED 321 Kinesiology (3) HPED 322 Exercise Physiology (3) HEXS 225 Research Methods and Statistical Analysis (3) HEXS 360 Exercise Testing and Prescription (3) PSYC 101 Introduction to Psychology (3) HEXS 412 Senior Seminar for Health and Exercise Science (3) HEXS 220 Health Promotion Management (3) One of the following: HPED 193 Lifeguarding/First Aid/CPR (or equivalent competencies (2) HPED 195 First Aid; CPR (1) or equivalent Competency\* with HPED 189 Emergency Water Safety (1) = (1-2) ORHPED 195 First Aid; CPR (1) or equivalent Competency\* with HPED 192 Water Safety Instructor (2) = (2-3)

One of the following concentrations:

#### Health and Fitness Concentration:

HEXS 215 Chronic Disease and Exercise (3) HPED 423 Principles of Administration (3) HPED 329 Sport in Society (3) BIOL 185 Human Anatomy and Physiology I (4) BIOL 186 Human Anatomy and Physiology II (4) CHEM 105 Chemical Science I (4) CHEM 112 Chemical Science II (3) NUTR 222 Nutrition Theory (3) HPED 223 Community Health (3) HPED 224 Personal Health Strategies (3) HPED 360 Exercise Testing and Prescription(3) One of the following: (3)GERO 251 Nutrition, Health, and Biology of Aging (3) PSYC 231 Psychology of Aging (3) PSYC 310 Child Development (3)) HPED 412 Senior Seminar for Health and Fitness (1)

\*Competency as defined by the American Red Cross.

**Pre-Physical Therapy Concentration** ATED 231 Injury Assessment I (3) ATED 232 Injury Assessment II (3) BIOL 150 Biology I (4) HPED 329 Sport in Society (3) BIOL 382 Microbiology for Health Professions(4) BIOL 385 Physiology(4) BIOL 386 Human Anatomy(4) CHEM 105 General Chemistry I (4) CHEM 106 General Chemistry II (4) PHYS 201 Introductory Physics I (4) PHYS 202 Introductory Physics II (3) One of the following:(3) PSYC 310 Child Development (3) PSYC 311 Adolescent Development (3) GERO 251 Nurtition, Health, and Biology of Aging (3) One of the following: (3-4)HPED 232 Teaching Adapted Physical Education (3) ATED 430 Therapeutic Exercise (3) ATED 337 Therapeutic Modalities (4) One of the following: (3-4) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4)

\*Competency as defined by the American Red Cross.

#### Sport Management Major (52-53 Credits)

<u>Core Courses</u> ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) BIOL 258 Human Biology (4) BIS 230 Computer Applications (3) BUSA 381 Business Law I (3)\*\* SPMT 110 Sport Management Careers & Content (1) HPED 170 Concepts of Conditioning (1) HPED 195 First Aid/CPR (1) SPMT 210 Ethics & Law in Sport Management (3) SPMT 211 Economics & Governance in Sport (3) SPMT 313 Sport Facility & Event Management (3) SPMT 314 Sponsorship & Marketing in Sport Management (3) HPED 322 Exercise Physiology (3) HPED 329 Sport in Society (3) SPMT 411 Senior Seminar in Sport Management (3) HPED 423 Principles in Administration (3) HPED/PHED Skills Elective (1) HRM 120 Principles of Management (3) MKT 230 Marketing Principles (3) SPMT 391 Sport Management Practicum (3) SPMT 410 Topics in Sport Management (2)

\*\*All students must pass the Computer Competency Exam, administered by the Department of Management and Business, prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

Many students preparing for careers in Pre-Physical Therapy major in Biology or in the Pre-Physical Therapy Concentration of Health and Exercise Science. For more about the Pre-Physical Therapy Program at Messiah College, please refer to the Pre-Professional Programs section of this catalog.

#### Health and Exercise Science Minor (19 credits)

HEXS 101 Introduction to Health and Exercise Science (1) HEXS 215 Chronic Disease and Exercise (3) HPED 322 Exercise Physiology (3) HEXS 360 Exercise Testing and Prescription (3) Select two of the following courses: HEXS 210 Exercise Psychology (3) HEXS 310 Elite Athletic Performance (3) HEXS 315 Stress Testing and ECG Interpretation (3) HEXS 415 Advanced Exercise Physiology (3)

Three credits of an upper-level course from ATED, HPED, or HEXS.

#### Coaching Minor (18-19 credits)

HPED 195 First Aid: CPR or ARC First Aid/CPR course (0–1) HPED 236 Medical Aspects of Sports (3) HPED 322 Exercise Physiology (3) HPED 333 Principles of Coaching (3)

HPED 391 Sport and Exercise Science Practicum (3)

- IDET 300 Topics: Ethical Issues in Sport (3)
- Three hours from the following:
  - ADED 139 Wilderness Encounter (3)
  - ADED 156 Team Sports (1)
  - ADED 188 Ropes and Initiatives Course Certifications (1)
  - HPED 321 Kinesiology (3)
  - HPED 360 Exercise Testing and Prescription (3)
  - HPED 233 Sports Officiating (2)
  - HPED 158 Racquet Sports (1)
  - HPED 164 Recreational and Rhythmical Activities (1)
  - HPED 165 Individual Sports (1)
  - HPED 170 Concepts of Conditioning (1)
  - HPED 175 Developmental Gymnastics (1)
  - HPED 185 Outdoor Living Skills (1)

## Sport Management Minor (18 credits)

- SPMT 110 Sport Management Careers and Content (1)
- SPMT 210 Ethics and Law in Sport Management (3)
- SPMT 211 Economics and Governance in Sport (3)
- SPMT 313 Sport Facility and Event Management (3)
- SPMT 314 Sponsorship and Marketing in Sport Management (3)
- SPMT 391 Sport Management Practicum (3)
- SPMT 410 Special Topics in Sport Management (2)

# HPER Majors' Skills Courses

- ADED 139 Wilderness Encounter (3)
- ADED 181 Caving (1)
- ADED 182 Rock Climbing (1)
- ADED 188 Ropes and Initiatives Course Certification (1)
- HPED 156 Team Sports (1)
- HPED 158 Racquet Sports (1)
- HPED 164 Recreational and Rhythmical Activities (1)
- HPED 165 Individual Sports (1)
- HPED 170 Concepts of Conditioning (1)
- HPED 175 Gymnastics (1)
- HPED 185 Outdoor Living Skills (1)
  - (Prerequisite: ADED 137 or equivalent)
- One of the following:
- 1) HPED 193 Lifeguarding/First Aid/CPR (2)
- 2) HPED 195 First Aid; CPR (1) PLUS HPED 189 Emergency Water Safety (1) OR HPED 192 Water Safety Instructor (2) (Prerequisite: swimming skills equivalent to Red Cross Level VI)

# HEXS 101 Introduction to Health and Exercise Science (1)

An introductory course designed to examine the philosophical and historical origin

of the field of exercise science. The course will include an overview of topics in the field of exercise science including; acute and chronic physiological responses to exercise, nutrition, biomechanics, concepts in health-related and physical fitness, and statistics. In addition, current issues and future directions will also be explored. (Offered Fall Semester only.)

## HEXS 210 Exercise Psychology (3)

The course provides an overview of psychological issues related to exercise and health behavior, including and understanding the concepts, principles and theories that relate to the practice of promoting and supporting regular exercise participation, patterns, and modification. Emphasis will be given to the psychological influences and consequences of exercise participation on positive health behaviors, and the impact of exercise on mental health states such as depression and anxiety. Social influences that impact exercise behavior will also be explored. (Alternate year course).

## HEXS 215 Chronic Disease and Exercise (3)

The course provides students with a basic understanding of the epidemiology of chronic disease and the role exercise has in the management and treatment of the disease. The course will examine diseases such as cardiovascular disease, metabolic disorders, musculoskeletal disease/disorders, and pulmonary disease. In addition, the course will address intervention strategies for risk reduction and chronic disease prevention for the individual as well as the broader community. (Alternate years, offered Fall 2007.)

## HEXS 220 Health Promotion Management (3)

The course provides the student with the history and current practice of health promotion and fitness instruction that can be used in a variety of health and exercise settings (e.g., corporate fitness, schools, non-profit organizations, hospital based programs, or service programs). Students will survey current health promotion topics, how to implement the administrative structure to conduct the programs, and assessment tools to evaluate the programs.

## HEXS 225 Research Methods and Statistical Analysis (3)

A course designed to introduce the theoretical basis and application process of research in the field of exercise science. The course explores the concepts of the research process, research design, ethical issues for the use of human subjects, and organizing a literature review. The students will also be introduced to the statistical concepts of descriptive and inferential statistics; including correlation, t-tests, ANOVA, factorial design and regression analysis. Note: Replaces HPED 328 Research Methods (3).

## HEXS 310 Elite Athletic Performance (3)

The course will utilize students' backgrounds in biomechanics and exercise physiology to examine training methods and models that facilitate sport performance at the elite level. Profile characteristics of elite athletes will be presented as well as the relationship between inherited and acquired capacities responsible for elite performance. Attention will also be given to ways that technology is currently being used to enhance elite athletic performance. Prerequisite of HPED 322. (Alternate years, offered Spring 2008.)

## HEXS 315 Stress Testing and ECG Interpretation (3)

The course provides the student with an understanding of basic electrocardiogram interpretation for the normal and the diseased heart at rest and during graded exercise testing. The course will review the anatomy and physiology of the cardio respiratory system and will include a survey of electrocardiography, including the topics of rate, rhythm, hypertrophy, axis determination, atrial and ventricular arrhythmias, conduction defects, myocardial ischemia, and myocardial infarction. Prerequisite of HPED 322 or Instructor's consent. (Alternate years, offered 2008-2009.)

#### HEXS 330 Advanced Research Methods (1-3)

Students will carry out the research project proposed in the Research Methods course under the direction of faculty mentors. The semester will culminate with the submission of the final two chapters (results and discussion) and a presentation at a departmental colloquium. Prerequisite: HPED 328.

#### HEXS 360 Exercise Testing and Prescription (3)

Practical experience in using physiological laboratory instrumentation. Emphasis on appropriate application of test results to the planning of individual fitness programs. Populations discussed include adults, elderly, cardiac patients, and athletes. Particular emphasis on data collection using bicycle ergometers and treadmills. Includes two hours laboratory per week. Prerequisite: HPED 322.

#### HEXS 391 Health and Exercise Science Practicum (1-3)

Practical experience related to health, physical education, athletic or leisure programming, or health and fitness. May involve experience as an instructional aide, athletic trainer, recreational sports, or off-campus employee. Prerequisite: departmental approval.

## HEXS 410 Topics in Health and Exercise Science (2-3)

Seminar in which content may change depending on when it is offered. Possible topics include sport and ethics; sport and Christianity; competition in sport and leisure; sport and leisure related in culture; trends in sport and leisure; the effects of technology in sport and leisure; problems in youth sports; the influence of sport in society; and the influence of sport in politics.

## HEXS 412 Senior Seminar for Health and Exercise Science (3)

This capstone course will investigate contemporary exercise science issues with a look to preparing students as future servant-leaders in society. Topics for discussion will include preparation for the senior capstone exam, current exercise trends in society, popular nutritional supplements, national certifications related to personal training and conditioning, physical therapy and graduate school expectations, and vocational issues. Through readings and class discussions, students will formulate a personal written philosophy articulating their mission as a Christian professional in the field of exercise science.

## HEXS 415 Advanced Exercise Physiology (3)

The course provides an advanced study of the physiological responses and adaptations to physical activity. Emphasis is placed on human bioenergetics, skeletal muscle structure and function, and the cardiovascular system. The critical analysis of the effect of exercise on human physiologic function will include in-depth examination of current literature. Prerequisite of HPED 322. (Alternate years, offered 2008-2009.)

#### HEXS 491 Independent Study in Health and Exercise Science (1-3)

Independent research with faculty supervision.

#### HPED 170 Concepts of Conditioning (1)

Introduction to the basic foundations of physical fitness and wellness concepts. Particular emphasis is placed on the fitness components of cardiovascular endurance, body composition, muscle strength and endurance, and labs emphasizing flexibility. Students design and implement individualized exercise programs, and significant class time is devoted to vigorous sport and exercise sessions.

#### HPED 223 Community Health Strategies (3)

Study of major community health problems and effective methods of community health education. Particular emphasis is given to the influence of society on human health behavior. Includes an in-depth look at the areas of consumer health, stress, safety, and sexuality. (Alternate years, offered Spring 2009.)

#### HPED 224 Personal Health Strategies (3)

Explorations in the personal health areas of drug dependency, nutrition, weight control, and disease. Emphasizes individual responsibility for making sound personal health decisions.

#### HPED 227 Foundations of Physical Education (3)

Overview of the physical education profession; brief history; philosophical, scientific, and sociological foundations and principles; a brief introduction to career opportunities plus overall education objectives of health and physical education programs. (Offered Fall Semester.)

#### HPED 229 Motor Learning (3)

An introductory investigation of principles affecting performance and retention of motor skills. Topics include learning stages, information processing, feedback, transfer, practice conditions, memory, arousal, task analysis, data analysis, fundamental experimental and statistical concepts. (Alternate years, offered Fall 2008.)

#### HPED 232 Teaching Adapted Physical Education (3)

Principles and practices concerning conditions and diseases (e.g., orthopedic, neurological, emotional, etc.) which influence participation in physical education and recreation.

#### HPED 233 Sports Officiating (2)

Understanding of basic philosophy of officiating, including methods, rules interpretation, and technique. Students develop basic officiating skills through participation and rating, and are introduced to officiating rating examinations (Offered on

#### demand.)

## HPED 236 Medical Aspects of Sport (3)

Basic injury prevention and care course for those majors involved in coaching, fitness programs, and physical activity supervision. Involves the application of basic injury care, conditioning of athletes, basic taping techniques, legal and ethical issues, and nutritional concepts. Lab sessions and practical experience are provided.

## HPED 305 Contemporary Issues in Health (3)

An in-depth study of selective, contemporary health issues. An emphasis on exploring Healthy People 2000 Objectives is included.

## HPED 309 Curriculum and Instruction in Elementary Physical Education (3)

Theories, principles, and practices related to curriculum development and instruction in elementary physical education. Practical experience is included.

## HPED 312 Curriculum and Instruction in Secondary Physical Education (3)

Theories, principles, and practices related to curriculum development and instruction in secondary physical education. Practical experience is included.

## HPED 321 Kinesiology (3)

Detailed study of human balance and motion, including the application of physical laws to action of bones, muscles, and their articulations. Practical application to physical education activities.

## HPED 322 Exercise Physiology (3)

Physiological adjustments of major organs and systems to exercise, including theories and principles for improving performance. Examination of current literature and research. An analysis of ethical and physiological implications of using scientific technology to enhance performance.

## HPED 326 Curriculum and Instruction in Health Education (3)

Curriculum planning, methods, materials, and teaching techniques for teaching health to grades K–12. Prerequisite: HPED 223, 224, or Instructor's consent.

## HPED 329 Sport in Society (3)

Study of race, sexism, social stratification, social mobility, and religious orientations pertaining to sports. Contemporary realities, myths, and issues concerning social differentiation will be examined by utilizing a variety of disciplinary approaches, including the following theories: functionalism, conflict, critical, and feminist. Analysis of the social influences and structure that have affected and exist within, between, and among societies, nations, and cultures will also be explored as they pertain to sport. Meets General Education Pluralism requirement.

## HPED 333 Principles of Coaching (3)

A study of principles and practices of coaching with an emphasis on methodology, administration, and conditioning. In addition, social-psychological dimensions of coaching such as motivation, stress, group dynamics and leadership will also be included. Students will be challenged to develop a philosophy of coaching and critique com-

petition in light of their Christian faith. (Alternate years, offered Spring 2009.)

#### HPED 391 Health and Exercise Science Practicum (1-3)

Practical experience related to health, physical education, athletic or leisure programming or health and fitness. May involve experience as an instructional aide, athletic trainer, recreational sports supervisor, or off-campus employee. Prerequisite: department approval.

#### HPED 422 Assessment in Health and Physical Education (2)

Guidance in appropriate selection, construction, and administration of motor skill, fitness, and knowledge assessment tools as well as interpreting and using results of data collection to improve student learning. (Offered Fall Semester only.)

#### HPED 423 Principles of Administration (3)

A study of leadership, basic skills, processes, and functions of management pertaining to physical education, fitness, and sport. The development of an extensive policies and procedures manual that includes, but is not limited to the following components: mission statement, objectives/goals, code of ethics, organizational plan, policies, facility plans, and operational budget. The case study approach is heavily utilized for the student practice decision-making skills. (Offered Spring Semester only.)

#### HPED 433 Student Teaching Seminar (1)

The seminar is designed to provide opportunities to reflect upon and evaluate teaching experiences, to research and debate special topics and to continue the process of planning for future professional endeavors. The seminar is conducted concurrently with student teaching. (Pass/Fail grade only.)

#### HPED 491 Independent Study in Physical Education (1-3)

Independent research with faculty supervision.

#### HPED 497, 498 Majors Honors (3, 3)

Independent research program for students who have a strong academic record for a minimum of five previous semesters of college study. Overall GPA of 3.5 and department approval required for enrollment.

#### SPMT 110 Sport Management Careers and Content (1)

This course is an introduction to the field of sport management and will be completed by first-year students during the fall semester. Career options and managerial content will be reviewed. Foundational studies of sport, including history, philosophy, and professional skills will be discussed as they relate to the field of sport management. (Offered Fall Semester only.)

#### SPMT 210 Ethics and Law in Sport Management (3)

This course integrates the ethical strategies of sport management along with the demonstration of how constitutional law, contract law, tort law, labor and anti-trust law, and discrimination apply to the sport management industry. (Alternate years, offered Fall 2007.)

#### SPMT 313 Sport Facility and Event Management (3)

This course is designed to assist the sport management student in acquiring the necessary knowledge and skills needed to manage a sport facility and to plan a sporting event. (Alternate years, offered Fall 2008.)

#### SPMT 314 Sponsorship and Marketing in Sport Management (3)

Sport sponsorship and marketing is designed to apply marketing principles to the area of sport, sport events, and sport products. Sponsorship and marketing strategies including sales, promotions, and advertising of sport will be emphasized. (Alternate years, offered Fall 2008.)

#### SPMT 391 Sport Management Practicum (3)

This course provides the prospective sports manager with practical training and experience involving progressive learning in specific areas of interest. The student and advisor jointly select an approved site and plan the practical experience. Potential sites include, but not limited to, sport facilities, professional sports, television stations, and the commercial sports industry. Progressive and summary reports and regular meetings with the faculty sponsor and field supervisor are required. The student is evaluated by the faculty supervisor and the field supervisor. Prerequisite of junior or senior level status in the major.

#### SPMT 410 Topics in Sport Management (2)

In-depth investigation and development of an area of current sport management interest. (Alternate years, offered 2008-2009.)

#### SPMT 411 Senior Seminar for Sport Management (3)

Serves as a capstone course for Sport and Exercise Science Majors. Stresses reading current literature, discussing critical ideas, and formulating the relationship between Christian faith and the sport management profession.

# **Athletic Training**

Upon completion of all program requirements, students are eligible to take the Board of Certification (BOC) exam for certification. Once BOC certified, students are eligible to make application for Pennsylvania state certification.

Students beginning in Athletic Training go through a formal screening and application process for official admission to the major (curriculum and clinical program) after three semesters. The following criteria must be met:

- 1. Completion of 45 credits with a minimum GPA of 2.50 in the following required courses: ATED 102, 136, 137, 180, HPED 170, BIOL 185 and 186.
- 2. Documentation of 50-80 directed, observation clinical hours.
- 3. Submission of formal application, a letter of personal interest, an interview with faculty athletic trainers, submission of two formal recommendations, provide copies of the College Health Center's required entrance

health forms (physical exam, Health Hx and immunizations), a signature indicating the applicant understands/agrees to comply with all requirements, documentation of NATA membership, and documentation that the student meets all ATEP technical standards.

4. Students are admitted to the formal major (curriculum and clinical program) upon approval of the Faculty Athletic Trainer Selection Committee, and the Department of Health and Human Performance. Entry is limited on a space-available basis.

Students admitted into the Athletic Training Major must maintain the minimum standards required for admission to the program. Students falling below these levels will be reviewed by the Athletic Training Program Director and placed on probation or suspension or be dismissed from the program. Appeals to reviews may be made to the Chair of the Department of Health and Human Performance. Students must maintain a 2.50 cumulative GPA in the ATED courses to graduate with a degree in Athletic Training.

Upon official admission to the Athletic Training Major, students are required to meet the following requirements:

- 1. Maintain current certifications in CPR for the Professional Rescuer (American Red Cross), A.E.D. and Disease Transmission (B.B.P.) and provide certification card copies yearly.
- 2. Maintain current certification in Emergency Care/First Aid (American Red Cross or equivalent) and provide a current copy.
- 3. Attend one athletic training professional convention or educational meeting each year after being officially admitted into the major.

#### Athletic Training Major (82-83)

HPED 170 Concepts of Conditioning (1)

HPED 1xx Non-aquatic majors' skill course (1) or PHED non-major skills course (1)

One of the following

HPED 189 Emergency Water Safety (1)

HPED 192 Water Safety Instructor (2)

HPED 193 Lifeguarding/First Aid/CPR (2) or Lifeguarding Competency\*

ATED 102 Introduction to Athletic Training (1)

ATED 136 Prevention and Risk Management (3)

ATED 137 Prevention and Risk Management Lab (1)

ATED 180 First Aid and Emergency Care (3)

ATED 201 Applied Biophysics in Athletic Training (4)

ATED 220 Technology in Athletic Training (2)

ATED 231 Injury Assessment I (2)

ATED 232 Injury Assessment II (2)

ATED 246 Practicum in Athletic Training I (2)

ATED 330 Pharmacology in Athletic Training (2)

ATED 335 Therapeutic Exercise (4)

ATED 337 Therapeutic Modalities and Treatment Techniques (4)

ATED 346 Practicum in Athletic Training II (2)

ATED 348 Practicum in Athletic Training III (2) ATED 442 Administration in Athletic Training IV (3) ATED 446 Practicum in Athletic Training IV (3) ATED 447 Clinic in Athletic Training (2) ATED 449 Clinical in Athletic Training (1) ATED 480 Senior Seminar in Athletic Training (4) HPED 305 Contemporary Issues in Health (3) HPED 321 Kinesiology (3) HPED 322 Exercise Physiology (3) HPED 360 Exercise Testing and Prescription (3) **Required Supporting Courses:** BIOL 185, 186 Human Anatomy and Physiology I, II (4,4) CHEM 110 Chemical Science (3) NUTR 222 Nutrition Theory (3) PSYC 101 Introduction to Psychology (3) STAT 269 Introductory Statistics (3) \*Competency as defined by the American Red Cross Athletic Training Minor (19-20 credits) ATED 102 Introduction to AThletic Training (3) ATED 180 First Aid and Emergency Care (3) One of the following: ATED 136 Prevention and Risk Management (3) and ATED 137 Prevention and Risk Management Lab (1) HPED 236 Medical Aspects of Sport (3) ATED 231 Injury Assessment I (Lower Extremities) (2) ATED 232 Injury Assessment II (2) ATED 335 Therapeutic Exercise (4) ATED 337 Therapeutic Modalities and Treatment Techniques (4)

## ATED 102 Introduction to Athletic Training (1)

An overview of the athletic training profession, career opportunities, the history of NATA, and athletic training organizations and requirements.

## ATED 136 Prevention and Risk Management (3)

The study of injury and illness risk factors encountered by athletes and physically active in order to plan and implement prevention and risk management programs.

## ATED 137 Prevention and Risk Management Lab (1)

The application of injury and illness prevention and risk management psychomotor skills and competencies.

## ATED 180 First Aid and Emergency Care (3)

Study and practical application of appropriate first aid and emergency care for acute athletic injuries/illnesses. Class meets requirements for American Red Cross First Responder certification. Prerequisite: Athletic Training Major status.

## ATED 201 Applied Biophysics in Athletic Training (4)

The course content includes physics and biomechanics (an introduction to applicable concepts, principles, laws, etc.), including motion, Newton's Laws, energy/momentum, harmonic motion, waves, light and electricity, and specific biomechanical and biophysical applications related to tissues, joint motions, operation and design of rehabilitation/exercise equipment, protective equipment, and therapeutic modalities. Three lecture periods and three hours of laboratory work per week. Prerequisites: BIOL 185, 186.

## ATED 220 Technology in Athletic Training (2)

This course will prepare students to use computers and other forms of technology to organize information, to develop presentations, to design publishable quality materials, to assess students/clients, and to complete research. These objectives will be met through the use of graphics, spreadsheets, database management, graphics integrated with word processing, Internet web page construction, PDAs, and statistical analysis software.

## ATED 231 Injury Assessment I (2)

Study and practice of athlete and physically active injury/illness assessment techniques for the lower extremity and trunk. Includes 1.5 laboratory hours per week.

## ATED 232 Injury Assessment II (2)

Study and practice of athlete and physically active injury/illness assessment techniques for the upper extremity, head and spine. Includes 1.5 laboratory hours per week.

## ATED 246 Practicum in Athletic Training I (2)

The course requires 80-100 clinical hours specialized clinical education experience for second semester sophomore ATED majors under the supervision of on-campus certified athletic trainers. It includes classroom lecture, practical applications and physician observations. Prerequisite: Formal acceptance into the Athletic Training Major. Students may not acquire more than 20 hours per week.

## ATED 330 Pharmacology for Athletic Training (2)

Study of pharmacologic applications for injury/illness to athletes and the physically active. Includes indications, contraindications, interactions of medications, and relevant governing regulations.

## ATED 335 Therapeutic Exercise (4)

Study of theoretical and practical applications of exercise, rehabilitation, and reconditioning programs for the injured athlete. Three hours of lecture and three hours of lab per week.

## ATED 337 Therapeutic Modalities and Treatment Techniques (4)

Study of the theories, uses, and clinical applications for physical therapy modalities, agents, and treatment techniques. Three hours of lecture and three hours of lab per week.

## ATED 346 Practicum in Athletic Training II (2)

Specialized clinical education experience for first semester junior ATED majors. The course requires 80-120 clinical hours under the supervision of on-campus certified athletic trainers in the athletic training room and with an on-campus sport. It includes classroom lecture, practical application and physician observations. Students may not acquire more than 20 hours per week.

## ATED 348 Practicum in Athletic Training III (2)

Specialized clinical education experience for second semester junior ATED majors. The course requires 80-120 clinical hours under the supervision of on-campus certified athletic trainers in the athletic training room and with an on-campus sport. It includes classroom lecture, practical application and physician observations. Students may not acquire more than 20 hours per week.

## ATED 442 Organization and Administration of Athletic Training (3)

Principle and strategies for organization, supervision, and implementation of all the administrative components of traditional athletic training programs (i.e., high school, college, pro and non-traditional programs, sports medicine clinics, hospitals, industrial settings).

#### ATED 446 Practicum in Athletic Training IV (3)

Specialized clinical education experience for first semester senior ATED majors. The course requires 120-200 clinical hours in off campus athletic training in an affiliated college or high school setting. Students work under the direction of a certified athletic trainer to gain football-related clinical experience (mid-August until November). Class includes lecture, practical application and observation of physicians. Students may not acquire more than 20 hours per week.

#### ATED 447 Clinic in Athletic Training (2)

Specialized class offered in January term for senior ATED majors. Includes classroom lecture, seminar, and applications related to issues in clinical athletic training and sports medicine (i.e., care of the physically active, licensure, third-party reimbursement, employment, etc.)

## ATED 449 Clinical in Athletic Training (1)

60 hours practical experience (care of the physically active) in an off campus allied health facility, medical facility, or industrial setting. Learning activities include surgery observation(s), a patient case study, and special topic presentation. Students may not acquire more than 20 hours per week.

## ATED 480 Senior Seminar in Athletic Training (4)

A specialized senior capstone course that evaluates final mastery of athletic training competencies and proficiencies. Includes special medical topics, pathologyrelated topics, and preparation for the BOC certification examination. Three hours of lecture and three hours of lab per week.

## ATED 497, 498 Major Honors (3, 3)

Independent research program for students who have a strong academic record for a minimum of five previous semesters of college study. Overall GPA of 3.5 and department approval required for enrollment.

# **Adventure Education**

This major will prepare the individual for a career as an adventure educator. The student will gain the theory, knowledge, skills, and experience necessary to successfully plan, implement, administer, and supervise educational experiences in the outdoor setting. Adventure education programs focus on the interpersonal relationships and personal growth that can occur during outdoor adventure activities and include ropes course experiences, extended wilderness trips, day activities such as rock climbing, caving, and canoeing. Students have the option of spending a semester on a National Outdoor Leadership School (NOLS) course in the Pacific Northwest, Rocky Mountains, or desert southwest.

#### Adventure Education Major (61-66 credits)

ADED 137 Ropes and Initiatives (1) ADED 139 Wilderness Encounter (3) ADED 180 Wilderness First Responder Module (1) ADED 188 Ropes and Initiatives Facilitation (1) ADED 250 Introduction to Adventure Education (3) ADED 251 Wilderness Education Association Certification Course (3) ADED 301 Leadership, Facilitation, and Group Dynamics (3) ADED 351 Programming and Trip Design (3) ADED 352 Trip Implementation and Evaluation (3) ADED 411 Senior Seminar for Adventure Education/Therapeutic Recreation Majors (1) ADED 485 Internship (4–8) ATED 180 First Aid and Emergency Care (3) HPED 170 Concepts of Conditioning (1) One of the following: HPED 189 Emergency Water Safety (1) HPED 192 Water Safety Instructor (2) HPED 193 Lifeguarding/First Aid/CPR (2) Two of the following: ADED 114 Canoeing (1) ADED 181 Caving (1) ADED 182 Rock Climbing (1) One of the following: HPED 223 Personal Health Strategies (3) HPED 224 Community Health Strategies (3) HPED 322 Exercise Physiology (3) HPED 423 Principles of Administration (2) TREC 230 Foundations of Therapeutic Recreation (3) One of the following: BIOL 150 Biology I (4) CHEM 105 General Chemistry I (4) BIOL 185 Human Anatomy and Physiology I (4) BIOL 261 Ecology (3) EDUC 203 Educational Psychology (3) PSYC 209 Life Span Development (3)

The Adventure Education major does not lead to teacher certification.

## Adventure Education Minor (19-21 credits)

ADED 137 Ropes and Initiatives (1) ADED 139 Wilderness Encounter (3) ADED 180 Wilderness First Responder Module (1) ADED 188 Ropes and Initiatives Facilitation (1) ADED 250 Introduction to Adventure Education (3) ADED 301 Leadership, Facilitation, and Group Dynamics (3) ADED 351 Programming and Trip Design (3) ATED 180 First Aid and Emergency Care (3) *One of the following:* ADED 114 Canoeing (1) ADED 181 Caving (1) ADED 182 Rock Climbing (1) ADED 251 Wilderness Education Association Certification Course (3)

## ADED 180 Wilderness First Responder Module (1)

Supplemental study and practical application of appropriate emergency care in a wilderness environment. Course meets requirements for SOLO Wilderness First Responder. Taken concurrently with ATED 180.

## ADED 250 Introduction to Adventure Education (3)

An overview of recreation, leisure, play, and adventure education; examination of the historical background of the recreation movement while considering the philosophical, psychological, and sociological dimensions of leisure services and adventure education; objectives, trends, and professional opportunities presented.

## ADED 251 Wilderness Education Association Certification Course (3)

A 21-day field-based course designed to develop outdoor leadership skill. Judgment and decision-making skills are the primary focus of the nationally recognized 18point curriculum designed by the WEA and utilized in this course. Students may be eligible for certification as a WEA Outdoor Leader upon the successful completion of this course. Prerequisite: ADED 139.

## ADED 301 Leadership, Facilitation, and Group Dynamics (3)

Study of theories and principles of adventure leadership. Focus on framing, facilitating, and debriefing adventure education activities. Exploration of group dynamics in field-based adventure experiences. Prerequisite: ADED 137.

## ADED 351 Programming and Trip Design (3)

This course is designed to assist students in developing leadership and programming skills useful in a variety of leisure settings with emphasis on adventure education and therapeutic recreation. Theoretical principles will provide the basis for practical experience. An emphasis on servant leadership will permeate the course.

# ADED 352 Trip Implementation and Evaluation (3)

Practical experience requiring the student to implement a wilderness trip of their own design. The field portion of this course occurs during spring break when students lead a wilderness experience. Provides experience with all aspects of a wilderness trip including planning, marketing, logistics, implementation, budget, and evaluation. Prerequisite: ADED 351.

# ADED/TREC 411 Senior Seminar for Adventure Education and Therapeutic Recreation Majors (1)

Serves as a capstone course for adventure education and therapeutic recreation majors. Stresses reading current literature, discussing critical ideas, and formulating a relationship between Christian faith and the adventure education and therapeutic recreation majors.

#### ADED/TREC 485 Internship (4-8)

Experience in an organized adventure education setting with professional supervision. (Pass/Fail grade only.) Required of all adventure education majors. Limited to senior status.

#### ADED 491 Independent Study in Adventure Education (1-3)

Subject to College and Departmental guidelines.

#### ADED 497, 498 Major Honors (3, 3)

Independent research program for students who have a strong academic record for a minimum of five previous semesters at college study. Overall GPA of 3.5 and Department approval required for enrollment.

#### TREC 230 (3)

Survey concepts and practices of therapeutic recreation related to leisure concerns. Emphasis on the delivery of leisure services to special populations in a variety of settings.

# NURSING

# Carolyn L. Kreamer, Ph.D., R.N.

Chair, Department of Nursing

# Faculty

Professor C. Kreamer Associate Professor L. Zinsmeister Assistant Professor M. Solomon Assistant Professors (Clinical Track) M. Derr, P. Linstedt, D. Loop, H. Lutz, C. Stark Smith, W. Thuma-McDermond

# Majors

The Department of Nursing offers the following major: Nursing (B.S. in Nursing)

# Mission

The mission of the Department of Nursing at Messiah College is to prepare the beginning professional nurse by providing basic professional education from a Christian worldview and within the context of a liberal education.

# **Program Options**

The major is open to all individuals who are seeking their initial or beginning education in professional nursing (BSN). There is no option for individuals who have a license as a Registered Nurse to complete the BSN.

# **Program Goals**

- 1. Prepare beginning professional nurses to provide wholistic nursing care to persons and families.
- 2. Provide an environment in which students are encouraged to develop and integrate a dynamic Christian worldview into their personal and professional lives.
- 3. Provide an educational foundation for graduate study for students.
- 4. Provide an environment for faculty that encourages effective teaching, professional development, and service.

The philosophy of the Department of Nursing is consistent with the Mission, Foundational Values, and College-Wide Educational Objectives of Messiah College. It reflects commitment to liberal education, core competencies, core knowledge, role development, and professional values for the preparation of the professional nurse as set forth by the American Association of Colleges of Nursing. Concepts from the Neuman Systems Model are an integral part of the process of care in the clinical nursing courses.

Central to and informing both the nursing program and the curriculum is the Christian worldview with its affirmations about God, humanity, and culture as understood from Scripture and throughout history. The nursing faculty and students seek to integrate the practice of nursing with the belief that God is the source of all truth and the One who created persons to glorify God within their environment and society. The nursing faculty of Messiah College promote the integration of faith and learning in both the theoretical and clinical educational environments. The clinical nursing courses include experiences in college laboratories, in the community, and in acute and chronic care settings in the south central Pennsylvania area. Non-clinical nursing courses provide students with the conceptual basis to further develop the roles of provider of care, designer/manager/coordinator of care, and member of the profession. Critical thinking, communication, and ethical reflection are further developed as students collaborate with other professionals, supportive services, and community members.

# Admission to the Nursing Major

Students are directly admitted to the nursing program but must meet progression criteria to advance in the nursing program and into clinical courses. Clinical courses are taught in a specific, progressive sequence and students must meet progression criteria to enroll in clinical courses according to that sequence. Clinical course size is limited and enrollment in clinical courses is competitive according to academic performance and other personal criteria. The following are necessary to enroll in the nursing clinical courses:

1. The student must have an overall GPA of 2.50 and must have completed all stated prerequisites to NURS 210 and NURS 211 with an earned cumulative GPA of 2.50 in these prerequisite courses (or their equivalent):

BIOL 185 and BIOL 186 Anatomy and Physiology I and II SOCI 101 Principles of Sociology and/or PSYC 101 Introduction to Psychology and/or HDFS 101 Foundations of Marriage and Family PSYC 209 Life Span Development CHEM 110 Chemical Science

NURS 203 Historical and Conceptual Basis for Nursing

**Transfer students:** Preference for enrollment in clinical courses will be given to students who have taken the majority of their prerequisite courses at Messiah College. Decisions on admission of transfer students will be made on an individual basis.

- 2. Enrollment in clinical nursing courses is predicated upon a positive recommendation of each student applicant from the nursing faculty based on their professional judgement regarding the student's suitability for progression to clinical nursing courses.
- 3. The student must receive satisfactory criminal history background checks.
- 4. The student is expected to perform the same "essential functions of the employment position" as licensed registered nurses.
- 5. The student's moral and professional behavior must be consistent with the Pennsylvania Code of Professional and Vocational Standards, the National Student Nurses Association Code of Academic and Clinical Conduct and the Messiah College Department of Nursing's Document on Good Moral Character and Infractions. Failure to demonstrate compliance with any of the aforementioned codes may result in denial of ennrollment in clinical nursing courses.

#### 6. Transfer students:

Internal transfer students applying to the nursing major:

- a. The student must meet with the Chairperson of the Department of Nursing or a designated faculty member to review the Nursing Curriculum Plan of Study.
- b. The student must complete a change of major form through the Registrar's Office.
- c. Upon enrollment in the nursing major, internal transfer students must meet the admission criteria as previously stated in #1-#5.

External transfer students applying to the nursing major:

- a. Students must apply to the College by April 15 (fall admission) and October 15 (spring admission) and meet all College admission criteria prior to the nursing admissions review process.
- b. Students transferring from a college or university other than Messiah College must have an earned cumulative GPA of 3.0 to be admitted to Messiah College as a nursing major.
- c. Depending upon the student's type and number of transferred courses, it may take up to an additional four years to complete the nursing program.
- d. If the prerequisite courses have not been met through transfer credits and must be completed at Messiah College, an earned cumulative GPA of 2.50 in the aforementioned prerequisite courses is required upon enrollment in clinical courses. Preference for enrollment in clinical courses will be given to students who have taken the majority of their prerequisite courses at Messiah College. Decisions on admission of transfer students will be made on an individual basis.
- e. Transfer students applying to the nursing major are notified of acceptance upon completion of the application review process. Notification of acceptance into the nursing major will occur on an ongoing basis.
- f. Upon application to the nursing major, transfer students must meet the enroll-

ment in clinical courses criteria as previously stated in #1 - #5.

External transfer students who have completed any courses with a nursing designation at another college or university:

- a. Students must apply to the College by April 15 (fall admission) and October 15 (spring admission) and meet all College admission criteria prior to the nursing admissions review process.
- b. Students transferring from a college or university other than Messiah College must have an earned cumulative GPA of 3.0 to be admitted to Messiah College as a nursing major.
- c. Decisions regarding admission will be based on a review and evaluation of the student's transcripts and description of previous course content in nursing and prerequisite courses. In addition, the student will receive written acknowledgment that indicates which nursing course(s) may be bypassed, which nursing course the student will enter, and any prerequisite or co-requisite requirements that must be met prior to or with the student's first clinical nursing course at Messiah College.
- d. Students applying directly into the first clinical nursing course must have transcripts and descriptions of previous course content submitted to the Department of Nursing Admission and Progression Committee by November 15. Students interested in placement in NURS 210 and NURS 211 must have completed at least 42 college credits prior to enrollment. The following prerequisite courses or their equivalents must be included in these credits: BIOL 185 and BIOL 186 Anatomy and Physiology I and II SOCI 101 Principles of Sociology and/or PSYC 101 Introduction to Psychology and/or HDFS 101 Foundations of Marriage and Family PSYC 209 Life Span Development CHEM 110 Chemical Science NURS 203 Historical and Conceptual Basis for Nursing
- e. Admission decisions for junior and senior placement are made on an individual basis upon review of college course work and space available in clinical nursing courses. Students applying to the nursing major at junior or senior levels must have transcripts, and description of previous nursing course content submitted to the Department of Nursing Admission and Progression Committee by May 15 (fall admission) and November 15 (spring admission).

Applicants to the first clinical nursing course are given written notification of the admission decision in January.

Prior to enrollment in clinical nursing courses, all students are required to obtain and maintain the following:

- 1. A physical examination
- 2. Specified immunizations
- 3. Current CPR (Cardio-Pulmonary Resuscitation) certification from American Heart Association Health Care Provider course
- 4. Annual criminal history background checks
- 5. Health insurance coverage

Students must provide their own transportation for clinical experiences beginning

with the first clinical nursing courses.

Upon graduation, employment opportunities are varied. Graduates are prepared to be employed as entry-level professional nurses in acute care hospitals, long-term or extended-care nursing homes, community home health agencies, international Christian missions, and public health and government agencies.

The program is approved by the State Board of Nursing of the Commonwealth of Pennsylvania and accredited by the Commission on Collegiate Nursing Education through June 30, 2013.

#### Registered Nurse Licensure

Graduates are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN) and upon passing the examination may be a registered nurse in any state or territory in the United States.

It is the graduate's obligation and responsibility to take and pass the NCLEX-RN following the completion of the nursing program. The Department of Nursing administers a practice examination for the NCLEX-RN in the senior year of the program. Students are counseled regarding preparation for the NCLEX-RN on the basis of the results of the practice examination and their total academic performance. Students must ultimately take the responsibility for and make their own decisions regarding their methods of preparation for the NCLEX-RN.

The Professional Nursing Law for the Commonwealth of Pennsylvania (P.L. 409, No. 109, Section 6) states the following:

"The Board (State Board of Nursing) shall not issue a license or certificate to an applicant who has been convicted of a felonious act prohibited by the act of April 14, 1972 (P.L. 233, No. 64), known as "The Controlled Substance, Drug, Device and Cosmetic Act," or convicted of a felony relating to a controlled substance in a court of law of the United States or any other state, territory or country unless:

- 1. at least ten (10) years have elapsed from the date of the conviction;
- 2. the applicant satisfactorily demonstrates to the Board that he has made significant progress in personal rehabilitation since the conviction such that licensure of the applicant should not be expected to create a substantial risk of harm to the health and safety of patients or the public or a substantial risk of further criminal violations; and
- 3. the applicant otherwise satisfies the qualifications contained in or authorized by this act.

As used in this subsection the term "convicted" shall include a judgment, an admission of guilt or a plea of nolo contendere."

## **BSN Program**

#### Nursing Major (85 credits)

NURS 203 Historical and Conceptual Basis for Nursing (3) NURS 210 Health Assessment (3) NURS 211 Foundations of Nursing Practice (3) NURS 303 Pathopharmacology I (2) NURS 304 Pathopharmacology II (2) NURS 305 Nursing Research I (2) NURS 310 Nursing Care of the Childbearing Family (4) NURS 311 Nursing Care of Adults and Older Adults I (4) NURS 312 Nursing Care of Adults and Older Adults II (4) NURS 313 Nursing Care of Infants, Children, and Adolescents (4) NURS 405 Nursing Research II (2) NURS 410 Psychiatric/Mental Health Nursing (4) NURS 411 Nursing Care of the Critically Ill (4) NURS 412 Community Health Nursing (4) NURS 413 Leadership in Nursing (3) One of the following: NURS 493 Senior Practicum in Zambia (3) NURS 495 Senior Practicum (3) NURS 496 Senior Seminar **Required Supporting Courses** BIOL 185, 186 Human Anatomy and Physiology I, II (4, 4) BIOL 189 Genetics for Health Professions (3) BIOL 382 Microbiology for Health Professionals (4) CHEM 110 Chemical Science (4) NUTR 222 Nutrition Theory (3) One of the following: PSYC 101 Introduction to Psychology (3) SOCI 101 Principles of Sociology (3) HDFS 101 Foundations of Marriage and Family (3) PSYC 209 Life Span Development (3) STAT 269 Introductory Statistics (3)

# NURS 203 Historical and Conceptual Basis for Nursing (3)

This course is designed to introduce the student to concepts basic to professional nursing from a Christian worldview with emphasis on person, health, environment, and nursing. It introduces the philosophy and organizing framework for the study of nursing at Messiah College. Consideration is given to the theoretical basis of professional nursing practice and to select nursing theories, with emphasis on Neuman's Systems Theory. The historical development of nursing from its Christian roots is briefly presented and the roles of the professional nurse in health care are introduced: provider of care, designer/manager/coordinator of care, and member of the profession. (Offered Fall and Spring semesters.) 3 credit hours: 3 lecture hours/week.

# NURS 210 Health Assessment (3)

The focus of this course is to establish a foundation in conducting a thorough health assessment. Included is an introduction to using appropriate communication tech-

niques, obtaining a detailed health history, demonstrating physical assessment skills, and cultivating critical thinking. Physiological, psychological, sociocultural, developmental and spiritual variables are introduced as they relate to the nursing process. Essential assessment techniques include inspection, palpation, percussion and auscultation with an emphasis on expected findings and variations of those findings. Students practice comprehensive health history taking and physical assessment skills in laboratory sessions. (Offered Spring semester only.) 3 credit hours: 2 lecture hours/week, 3 laboratory hours/week. Prerequisites: BIOL 185, BIOL 186, CHEM 110, PSYC 101/SOCI 101/HDFS101, PSYC 209. Pre-or Corequisites: NURS 203, NURS 211, BIOL 189, NUTR 222.

# NURS 211 Foundations of Nursing Practice (3)

The focus of this clinical nursing course is on the beginning application of core competencies and core knowledge to create a foundation for nursing practice. Emphasis is on scientific rationale, critical thinking and competence in the implementation of skills within the nursing process. Intervention strategies focus on primary and secondary prevention. Physiological, psychological, sociocultural, developmental and spiritual variables are introduced as they relate to the nursing process. Clinical learning experiences occur in the simulated laboratory setting as well as various client care settings with emphasis on the provider of care role. (Offered Spring semester only.) 3 Credit Hours: 1 lecture hour/week, 6 clinical hours/week. Prerequisites: BIOL 185, BIOL 186, CHEM 110, PSYC 101/SOCI 101/HDFS101, PSYC 209. Pre-or Corequisite: NURS 203, NURS 210, BIOL 189, NUTR 222.

# NURS 303 Pathopharmacology I (2)

The focus of this non-clinical course is the presentation of major pathopharmacologic concepts related to the endocrine, gastrointestinal, genitourinary, musculoskeletal, and integumentary systems with incorporation of clinical drug therapy of major drug classification for presented systems. (Offered Fall Semester only.) 2 credit hours: 2 lecture hours/week. Prerequisites: NURS 203, NURS 210, NURS 211, BIOL 382. Corequisites: NURS 310, NURS 311.

# NURS 304 Pathopharmacology II (2)

The focus of this non-clinical course is the presentation of major pathopharmacologic concepts related to nervous, cardiovascular, and pulmonary systems with incorporation of clinical drug therapy of major drug classification for presented systems. (Offered Spring semester only.) 2 credit hours: 2 lecture hours/week. Prerequisites: NURS 310, NURS 311, NURS 303. Corequisites: NURS 305, NURS 312, NURS 313.

# NURS 305 Nursing Research I (2)

Introduces, defines and emphasizes methods of qualitative and quantitative systematic inquiry. Designed to help students become critical consumers of published research. (Offered Spring Semester only.) Two credit hours: 2 lecture hours/week. Pre-or Corequisite: STAT 269.

# NURS 310 Nursing Care of the Childbearing Family (4)

The focus of this clinical nursing course is the client system composed of the childbearing family during all phases of childbirth from conception through the postpartum period. Throughout this course, emphasis is placed on providing culturally competent care by assessing the wide range of characteristics and configurations of the childbearing family. Students continue to develop and build on concepts and skills presented in previous nursing courses. Physiological, psychological, sociocultural, developmental and spiritual variables are incorporated in the nursing process. Intervention strategies focus on primary, secondary, and tertiary prevention. Clinical learning experiences may occur in inpatient, outpatient, and community settings. Emphasis is on the provider of care role and introduction of the designer/manager/coordinator of care role. The length of this course is one-half of the fall semester. Four credit hours: 4 lecture hours/week, 12 clinical hours/week. Prerequisites: NURS 203, NURS 210, NURS 211, BIOL 382. Pre-or Corequisites: NURS 303, NURS 311.

# NURS 311 Nursing Care of Adults and Older Adults I (4)

The focus of this clinical nursing course is the client system composed of adults and older adults, in the context of families, experiencing stressors that threaten system stability. Physiological, psychological, sociocultural, developmental and spiritual variables are incorporated in the nursing process. Intervention strategies focus on primary and secondary prevention. Clinical learning experiences may occur in medical-surgical inpatient settings as well as various community settings and emphasize the provider of care role and introduce the designer/manager/coordinator of care role. The length of this course is one-half of the fall semester. Four credit hours: 4 lecture hours/week, 12 clinical hours/week. Prerequisites: NURS 203, NURS 210, NURS 211, BIOL 382. Corequisites: NURS 303, NURS 310.

# NURS 312 Nursing Care of Adults and Older Adults II (4)

This course is a continuation of Nursing Care of Adults and Older Adults I and is focused on the client system composed of adults and older adults, in the context of families, experiencing stressors that threaten system stability. Physiological, psychological, sociocultural, developmental and spiritual variables are incorporated in the nursing process. Intervention strategies focus on primary and secondary prevention. Clinical learning experiences may occur in medical-surgical inpatient settings as well as various community settings and emphasize the provider of care role and introduce the designer/manager/coordinator of care role. The length of this course is one-half of the spring semester. Four credit hours: 4 lecture hours/week, 12 clinical hours/week. Prerequisites: NURS 310, NURS 311, NURS 303. Corequisites: NURS 304, NURS 313

# NURS 313 Nursing Care of Infants, Children and Adolescents (4)

The focus of this clinical nursing course is the client system composed of infants, children and adolescents in the context of family. Throughout the course emphasis is placed on providing care for children of various ages who have attained system stability or wellness or who are experiencing stressors affecting normal lines of defense. Physiological, psychological, sociocultural, developmental and spiritual variables are incorporated in the nursing process. Intervention strategies focus on primary and secondary prevention with some tertiary intervention. Clinical experiences emphasize the provider of care role and introduce the designer/manager/coordinator of care

role. Clinical learning experiences may occur in pediatric inpatient, outpatient, and community settings. The length of this course is one-half of the spring semester. Four credit hours: 4 lecture hours/week, 12 clinical hours/week. Prerequisites: NURS 310, NURS 311, NURS 303. Corequisites: NURS 304, NURS 312.

# NURS 394 Advances in Nursing I (3)

Additional nursing principles of special interest to the instructor and/or students. Lecture hours and clinical laboratory to be determined. Prerequisites: NURS 203, NURS 210, NURS 211.

# NURS 405 Nursing Research II (2)

Reviews, clarifies, and extends nursing research concepts presented in NURS 305 Emphasizes the methods and use of evidence-based practice in the provider and designer/manager/coordinator of care roles. (Offered Fall Semester only.) Two credit hours: 2 lecture hours/week. Prerequisite: NURS 305.

# NURS 410 Psychiatric/Mental Health Nursing (4)

The focus of this clinical nursing course is the client system composed of adults and adolescents in the context of family. Concepts are refined for application with clients who are mentally ill or are experiencing other difficulties in living. Theory pertains to the various disorders or difficulties in living. Throughout the course emphasis is placed on providing care for persons who have attained system stability or wellness or who are experiencing stressors affecting normal lines of defense. Physiological, psychological, sociocultural, developmental and spiritual variables are incorporated in the nursing process. Intervention strategies focus on primary and secondary prevention with some tertiary intervention. Clinical experiences emphasize the provider of care role and introduce the designer/manager/coordinator of care role. Clinical learning experiences may occur in the psychiatric inpatient, outpatient, and community settings. The length of this course is one-half of the fall semester. Four credit hours: 4 lecture hours/week, 12 clinical hours/week. Prerequisites: NURS 304, NURS 305, NURS 312, NURS 313.

# NURS 411 Nursing Care of the Critically Ill (4)

The focus of this clinical nursing course is the client system experiencing crisis composed of persons across the lifespan in the context of family. Throughout this course increasingly complex health problems are examined. Emphasis is on identification of client system strengths and stressors affecting lines of resistance. Physiological, psychological, sociocultural, developmental and spiritual variables are incorporated in the nursing process. The concept of secondary prevention is expanded in this course to include the provider of care role in acute/critical care settings. The concept of tertiary prevention is expanded as it relates to the designer/manager/coordinator of care role in the acute and critical health care environment. Clinical learning experiences occur in adult and pediatric critical care settings and in emergency medical services. The length of this course is one-half of the fall semester. Four credit hours: 4 lecture hours/week, 12 clinical hours/week. Prerequisites: NURS 304, NURS 305, NURS 312, NURS 313.

# NURS 412 Community Health Nursing (4)

The focus of this clinical nursing course is client systems in the community experiencing stressors that threaten system stability. Physiological, psychological, sociocultural, developmental and spiritual variables in the community setting are incorporated in the nursing process. Intervention strategies focus on primary, secondary and tertiary prevention, with an additional emphasis on health promotion and risk reduction following Healthy People 2010 guidelines. Clinical learning experiences focus on service-learning with vulnerable populations, health care disparities, and social justice issues, including health care systems and policy development. A discussion of nursing responsibilities in the care of the community in crisis is also included. Community and public health nursing roles emphasized are: provider of care, designer/manager/coordinator of care, and member of the profession. The length of this course is offered spring semester. Four credit hours: 4 lecture hours/week, 12 clinical hours/week. Prerequisites: NURS 405, NURS 410, NURS 411.

# NURS 413 Leadership in Nursing (3)

The focus of this course is development of the leadership for entry level nursing practice with emphasis on the designer/manager/coordinator of care role. The concepts of primary, secondary, and tertiary prevention are examined in relation to leadership and management principles applied in health care organizations and systems. Critical skills such as communication, collaboration, negotiation, delegation, coordination, evaluation of interdisciplinary work, and the application of outcome-based practice models are cultivated. (Offered Spring semester only.) Three credit hours: 1 lecture hour per week, 6 clinical hours per week. Prerequisites: NURS 405, NURS 410, NURS 411, NURS 495 or NURS 493.

# NURS 491 Independent Study (1-3)

Independent study under the supervision of an instructor whose approval must precede the student's enrollment.

# NURS 493, Senior Practicum in Zambia (3)

The focus of this course is upon the development of clinical decision-making skills and refinement of clinical coordinating behaviors with groups of clients in an international setting, specifically at Macha Mission Hospital, Zambia. The course will provide opportunities for students to synthesize theoretical knowledge, clinical skills, nursing process, and professional role behaviors with an emphasis on global health issues and cross-cultural understanding of cultural diversity. The clinical experience will focus on the care of client groups in a rural African community greatly impacted by the Sub-Saharan AIDS pandemic and two other diseases of poverty targeted by the Global Fund: malaria and tuberculosis. Clinical nurse preceptors will be Messiah nursing faculty and Zambian nurses, if qualified, and as determined by Macha Hospital's Sister Tutor and Medical Director. Enrollment recruitment will focus on students who have career aspirations for international nursing or mission nursing. This course is an alternative option to meet the nursing program requirements for Senior Practicum. Prerequisites: NURS 405, NURS 410, NURS 411.

# NURS 494 Advances in Nursing II (3)

Advanced nursing principles of special interest to the instructor and/or students. Lecture hours and clinical laboratory hours to be determined. Prerequisites: NURS 303, NURS 304, NURS 305, NURS 310, NURS 311, NURS 312, NURS 313.

# NURS 495 Senior Practicum (3)

The focus of this clinical course is development of clinical decision-making skills and refinement of clinical coordinating behaviors with groups of clients. The course will provide opportunities for students to synthesize theoretical knowledge, clinical skills, nursing process, and professional role behaviors in clinical laboratories and through peer seminars. The clinical experience will focus on the care of groups of clients in a variety of settings in collaboration with clinical nurse preceptors. (Offered Spring semester and J-Term only.) Three credit hours: 1 lecture hour per week, 90 hours total clinical laboratory hours flexibly scheduled in collaboration with selected, approved, on-site clinical nurse preceptors. Prerequisites: NURS 405, NURS 410, NURS 411.

# NURS 496 Senior Seminar in Nursing (3)

Emphasizes roles of designer/manager/coordinator of care and member of profession by involving students in issues of healthcare problems/policy and healthcare financing. Focuses on the transition into the graduate role. (Offered Spring semester only.) Three credit hours: 3 lecture hours per week. Prerequisites: NURS 405, NURS 410, NURS 411.

# NUTRITION AND DIETETICS

# Kathryn A. Witt, Ph.D., R.D., L.D.N.

Chair, Department of Nutrition and Dietetics

# Faculty

Associate Professor K. Witt Assistant Professor

A. Binkoski

# **Majors and Minors**

The Department of Nutrition and Dietetics offers the following major: Nutrition and Dietetics (B.S. in Dietetics)

The Department of Nutrition and Dietetics offers the following minor: Food and Nutrition

# **Program Options**

The Department of Nutrition and Dietetics is committed to providing students with a solid foundation in nutrition science and with the basic skills needed to apply nutrition knowledge in the care of individuals and communities. Many work environments, particularly those in the health care field, require that an individual be credentialed as a Registered Dietitian (R.D.) to practice nutrition care. To earn the R.D. credential an individual must complete a three-step process: 1) Complete a minimum of a bachelor's degree at a U.S. regionally accredited college or university and course work approved by the Commission on Accreditation for Dietetics Education (CADE) of the American Dietetic Association (ADA). 2) Complete a CADE-accredited dietetic internship. Typically these programs are offered by health care facilities, community agencies, foodservice corporations, or educational institutions and are 6 to 12 months in length. 3) Pass a national examination administered by the Commission on Dietetic Registration (CDR). (Once the R.D. credential has been earned, continuing professional educational requirements must be met to maintain it.) For additional information on dietetics education contact CADE at: American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, Illinois 60606-6995, Phone: 312-899-0040 Ext. 5400, or www.eatright.org.

The Messiah College Nutrition and Dietetics major curriculum is approved by CADE as a Didactic Program in Dietetics and enables students to complete the first step towards becoming a Registered Dietician Graduates of the Messiah College Nutrition and Dietetics program who wish to become Registered Dieticians apply to a CADE-accredited dietetic internship (Step 2). After successful completion of a supervised practice program they are eligible to take the national registration exam (Step 3).

Graduates who do not begin CADE approved supervised practice programs after graduation are employable as dietetic technicians in health care institutions and businesses, nutrition counselors in community nutrition programs, and food service managers in health care institutions, schools, and industry. Additionally, graduates may choose to continue their education by applying to graduate school in areas such as nutrition science, nutrition education, or international nutrition.

The Department of Nutrition and Dietetics also offers a verification program for individuals who already have at least a bachelor's degree from an accredited institution but have not taken all of the course work required by CADE. Individuals seeking to obtain verification of the CADE Didactic Program in Dietetics academic requirements complete an individualized plan of study based on evaluation of their academic transcripts, including at least 18 credits in Food and Nutrition courses at Messiah College. Individuals who complete the verification program requirements are eligible to apply for CADE-accredited supervised practice programs.

The Foods and Nutrition minor does not fully satisfy the American Dietetic Association academic requirements. The minor is designed to enhance the food and nutrition knowledge of students majoring in other health or education related fields.

# **Nutrition and Dietetics**

Dietetics is a profession concerned with the science and art of human nutritional care. Students study a wide variety of subjects, including anatomy and physiology, chemistry and biochemistry, food science and technology, nutrition science, management and business, education and counseling, and medical nutrition. In addition to course work, students are strongly encouraged to obtain work or volunteer experience in nutrition and dietetics. Students not able to obtain these experiences or who wish to explore a particular area of nutrition and dietetics practice may choose to complete a practicum in nutrition and dietetics. In the past, students have completed practica in hospitals, nursing homes, and community health agencies. Students also have the opportunity to participate in nutrition related research projects. Recent projects have been related to nutrition assessment, sports nutrition, and the health habits of college students.

# Nutrition and Dietetics Major (70 credits)

BIOL 185, 186 Human Anatomy and Physiology I, II (4, 4) BIOL 381 Microbiology or BIOL 382 Microbiology for Health Professions (4) CHEM 105, 106 General Chemistry I, II (4, 4) CHEM 204 Introduction to Organic Chemistry (4) HRM 120 Principles of Management (3) NUTR 099 Opportunities in Nutrition and Dietetics (1) NUTR 121 Food and Food Science (3) NUTR 222 Nutrition Theory (3) NUTR 322 Nutrition Through the Life Cycle (3) NUTR 331 Advanced Food Science and Technology (3) NUTR 341 Food Service Operations (3) NUTR 342 Food and Nutrition Services Management (3) NUTR 352 Community Nutrition (3) NUTR 410 Nutrition Counseling Experience (1) NUTR 411, 412 Medical Nutrition Therapy I, II (3, 3) NUTR 425 Advanced Nutrition I (4) NUTR 426 Advanced Nutrition II (3) NUTR 493 Senior Seminar in Nutrition and Dietetics (1) PSYC 111 Introduction to Psychology (3) STAT 269 Introductory Statistics (3)

# Foods and Nutrition Minor (18 credits)

CHEM 105 General Chemistry I or CHEM 110 Chemical Science (4) NUTR 121 Food and Food Science (3) NUTR 222 Nutrition Theory (3) NUTR 322 Nutrition through the Life Cycle (3)

Plus 9 credits selected from the following:

NUTR 331 Advanced Food Science and Technology (3) NUTR 341 Food Service Operations (3) NUTR 342 Food and Nutrition Services Management (3) NUTR 352 Community Nutrition (3) NUTR 425 Advanced Nutrition I (4) NUTR 426 Advanced Nutrition II (3)

# NUTR 099 (formerly FSN 102) Opportunities in Nutrition and Dietetics (1)

An introduction to the nutrition and dietetics including educational requirements and career opportunities. Students will explore the history of nutrition and dietetics and areas of modern practice. Skill and competencies necessary for success in theses areas will be identified. Opportunities for interaction with dietetics professionals will be offered. (Offered Fall Semester only.)

# NUTR 110 (formerly FSN 110) Science and Nutrition (3)

A survey of basic nutrition science, including nutrient function, methods of obtaining and evaluating data, and practical application. Two lectures and three hours of laboratory per week. Not appropriate for students who have taken or are planning to take NUTR 222. Meets General Education Laboratory Science requirement.

# NUTR 121 (formerly FSN 121) Food and Food Science (3)

Basic examination of the principles of food science, with an emphasis on techniques which illustrate those principles. Two lectures and three hours of laboratory per

week. Prerequisite: CHEM 105 or CHEM 110 or Instructor's consent.

# NUTR 222 (formerly FSN 222) Nutrition Theory (3)

Introduction to the science of nutrition, to the nutrient needs of the body and the foods that meet these needs. Tools and techniques for assessing personal nutrition status are reviewed. Prerequisite: CHEM 105 or CHEM 110.

# NUTR 322 (formerly FSN 322) Nutrition through the Life Cycle (3)

Examination of the nutritional requirements of pregnancy, growth, adulthood, and aging. Includes nutritional assessment and factors that affect food habits at various ages. Prerequisite: NUTR 222.

# NUTR 331 (formerly FSN 331) Advanced Food Science and Technology (3)

Examination of the U.S. food supply with emphasis on food product development and marketing, food composition, ingredient functions, food processing and preservation, genetically modified foods, and laws and regulations that control and protect the food supply. Prerequisites: NUTR 121 and NUTR 222. (Alternate years, offered Fall 2008.)

# NUTR 341 (formerly FSN 342 and FSN 344) Food Service Operations (3)

Examination of the standards, principles and techniques required to produce food in quantity including food purchasing, facility layout, equipment selection, quality control, service and distribution. Two lectures and three hours of laboratory per week. An off-campus observation assignment is required prior to the beginning of this course. Prequisites: HRM 120, NUTR 121. (Alternate years, offered Fall 2008.)

# NUTR 342 (formerly FSN 341) Food and Nutrition Services Management (3)

Introduction to the management concepts, skills and tools required in modern nutrition and dietetics practice. Subjects include management theories and functions, leadership, human resources management, financial management, marketing, and quality improvement. Emphasis is placed on the application of management concepts in food service settings. Two lectures and three hours of laboratory per week. Prerequisites: NUTR 341. (Alternate years, offered Spring 2009.)

# NUTR 352 (formerly FSN /NUTR 319) Community Nutrition (3)

Study of the methods used to provide nutrition care to communities, with consideration given to community nutrition problems, current services, communicating with the public, grant writing, and program planning and evaluation. Prerequisite: NUTR 322.

# NUTR 391 (formerly NUTR/FSN 427) Nutrition and Dietetics Practicum (1-3)

Supervised experience in a facility employing foods and nutrition professionals (e.g., hospital, nursing home, food business, community agency, etc.). Open to junior and senior dietetics majors. Prerequisites: NUTR 222 and Instructor's consent.

# NUTR 393 (formerly FSN 393) Research Methods (1)

Offered during the fall and spring semester for third-year students. The course will focus on research methodology, including advanced literature searching, experimen-

tal design, and presentation of research data. Students working under the guidance of a faculty mentor will select a research topic, conduct a literature review, and write a research proposal. One lecture per week. Prerequisites: Junior standing and 3.0 GPA or departmental consent. Cross listed with BIOL/CHEM 393.

#### NUTR 410 Nutrition Counseling Experience (1)

Examination and application of current techniques for nutrition counseling. Three hours of laboratory per week. Prerequisites: NUTR 121, NUTR 322, BIOL 185,186, STAT 269 and CHEM 204. (Alternate years, offered Fall 2007.)

# NUTR 411 (formerly FSN 411) Medical Nutrition Therapy I (3)

Study and application of the principles of the nutrition care process which includes nutritional assessment, design, and implementation of nutrition care strategies and evaluation of client response and progress. Students study the most current approaches and rationale relative to nutrition therapy in a variety of disease and physiological stress conditions. Enteral and parenteral nutrition addressed. Three lectures per week. Prerequisites: NUTR 121, NUTR 322, BIOL 185,186, STAT 269 and CHEM 204. (Alternate years, offered Fall 2007.)

# NUTR 412 (formerly FSN 412) Medical Nutrition Therapy II (3)

Continuation of the study and application of the principles of the nutrition care process which includes nutritional assessment, design, and implementation of nutrition care strategies and evaluation of client response and progress. Students study the most current approaches and rationale relative to nutrition therapy in a variety of disease and physiological stress conditions. Enteral and parenteral nutrition addressed. Two lectures and three hours of laboratory per week. An off-campus observation assignment is required prior to the beginning of NUTR 412. Prerequisite: NUTR 411.

# NUTR 422 (formerly FSN 422) Senior Research (1-3)

Offered during the fall and spring semester for fourth year students. Students carry out research projects proposed in NUTR 393 or NUTR 491. Faculty and students will meet regularly during the semester for progress updates and to discuss other topics as needed. The project will typically culminate with the submission of a written research report and an oral presentation that is advertised campus wide. Prerequisites: Senior year standing, approval of the student's academic adviser and department chair, and completion of NUTR 393 Research Methods or 1 credit of NUTR 491. Maximum of 3 credits per semester with the total not exceeding 5 credits.

# NUTR 425 Advanced Nutrition I (4)

Study of the biochemistry of nutrient metabolism and function, including nutrigenomics. Emphasis on current research including methodology, techniques, and interpretation. Three hours of lecture and three hours of laboratory per week. Prerequisites: NUTR 322, STAT 269, and CHEM 204 or CHEM 309 and 310. (Alternate years, offered Fall 2007.)

# NUTR 426 Advanced Nutrition II (3)

Continued study of nutrient metabolism and function. Students will complete a

research project including a written research report and an oral presentation. Two hours of lecture and three hours of laboratory per week. Prerequisites: NUTR 425. (Alternate years, offered Spring 2008.)

# NUTR 491 (formerly FSN 491) Independent Study (1-3)

Junior and senior students with at least a B average may select a problem for independent investigation in a special area of foods and nutrition.

# NUTR 493 (formerly FSN 493) Senior Seminar in Nutrition and Dietetics (1)

Topics addressed include Christian perspectives, ethical concerns and social responsibility issues relating to nutrition and dietetics practice. Students explore career options and prepare for postgraduate education or employment. Prerequisite: Senior nutrition and dietetics major.

# NUTR 497, 498 (formerly FSN 497, 498) Major Honors (2-3, 2-3)

Completion of a research or service learning project for students who have a strong academic record for a minimum of five previous semesters of college study. Overall GPA of 3.5, Major GPA of 3.8, NUTR 393 or NUTR 491, and departmental approval required for enrollment.

# PRE-PROFESSIONAL HEALTH PROGRAMS

#### **Pre-Medical Programs**

• Allopathic and osteopathic medicine, dentistry, veterinary medicine

#### Pre-Allied Health Programs

 Chiropracty, forensic science, occupational therapy, optometry, pharmacy, physician's assistant, podiatry

**Pre-Physical Therapy Programs** 

# **Pre-Medical and Pre-Allied Health Programs**

Messiah College has an excellent record of preparing students for lives of service and leadership in the healthcare professions. Students planning to enter medicine (allopathic and osteopathic medicine, dentistry, or veterinary medicine) or an allied healthcare profession (chiropracty, forensic science, occupational therapy, optometry, pharmacy, physician's assistant, podiatry, etc.) often choose to major in biology, biochemistry, or chemistry. However, with careful course planning, some students choose to major in other disciplines and concurrently complete the requisite science courses. Premed/allied health students are served by both a faculty academic advisor and a health professions advisor. Faculty academic advisors help students plan their course work to meet requirements in general education and their major discipline. In a complementary manner, the Coordinator of Pre-Health Professions Advising works closely with students on issues related to their successful application to medical/allied health school.

Students typically begin their association with the Coordinator of Pre-Health Professions Advising during their first semester at Messiah College. They meet regularly with the Coordinator through graduation, and in some cases even after graduation, to carefully plan their curricular and cocurricular activities and to prepare a professional school application portfolio. The Coordinator of Pre-Health Professions Advising, the Pre-Health Professions Advising Committee, the Medical Awareness Society (pre-med club), and many other campus support programs offer assistance and enrichment in all aspects of the medical/allied health school preparation and application process. From academic support for achieving and maintaining a competitive GPA, to engaging in a wide variety of cocurricular and medically-related experiences and research programs, to successfully preparing for required admission tests, Messiah College offers an integrated experience that has proven successful in helping our students gain admission to the medical program of their choice.

# **Pre-Physical Therapy Program**

Physical therapists must complete an accredited postbaccalaureate master's degree or doctoral degree graduate program to be eligible for licensing and to practice their profession. Students pursuing a career in physical therapy have several options available to them at Messiah College to prepare and compete for admission to such programs. Students may enroll in the pre-physical therapy concentration within the Health and Exercise Science major offered in the Department of Health and Human Performance for a curriculum that is tailored to meet the admission requirements of most graduate physical therapy programs. Alternatively, students may major in another discipline, such as biology or psychology, and work with their academic advisor and pre-health professions advisor to carefully choreograph their schedule to ensure that they satisfy their major and professional school requirements. Admission to physical therapy graduate programs is competitive, and Messiah College students have been very successful in gaining admission to top-rated programs including Arcadia University, where a number of our graduates attend through our articulation agreement with Arcadia's DPT program.

# School of the Humanities

# Joseph P. Huffman, Ph.D.

Dean

# Faculty

Professor S. Caroselli Senior Lecturer

K. Quimby

- Department of Biblical and Religious Studies
- Department of Communication
- Department of English
- Department of History
- Department of Modern Languages
- Department of Philosophy
- Department of Politics
- Interdisciplinary Humanities Major

# **Identity and Mission Statement**

The School of the Humanities is an interdisciplinary intellectual community which analyzes and interprets the creation and transmission of human culture, both ancient and modern. We emphasize critical and creative thinking, communication skills, and the development of Christian perspectives as we engage the pressing aesthetic, philosophical, political, religious, and social issues of our day. Our mission is to educate students and the larger College community by cultivating an informed Christian faith, a maturing cultural literacy, and portable intellectual skills. We develop lifetime learners who demonstrate global awareness, civic engagement, servant leadership, and reconciliation in church and society.

The School of the Humanities consists of seven academic departments, the Writing

Center, the Beatrix Howe Language Center, and the Center for Public Humanities. Fifteen majors and 37 minors/concentrations advance a wide range of educational aspirations among our humanities students. The Center for Public Humanities enriches the School, the College, and the wider regional community by bringing faculty and students together with other educational, cultural, and civic organizations (e.g., schools, libraries, museums, regional societies and state councils, colleges and universities) to pursue collaborative ventures in humanities-based teaching, learning, and public events.

# BIBLICAL AND RELIGIOUS STUDIES

# David Weaver-Zercher, Ph.D.

Chair, Department of Biblical and Religious Studies

# Faculty

Professors
G. Brubacher, M. Cosby, D. Jacobsen, J. McDermond, J. Stanley, S. Stanley, J. Yeatts
Associate Professors
G. Pickens, E. Seibert, D. Weaver-Zercher
Assistant Professors
S. Baker, L. Finger, S. Gallaher
Senior Lecturer
B. Smith

*Lecturer* R. Crane

# Mission

The Department of Biblical and Religious Studies is a community of students and Christian scholars who specialize in biblical studies, religious history, theology, world religions, and Christian ministry. Our goal is to model and encourage informed thinking about Christian faith and practice and the role of religion in the world. We foster spiritual and theological reflection that enables individuals to develop and deepen Christian commitment, interpret matters of faith intelligently, and minister to others with wisdom and compassion.

# **Majors and Minors**

The Department of Biblical and Religious Studies offers the following majors: Biblical and Religious Studies (B.A.) Concentrations: Bible Religion Theology World Christianity Christian Ministries (B.A.) Concentrations: Congregational Ministries Cross-Cultural Ministries Youth Ministries

The Department of Biblical and Religious Studies offers the following minors: African-American Religion and Culture Bible Brethren in Christ Studies Christian Ministries Global Christian Studies Cross-Cultural Ministries Religion

# **Biblical and Religious Studies Major**

The Biblical and Religious Studies major equips students to interpret biblical texts responsibly and to reflect on religious beliefs and practices. By acquiring tools for biblical interpretation, theological reflection, and religious understanding, students gain insight into their own faith as well as resources for becoming leaders, servants, and reconcilers in church and society. Students choose a concentration in one of four areas: Bible, Religion, Theology, or World Christianity. With its emphasis on the development of reading, writing, and critical-thinking skills, the major prepares students for entry-level positions in a variety of fields, as well as seminary or graduate school. In addition to serving students who pursue this major as their primary field, the Biblical and Religious Studies major serves as an excellent double major for students in other departments who wish to be responsible members of church and society.

The **Bible concentration** focuses on the biblical text, examining the Bible's contents and backgrounds while introducing students to various methods of interpretation. Students in this concentration are encouraged to take Greek and/or Hebrew to meet their General Education language requirement.

The **Religion concentration** examines a variety of world religions and the ways scholars study them. Student opting for this concentration are encouraged to spend a semester at Messiah's Philadelphia campus, taking several religion courses at Temple University.

The **Theology concentration** emphasizes careful reflection on Christian belief and practice, examining the commonalities and differences that have been evident within the life of the church past and present.

The World Christianity concentration introduces students to the dynamics of

Christianity as a global faith. Representative forms of Christianity as it exists in the world and Christianity as a missionary religion for the world will be analyzed. Students choosing this concentration are encouraged to spend a semester in a cross-cultural setting.

#### Biblical and Religious Studies Major - Core Curriculum (24 credits)

BIBL 202 Encountering the Bible (Majors) (3) BIBL 233 Old Testament Literature (Majors) (3) BIBL 237 New Testament Literature (Majors) (3) THEO 205 Introduction to Christian Theology (3) THEO 305 Christian Theology of Religious Pluralism (3) RELI 206 Religions of the World (Majors) (3) RELI 344 History of Christianity (3) THEO 487 Biblical and Religious Studies Seminar (3) One of the following concentrations: (1) Bible (15 credits) One BIBL course in the 250-293 range (3) BIBL 307 Biblical Backgrounds (3) One of the following: BIBL 312 Selected Old Testament Books (3) BIBL 313 Selected New Testament Books (3) BIBL 381 Biblical Interpretation and Criticism (3) BIBL 382 Topics in Biblical Theology (3) (2) Religion (15 credits): Two of the following: RELI 228 Judaism (3) RELI 229 Islam (3) RELI 333 Religions of India (3) RELI 334 Religions of China and Japan (3) One of the following: RELI 321 Christianity in Latin America (3) RELI 329 Christianity in Africa (3) RELI 332 Christianity in Asia (3) One of the following: RELI 340 New Religious Movements (3) RELI 355 Religion in the United States (3) SOCI 341 Religion and Society (3) RELI 366 Topics in Religion (3) (3)Theology (15 credits) One of the following: RELI 321 Christianity in Latin America (3) RELI 329 Christianity in Africa (3) RELI 332 Christianity in Asia (3) THEO 340 Modern Theology (3) THEO 345 Contemporary Theology (3) THEO 354 Women Theologians in the United States (3) THEO 366 Topics in Theology (3) (4) World Christianity (15 credits) CHRM 220 Introduction to Christian Mission (3)

RELI 321 Christianity in Latin America (3) RELI 329 Christianity in Africa (3) RELI 332 Christianity in Asia (3) RELI 366 Topics in Religion (3)

#### Bible Minor (18 credits)

BIBL 231 Old Testament Literature (3) BIBL 235 New Testament Literature (3) Six credits of 300-level BIBL courses Six additional credits of BIBL courses, excluding BIBL 201, 202, 203, or 204

#### Religion Minor (18 credits)

One 200-level Christian Beliefs course (3)
THEO 487 Biblical and Religious Studies Seminar (3)
Four (4) additional RELI or THEO courses selected in consultation with minor advisor (12)

#### African-American Religion and Culture Minor (18 credits)

ENGL 356 African-American Literature (3) HIST 352 African-American History since 1865 (3) THEO 207 African-American Theology (3) THEO 487 Seminar in Theology and Religion (3) Six hours of approved electives. Possible courses include: RELI 329 Christianity in Africa (3) EDUC 246 Socio-Cultural Perspectives on Education (3) Approved Temple University course on African-American culture (3)

#### Brethren in Christ Studies Minor (21 credits)

BIBL 291 Issues of War, Peace and Social Justice in Biblical Texts (3)
RELI 491 or THEO 491 Independent Study (3)
THEO 209 Anabaptist Theology (3)
THEO 211 Brethren in Christ Life and Thought (3)
THEO 217 Wesleyan/Holiness Theology (3)
THEO 238 Christian Theology I: God and Humanity (3)
THEO 239 Christian Theology II: The Nature and Mission of the Church (3)

#### Global Christian Studies Minor (21 credits)

THEO 223 Global Christian Theology (3)
THEO 238 Christian Theology I: God and Humanity (3)
THEO 239 Christian Theology II: The Nature and Mission of the Church (3)
IDCC 260 Cross-Cultural Studies (or some other form of study abroad) approved by minor advisor (3) *Three of the following courses:*RELI 321 Christianity in Latin America (3)
RELI 329 Christianity in Africa (3)
RELI 332 Christianity in Asia (3)
RELI 355 Religion in the United States (3)

# **Christian Ministries Major**

The major in Christian Ministries primarily prepares women and men for entry- level positions in congregational and para-church ministries. This program can also serve as a foundation for further education in a seminary setting. With its three concentrations, the major incorporates practical elements, but it also requires the student to acquire competency in biblical and theological reflection, which serve as the theoretical foundations for this course of study. Critical thinking and oral and written communication skills are also stressed.

The **Congregational Ministries concentration** provides the student with a broad course of study focusing on the diverse aspects of congregation-based work.

The **Cross-Cultural Ministries concentration** provides the student with skills and perspectives for intercultural service opportunities and partnerships with congregations world-wide and para-church mission organizations.

The **Youth Ministries concentration** provides the student with general orientation to ministry as well as focused study in the area of youth work.

#### Christian Ministries Major - Core Curriculum (34 credits)

BIBL 202 Encountering the Bible (Majors) (3) BIBL 233 Old Testament Literature for Majors(3) BIBL 237 New Testament Literature for Majors(3) One of the following: BIBL 312 Selected Old Testament Books (3) BIBL 313 Selected New Testament Books (3) BIBL 382 Topics in Biblical Theology (3) CHRM 099 Opportunities in Christian Ministries (1) CHRM 242 Christian Spirituality (3) CHRM 338 Teaching for Christian Ministries (3) CHRM 493 Christian Ministries Seminar (3) RELI 344 History of Christianity (3) THEO 238 Christian Theology I: God and Humanity (3) THEO 239 Christian Theology II: The Nature and Mission of the Church (3) THEO 338 Christian Theology III: Peace, Justice, and Reconciliation (3) One of the following concentrations: 1) Congregational Ministries (29 credits) CHRM 210 Theology of Ministry (3) CHRM 225 Field Experience in Christian Ministries (2) CHRM 243 Evangelism and Discipleship (3) CHRM 323 Worship (3) CHRM 330 Organization and Leadership for Ministry (3) CHRM 342 Pastoral Counseling (3) CHRM 343 Homiletics (3) CHRM 351 Topics in Congregational Ministries (3) CHRM 391 Practicum (3) RELI 355 Religion in the United States (3)

# 2) Cross-Cultural Ministries (29 credits)

ANTH 101 Introduction to Cultural Anthropology (3) COMM 342 Intercultural Communication (3) CHRM 220 Introduction to Christian Mission (3) CHRM 227 Pre-Field Experience for Cross-Cultural Ministry (3) CHRM 320 Biblical Theology of Mission (3) CHRM 352 Topics in Cross-Cultural Ministries (3) CHRM 393 Post-Field Experience for Cross-Cultural Ministry (2) One of the following: RELI 205 Religions of the World (3) RELI 228 Judaism (3) RELI 229 Islam (3) RELI 333 Religions of India (3) RELI 334 Religions of China and Japan (3) One of the following: RELI 321 Christianity in Latin America (3) RELI 329 Christianity in Africa (3) RELI 332 Christianity in Asia (3) THEO 223 Global Christian Theology (3) THEO 305 Christian Theology of Religious Pluralism (3)

# 3) Youth Ministries (32 credits)

CHRM 210 Theology of Ministry (3) CHRM 225 Field Experience in Christian Ministries (2) CHRM 235 Ministry with Youth I (3) CHRM 330 Organization and Leadership for Ministry (3) CHRM 336 Ministry with Youth II (3) CHRM 353 Topics in Youth Ministries (3) CHRM 391 Practicum (3) PSYC/HDFS 311 Adolescent Development (3) RELI 355 Religion in the United States (3) One of the following: CHRM 243 Evangelism and Discipleship (3) CHRM 323 Worship (3) CHRM 342 Pastoral Counseling (3) CHRM 343 Homiletics (3) One of the following: EDUC/PSYC 203 Educational Psychology (3) HDFS 101 Foundations of Marriage and Family (3) PSYC 101 Introduction to Psychology (3)

#### Christian Ministries Minor (24 credits)

CHRM 099 Opportunities in Christian Ministries (1) One of the following: CHRM 210 Theology of Ministry (3) CHRM 220 Introduction to Christian Mission (3) CHRM 225 Field Experience in Christian Ministries (2) THEO 238 Christian Theology I: God and Humanity (3) THEO 239 Christian Theology II: Nature and Mission of the Church (3) Three additional CHRM courses in a chosen area of emphasis (9) One of the following: BIBL 231 Old Testament Literature (3)

BIBL 235 New Testament Literature (3)

#### Cross-Cultural Ministries Minor (18 credits)

ANTH 101 Introduction to Cultural Anthropology (3) CHRM 220 Introduction to Christian Mission (3) CHRM 243 Evangelism and Discipleship (3) CHRM 320 Biblical Theology of Mission (3) CHRM 352 Topics in Global Ministries (3) One of the following: RELI 228 Judaism (3) RELI 229 Islam (3) RELI 321 Christianity in Latin America (3) RELI 329 Christianity in Africa (3) RELI 332 Christianity in Asia (3) RELI 333 Religions of India (3) RELI 334 Religions of China/Japan (3)

# **Department Courses**

# **Biblical Studies Courses:**

#### BIBL 201 Encountering the Bible (3)

Equips students to interpret the Old and New Testaments in their historical and literary contexts. This course explores various genres and addresses the origin, transmission, and canonization of the Bible. Students learn to understand and apply biblical texts responsibly through careful reading and analysis. Meets General Education requirement in Bible.

# BIBL 202 Encountering the Bible for Majors (3)

Equips students to interpret the Old and New Testaments in their historical and literary contexts. This course explores various genres and addresses the origin, transmission, and canonization of the Bible. Students learn to understand and apply biblical texts responsibly through careful reading and analysis. Alternate to BIBL 201, designed specifically for students pursuing a major in Biblical and Religious Studies or Christian Ministries. Meets General Education requirement in Bible.

# BIBL 203 Encountering the Old Testament (Hebrew Bible) (3)

Equips students to interpret the Old Testament (Hebrew Bible) in its historical and literary contexts. This course explores various genres and addresses the origin, transmission, and canonization of the Old Testament. Students learn to understand and apply biblical texts responsibly through careful reading and analysis. Meets General Education requirement in Bible.

# BIBL 204 Encountering the New Testament (3)

Equips students to interpret the New Testament in its historical and literary contexts. This course explores various genres and addresses the origin, transmission, and canonization of the New Testament. Students learn to understand and apply biblical texts responsibly through careful reading and analysis. Meets General Education requirement in Bible.

# BIBL 231 (formerly BIL 203) Old Testament Literature (3)

Introduction to content and themes of the Old Testament with emphasis on sequence and meaning of events. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 233 (formerly BIL 213) Old Testament Literature for Majors (3)

Introduction to content and themes of the Old Testament with emphasis on sequence and meaning of events. Alternate to BIBL 231, designed specifically for students pursuing Bible, Religion, or Christian Ministries majors. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 235 (formerly BIL 204) New Testament Literature (3)

Survey of historical and cultural background of the New Testament, the life of Christ, the formation of the early Church, and the main themes of New Testament books. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 237 (formerly BIL 214) New Testament Literature for Majors (3)

Survey of historical and cultural background of the New Testament, the life of christ, the formation of the early Church, and the main themes of New Testament books. Alternate to BIBL 235, designed specifically for students pursuing Bible, Religion, or Christian Ministries majors. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 251 (formerly BIL 261) Archaeology of the Old Testament World (3)

Not dead stones but living people are the interest of this course. It provides a history of excavating in the lands of the Bible; methods, approaches, and schools of thought; the major biblical sites; and the value and limits of archaeology for biblical study. It seeks to recover, so far as possible, the physical and cultural setting in order to understand the hopes and fears and issues of faith for the actors in the Old Testament drama. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 253 (formerly BIL 241) Pentateuch (3)

A study of the content and themes of the first five books of the Bible. Particular attention is given to those texts that inform the theology, social practices, and ethics

of contemporary Christians. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

#### BIBL 255 (formerly BIL249) Historical Books I (3)

First of a two-part sequence dealing with the history and theology of ancient Israel (Joshua - I Kings 11). This study covers the period from the conquest of Canaan through the reign of Solomon. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

#### BIBL 257 (formerly BIL 250) Historical Books II (3)

Second of a two-part sequence dealing with the history and theology of ancient Israel (I Kings 12 - Nehemiah). This study covers the period beginning with the Divided Monarchy and concluding with the Restoration. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. (Note: BIBL 255 is <u>not</u> a prerequisite for this course.) Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

#### BIBL 259 (formerly BIL 251) Poetical and Wisdom Literature (3)

Studies in Job, Psalms, Proverbs, Ecclesiastes, and Song of Solomon in the light of Hebrew poetry and thought, with attention to the deep religious motives of the authors, as well as worship values and instruction for living. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 261 (formerly BIL 215) Prophets I (3)

First of a two-part sequence of selected prophets in the chronology of their ministries, e.g., Elijah, Elisha, Amos, Hosea, and Isaiah. Surveys historical background, literary analysis, and theological interpretation. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 263 (formerly BIL 216) Prophets II (3)

Second of a two-part sequence of selected prophets in the chronology of their ministries, e.g., Jeremiah and Ezekial. Surveys historical background, literary analysis, and theological interpretation. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. (Note: BIBL 261 is <u>not</u> a prerequisite for this course.) Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

#### BIBL 271 (formerly BIL 262) Archaeology of the New Testament World (3)

Not dead stones but living people are the interest of this course. It provides a history of excavating in the lands of the Bible; methods, approaches, and schools of thought; the major biblical sites; and the value and limits of archaeology for biblical study. It seeks to recover, so far as possible, the physical and cultural setting in order to understand the hopes and fears and issues of faith for the actors in the New Testament drama. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 273 (formerly BIL 205) The Synoptic Gospels (3)

Analysis of the Synoptic Gospels, focusing on each writer's presentation of Jesus and his life and teachings. Background studies include the synoptic relationships, historical foundations, and theological reflections in the Gospels. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 275 (formerly BIL 207) Johannine Literature (3)

Analysis of the Gospel and Epistles of John, designed to uncover their origin, structure, content, and particular themes. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 277 (formerly BIL 231) Paul and His Letters (3)

Analysis of the Pauline Epistles to discover the thoughts and practices of the early Church. Attention given to the specific background of each epistle and the issues addressed, as well as to the general theological motifs common to all. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 279 (formerly BIL 285) General Epistles (3)

Study of those works in the New Testament canon identified as the non-Johannine general or catholic epistles (Hebrews, James, I and II Peter, and Jude). Attention is given to questions of historical setting, authorship, genre, content, and theology. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 281 (formerly BIL 270) Apocalyptic Literature (3)

Study of the Bible's apocalyptic literature: the books of Daniel and Revelation. Attention is given to historical setting, authorship, genre, content, theology, and modes of interpretation. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 285 (formerly BIL 210) Studies in Biblical Texts (3)

Study in the English text of a particular book or books of the Old and/or New Testament. Attention is given to historical background, content, and theology. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 287 (formerly BIL 224) Studies in the Bible as Literature (3)

Study of selections from the Bible, with particular reference to the importance of literary types in interpreting the Bible. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Cross-listed with ENGL 164. Students may use this course to meet either the General Education Knowledge of the Bible requirement (for students who entered Messiah College prior to Fall 2005) or the General Education Literature requirement, but not both.

# BIBL 289 (formerly BIL 238) Bible, Stewardship and the City (3)

A study of the relationship between resource stewardship and city life in both the Old and New Testaments. Key biblical texts and concepts serve as the foundation for considering how people can live appropriately on earth today and properly use human, material, natural, and social resources, even within an urbanized context. Attention is given to biblical texts relating a Christian response to such topics as personal consumption, land use issues, and environmental degradation. Prerequisite BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Cross-listed with URBS 238. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 291 (formerly BIL 280) Issues of War, Peace and Social Justice in Biblical Texts (3)

A study of the major Biblical texts pertaining to war, peace, and social justice issues, with attention to their application past and present. This course assesses the traditional Christian stances toward war and also deals with more recent developments such as terrorism, pre-emptive strike, nonviolent resistance, and active peacemaking, all from a biblical perspective. It also explores related issues like the relationships between patriotism, military service, nationalism, and Christian citizenship in the kingdom of God. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Knowledge of the Bible requirement for students who entered Messiah College prior to Fall 2005.

# BIBL 293 (formerly BIL 281) The Bible and Social Ethics (3)

Central concepts and methods of biblical ethics in the social context are developed through an examination of relevant passages from both testaments. Biblical values applied to a discussion of current social issues. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204. Meets General Education Ethics requirement.

# BIBL 297: World of the Bible: Israel (3)

A combination of archaeological excavation at the biblical site of Bethsaida, and touring biblical and cultural sites in Israel. The tour section focuses on sites important to biblical studies and also includes sites and studies relating to the history and cultures of the various peoples in modern Israel. Prerequisite BIBL 201, 202, 203, or 204. Meets the General Education cross-cultural requirement.

# BIBL 307 Biblical Backgrounds (3)

Study of non-biblical resources that contribute to understanding the historical, theological, and cultural landscape of the ancient Mediterranean world. Readings will include selections from sources such as the Dead Sea Scrolls, Josephus, the Apocrypha, and the Pseudepigrapha. Material resources from archaeology might also be studied. Prerequisite: BIL 105 or 106 or BIBL 201 or 202 or 203 or 204; and one additional BIBL course, excluding BIBL 201, 202, 203, and 204.

# BIBL 312 Selected Old Testament Books (3)

Study in the English text of a particular portion of Old Testament literature, e.g., Genesis, the Psalms, Isaiah. Emphasizes both content and structure with consideration of critical issues. Prerequisite: BIL 203 or 213 or BIBL 231 or 233.

# BIBL 313 Selected New Testament Books (3)

Study in the English text of a particular portion of New Testament literature, e.g., the Gospel of John, Romans, Hebrews. Emphasizes both content and structure with consideration of critical issues. Prerequisite: BIL 204 or 214 or BIBL 235 or 237.

# BIBL 381 Biblical Interpretation and Criticism (3)

A study of methods by which the Biblical text is analyzed, and hermeneutical approaches stemming from diverse ethnic, socio-economic, lay, and scholarly communities. Prerequisites: BIL 203 or 213 or BIBL 231 or 233; and BIL 204 or 214 or BIBL 235 or 237.

# BIBL 382 Topics in Biblical Theology (3)

Study of a selected biblical motif, noting its comparative treatment by various biblical authors and tracing its development through Scripture. Prerequisites: BIL 203 or 213 or BIBL 231 or 233; and BIL 204 or 214 or BIBL 235 or 237.

# BIBL 491 Independent Study (1-3)

Selected topics pursued independently with frequent consultation with a faculty supervisor.

# BIBL 497, 498 Major Honors (3, 3)

Independent research program for students who have a strong academic record (3.5 cumulative GPA) for a minimum of five previous semesters of college study. Department approval required for enrollment.

# Biblical Language Courses:

# GREK 205 Fundamentals of Greek I (3)

Elements of Greek are introduced, studied, and applied with a goal of mastering the rudiments of the language and acquiring a carefully selected vocabulary. Readings from the New Testament. Meets General Education Language requirement.

# GREK 206 Fundamentals of Greek II (3)

Elements of Greek are introduced, studied, and applied with a goal of mastering the rudiments of the language and acquiring a carefully selected vocabulary. Readings from the New Testament. Meets General Education Language requirement. Prerequisite: GREK 205.

# GREK 305 Intermediate Greek (3)

Syntax, vocabulary, efficiency in translation, and exact meanings of words are stressed. Selected New Testament passages are read. Prerequisites: GREK 205, 206. Meets General Education Language requirement.

# HEBR 205 Fundamentals of Hebrew I (3)

Introduction to the basic grammar and vocabulary of biblical Hebrew. Emphasizes understanding word formation and building vocabulary as a foundation for developing reading proficiency. Various passages from the Hebrew Bible are read. Meets General Education Language requirement.

# HEBR 206 Fundamentals of Hebrew II (3)

Introduction to the basic grammar and vocabulary of biblical Hebrew. Emphasizes understanding word formation and building vocabulary as a foundation for developing reading proficiency. Various passages from the Hebrew Bible are read. Meets General Education Language requirement. Prerequisite: HEBR 205.

# HEBR 305 Intermediate Hebrew (3)

Readings from the Hebrew Bible are selected to develop facility in reading and translating the Hebrew text. Prerequisite: HEBR 205, 206. Meets General Education Language requirement.

# **Christian Ministries Courses:**

# CHRM 099 (formerly CEM 103) Opportunities in Christian Ministries (1)

Surveys the opportunities available to Christian Ministries majors. The emphasis is on interaction with persons who are serving in ministry positions.

#### CHRM 210 (formerly CEM 210) Theology of Ministry (3)

Nature, authority, and responsibility of the minister. Relation to the general church and community, methods of ministerial work, the conducting of church services, and general church administration. Prerequisite: CHRM 099.

# CHRM 220 (formerly CEM 220) Introduction to Christian Mission (3)

This course will be a general introduction to Christian missions and to the global dimensions of the Christian faith. The biblical/theological, historical, and current global contextual foundations for Christians witness will be reviewed, and strategies for personal and communal mission participation in light of these foundations will be surveyed.

# CHRM 225 (formerly CEM 225) Field Experience in Christian Ministries (2)

Field experience for students preparing for Christian ministry that provides observation and the development of an understanding of ministry roles. Students are expected to connect theoretical ideas with actions and decision-making processes associated with effective ministry. Focus is on the comparison of global, congregational, and para-church ministry settings. Prerequisite: CHRM 099.

# CHRM 227 Pre-Field Experience for Cross-Cultural Ministry (3)

The development of appropriate resources (including funds), attitudes, strategies, and cultural learning techniques for cross-cultural ministry. Students are required to participate in an 8-10 week cross-cultural ministry experience during the following summer and participate in CHRM 393 the following fall. To be taken in the spring

semester of the junior year by all students completing the Cross-cultural Ministries concentration of the Christian Ministries major. Prerequisites: Junior standing and completion of ANTH 101, CHRM 220, and COMM 342.

# CHRM 235 (formerly CEM 235) Ministry with Youth I (3)

The theoretical background of youth ministry is investigated with special attention given to the theological foundations of ministry with youth, the psychological characteristics of youth, the social manifestations of the youth culture, and qualities that enhance ministry with youth.

# CHRM 242 (formerly CEM 242) Christian Spirituality (3)

This course provides an examination of the Christian experience of God, with attention to the symbols used throughout history to describe this experience. By reflecting on a variety of approaches to God, students develop a comprehensive view of spirituality in the Christian tradition. Reserved for Bible and Christian Ministries majors; other students need permission of instructor to enroll.

# CHRM 243 Evangelism and Discipleship (3)

This course examines biblical and historical understandings and practices of evangelism and discipleship. The relationship between evangelism, discipleship, and social action will be emphasized and applications will be made to local church contexts. Prerequisites: CHRM 099 and CHRM 210.

# CHRM 320 (formerly CEM 320) Biblical Theology of Mission (3)

This course will examine the story of God's activity in the world as recorded in the Bible. A particular focus of the course will be the relationships between mission (God's activity) and missions (human activity) that are developed in the biblical record. Applications will be made to various North American and global contexts. Prerequisites: CHRM 099 and CHRM 220.

# CHRM 323 (formerly CEM 323) Worship (3)

An introduction to the broad topic of worship, including such aspects as the theology of worship, the creation of worship materials, and the development of worship skills. Attention is also given to special worship services, the liturgical calendar, and the influence of culture on worship. Prerequisites: CHRM 099 and CHRM 210.

# CHRM 330 (formerly CEM 330) Organization and Leadership for Ministry (3)

An introduction to the basic process of organization and leadership in a variety of ministry settings including congregations and intercultural ministries in North America and ministries in other parts of the world. Topics include financial planning, organizational management, and leadership recruitment, development, and training. Prerequisites: CHRM 099 and either CHRM 210 or CHRM 220.

# CHRM 336 (formerly CEM 336) Ministry with Youth II (3)

The practice of youth ministry is demonstrated through activities that acquaint the students with sound methods of evangelizing, discipling, teaching, and counseling youth. Attention is also given to planning and managing a comprehensive program of ministry with youth. Prerequisite: CHRM 235.

# CHRM 338 (formerly CEM 338) Teaching for Christian Ministries (3)

Study of the biblical, historical, philosophical, theological, and psychological foundations of Christian education with special emphasis on how they relate to the aim, content/method, teacher-student relationship, environment, and evaluation of Christian education. This theoretical framework is then applied to pedagogy and the development of curricular materials for Christian ministry. Prerequisites: CHRM 099 and either CHRM 210 or CHRM 220.

# CHRM 342 (formerly CEM 342) Pastoral Counseling (3)

Role of the pastor in private, group, crises, referral, marriage enrichment, family, youth, and peer counseling. Prerequisites: CHRM 099 and CHRM 210.

# CHRM 343 (formerly CEM 343) Homiletics (3)

The sermon is defined in relation to its purpose. Various methods of sermonizing and types of sermons are considered, with the Bible regarded as the primary source of sermon material. Practical experience in sermon preparation and delivery. Prerequisites: CHRM 099 and CHRM 210.

# CHRM 351 (formerly CEM 351) Topics in Congregational Ministries (3)

Study of a selected theme relating to Congregational Ministries, drawing primarily upon biblical studies and theology. Limited to upper-division Christian Ministries students. Prerequisites: CHRM 099 and CHRM 210.

# CHRM 352 (formerly CEM 352) Topics in Global Ministries (3)

Study of a selected theme relating to Global Ministries, Intercultural Ministries, or Mission, drawing primarily upon biblical studies and theology. Limited to upper-division Christian Ministries students. Prerequisites: CHRM 099 and CHRM 220.

# CHRM 353 (formerly CEM 353) Topics in Youth Ministries (3)

Study of a selected theme relating to Youth Ministries, drawing primarily upon biblical studies and theology. Limited to upper-division Christian Ministries students. Prerequisites: CHRM 099 and CHRM 210.

# CHRM 360 (formerly CEM 360) Models of Christian Ministry in the City (3)

Exploration of the theologies and practice of Christian ministry in the city. Diverse models of urban mission are examined through tours, guest lectures, and readings. Prerequisites: CHRM 099 and either CHRM 210 or CHRM 220.

# CHRM 391 (formerly CEM 391) Practicum (1-3)

Supervised fieldwork in any of the following areas: Christian ministries, missions, peacemaking, or youth ministry. Senior status is required for admission. Prerequisites: CHRM 099 and either CHRM 210 or CHRM 220.

# CHRM 393 Post-Field Experience for Cross-Cultural Ministry (2)

A continuation of CHRM 227 focusing on reflection and analysis of the summer cross-cultural ministry experience through debriefing exercises. To be taken in the fall semester of the senior year by all students completing the Cross-Cultural

Ministries concentration of the Christian Ministries major. Prerequisites: Senior standing and completion of CHRM 227.

# CHRM 491 (formerly CEM 491) Independent Study (1-3)

Selected topics pursued independently with frequent consultation with faculty supervisor. Prerequisites: CHRM 099 and either CHRM 210 or CHRM 220.

# CHRM 493 (formerly CEM 493) Christian Ministries Seminar (3)

This course serves as the capstone for Christian Ministries majors. The preparation and presentation of a major research project related to ministry is the central agenda for the course. Senior status is required for admission. Prerequisites: CHRM 099 and either CHRM 210 or CHRM 220.

# CHRM 497, 498 (formerly CEM 497, 498) Major Honors (3, 3)

Independent research program for students who have a strong academic record (3.5 cumulative GPA) for a minimum of five previous semesters of college study. Departmental approval required for enrollment. Prerequisites: CHRM 099 and either CHRM 210 or CHRM 220.

# **Religion Courses:**

# RELI 205 Religions of the World (3)

An introduction to the world's major religious traditions, including primal religions, Hinduism, Buddhism, Judaism, Christianity, and Islam. In addition to examining historical and current beliefs and practices of these traditions, students will be introduced to the study of religion and Christian theological resources for reflecting on religious diversity. Meets the General Education Philosophy/Religion requirement.

# RELI 206 Religions of the World for Majors (3)

An introduction to the world's major religious traditions, including primal religions, Hinduism, Buddhism, Judaism, Christianity, and Islam. In addition to examining historical and current beliefs and practices of these traditions, students will be introduced to the study of religious and Christian theological resources for reflecting on religious diversity. Alternate to RELI 205, designed specifically for Biblical and Religious Studies majors. Meets the General Education Philosophy/Religion requirement.

# RELI 228 Judaism (3)

A survey of Judaism as a religion, culture, and way of life. This course will examine foundational beliefs and practices within their historical and current contexts and will also discuss the rich diversity within Judaism. It will reflect on the millennia of Jewish experience within surrounding cultures, the role of the modern state of Israel in that experience, and Jewish-Christian relations past and present. Meets the General Education Philosophy/Religion requirement.

# RELI 229 Islam (3)

A survey of Islam as a religion, way of life, and civilization. This course will examine foundational beliefs and practices within their historical and current contexts and will also discuss the rich diversity within Islam. It will highlight the role of Islam in

both local and global affairs, including perspectives on Muslim-Christian relations. Meets the General Education Philosophy/Religion requirement.

# RELI 321 (formerly RET 321) Christianity in Latin America (3)

Historical overview and contemporary survey of Christianity in Latin America. Attention will be given to the social history of the churches and to developments in theology. The Catholic Church will provide the major focus, but Protestant developments (especially Pentecostalism) will be considered. Meets General Education Non-Western Studies requirement.

# RELI 329 (formerly RET 329) Christianity in Africa (3)

Historical overview and contemporary survey of Christianity in Africa (and the African Diaspora). Attention will be given both to the social history of the churches and to developments in theology. A brief introduction to African traditional religions and Islam will also be included. Meets General Education Non-Western Studies requirement.

# RELI 332 (formerly RET 332) Christianity in Asia (3)

Historical overview and contemporary survey of Christianity in Asia. Attention will be given both to early developments in the Middle East and Persia and to later developments in China, India, and elsewhere. Both the social history of the churches and theology will be considered. Meets General Education Non-Western Studies requirement.

# RELI 333 (formerly RET 333) Religions of India (3)

The history and development of the major Vedic traditions of the Indian subcontinent as well as smaller religious communities such as Jains and Sikhs. Special attention is drawn to the impact of historical religion on modern India. Meets General Education Non-Western Studies requirement.

# RELI 334 (formerly RET 334) Religions of China and Japan (3)

Study of the history and development of the major religions of China, Tibet, and Japan. Emphasis is placed on the distinction between religions indigenous to these areas and those which were "imported." Analysis of the interaction between these two types of religions directs our attention to the influence of culture on religion and religion on culture. Meets General Education Non-Western Studies requirement.

# RELI 335 (formerly RET 335) Gender and Christianity (3)

Approaches Christianity from a perspective that incorporates insights relating to gender studies in various disciplines, including theology, Bible, sociology, and history. Prerequisite: THEO 205 or 238.

# RELI 340 (formerly RET 340) New Religious Movements (3)

Investigates the rise, development, and teachings of sects and new religious movements from a sociological, theological, and historical perspective. Meets General Education Pluralism requirement.

# RELI 344 (formerly RET 244) History of Christianity (3)

Survey of Christianity from the time of Jesus to the present. Major developments, important turning points, and influential individuals will be highlighted. Differences and similarities between major Christian traditions (Protestant, Catholic, Orthodox, etc.) and denominational differences within Protestantism will be explored. Prerequisites: THEO 205, THEO 238, or another Christian Beliefs course.

# RELI 355 (formerly RET 355) Religion in the United States (3)

Survey of religion in the United States with a focus on Christianity. Attention will be given to the diversity of religious expressions on the American landscape and social interactions between groups. Meets General Education Pluralism requirement.

# **RELI 366 Topics in Religion**

Study of a particular theme or topic pertaining to world religions, world Christianity, or the study of religion. Prerequisite: RELI 205 or RELI 206.

# RELI 491 Independent Study (1-3)

Selected topics pursued independently with frequent consultation with a faculty supervisor.

# RELI 497, 498 Major Honors (3, 3)

Independent research program for students who have a strong academic record (3.5 cumulative GPA) for a minimum of five previous semesters of college study. Department approval required for enrollment.

# **Theology Courses:**

# THEO 205 (formerly RET 237) Introduction to Christian Theology (3)

A survey course dealing with the history and present expressions of classic Christian understandings of God, Christ, the Holy Spirit, humanity, creation, redemption, etc. Issues of theological method are introduced, especially as this relates to the integration of faith and learning in various academic disciplines. Meets General Education Christian Beliefs requirement.

# THEO 207 (formerly RET 208) African-American Theology (3)

Explores African-American theology, spirituality, and ethics, with special attention to Black Theology. Meets General Education Christian Beliefs requirement.

# THEO 209 (formerly RET 219) Anabaptist Theology (3)

Explores core Christian beliefs through a study of the history and present teachings of a variety of Anabaptist churches, idetifying similarities and differences with a variety of other Christian traditions. Special attention is given to the peace witness of this tradition. Meets General Education Christian Beliefs requirement.

# THEO 211 (formerly RET 210) Brethren in Christ Life and Thought (3)

Founding, historical development, and present situation of the Brethren in Christ, with special attention to their interaction with other religious bodies and with society generally. Meets General Education Christian Beliefs requirement.

# THEO 213 (formerly RET 204) Pentecostal Theology (3)

Explores Christian theology, spirituality, and ethics through an analysis of the beliefs and practices of pentecostal and charismatic movements around the world, identifying similarities and differences with a variety of other Christian traditions. Meets General Education Christian Beliefs requirement.

# THEO 215 Roman Catholic Theology (3)

A general introduction to Christian theology that pays special attention to the beliefs, practices, and traditions of the Roman Catholic Church, identifying similarities and differences with a variety of Protestant perspectives. Meets General Education Christian Beliefs requirement.

# THEO 217 (formerly RET 217) Wesleyan/Holiness Theology (3)

Examines major Christian doctrines from the perspectives of the Wesleyan/Holiness movement, identifying similarities and differences with a variety of other Christian traditions. Special attention is given to social holiness. Meets General Education Christian Beliefs requirement.

#### THEO 219 (formerly RET 205) Theology and Christian Unity (3)

Examines various Christian theological traditions (e.g., Catholic, Orthodox, Reformed, Anabaptist, Pietist, Wesleyan/Holiness) exploring areas of commonality and difference and assessing possibilities and problems related to the goal of Christian unity. Meets General Education Christian Beliefs requirement.

#### THEO 221 (formerly RET 216) Faith and Society (3)

Foundational Christian beliefs are surveyed with attention to the Gospel's social mandate. The course includes reflection on the Christian commitment to social activism and peacemaking. Meets General Education Christian Beliefs requirement.

# THEO 223 (formerly RET 215) Global Christian Theology (3)

Examines classic categories of Christian belief as expressed in various theologies currently being developed in Latin America, Africa, and Asia. Meets General Education Christian Beliefs requirement.

# THEO 225 (formerly RET 319) Practical Theology of the Urban Church (3)

This course studies how Christian beliefs and institutions have been shaped by and help to direct community life within urban locations. Course content focuses on current methods and skills of urban church ministry, community organizing, and social change within a city. Consideration is given to different church strategies used to accomplish service to a local neighborhood. Cross-listed with URBS 319. Meets General Education Christian Beliefs requirement.

# THEO 227 (formerly RET 206) Theology, Violence, and Nonviolence (3)

Examines how core Christian beliefs and moral teachings relate to the issues of violence and non-violence. Meets General Education Christian Beliefs requirement.

# THEO 238 (formerly RET 238) Christian Theology I: God and Humanity (3)

A survey course dealing with the history and present expressions of classic Christian

understandings of God, Christ, the Holy Spirit, humanity, creation, culture, redemption, etc. Issues of theological method are also introduced. Alternate to RELI 237, designed specifically for students pursuing a major in Christian Ministries. Meets General Education Christian Beliefs requirement.

# THEO 239 (formerly RET 239) Christian Theology II: The Nature and Mission of the Church (3)

A biblical and historical study of the doctrine of the nature and mission of the church with special attention to the doctrines of atonement and reconciliation and to those models of the church that are relevant to those preparing for Christian ministry in the contemporary world. Prerequisite: THEO 238.

# THEO 305 Christian Theology of Religious Pluralism (3)

A review and analysis of how Christian theologians have understood the relationship between Christianity and other religions. Practical concerns of interaction with followers of other religions will also be explored. Prerequisites: THEO 205 and RELI 206.

# THEO 338 (formerly RET 338) Christian Theology III: Peace, Justice, and Reconciliation (3)

This course considers the biblical and theological themes pertinent to conflicts that occur on personal, national, and global levels (and are rooted in such evils as racism, sexism, materialism, and militarism) and introduces students to possibilities for prophetic intervention that works toward peacemaking, the restoration of justice, and divine and human reconciliation. Prerequisites: THEO 238 and THEO 239.

# THEO 340 Modern Theology (3)

Major developments in Christian theology from 1800 to the late twentieth century are examined. Special attention will be given to thinkers whose influence continues to shape theological reflection today. Prerequisite: a course that meets the General Education requirement in Christian Beliefs.

# THEO 345 Contemporary Theology (3)

Contemporary theology varies greatly in terms of both topics of discussion and methods of analysis. This course selectively examines some of the most important voices within that diversity, focusing on theological works published in the last three decades. Particular attention will be given to theological discourse on justice and reconciliation. Prerequisite: a course that meets the General Education requirement in Christian Beliefs.

# THEO 354 (formerly RET 354) Women Theologians in the United States (3)

Surveys theologies in the United States produced by African, Hispanic/Latina and Euro-American women. The course examines the context and methodologies of these theologians with consideration given to how their social locations produce special theological concerns and perspectives. Meets General Education Pluralism requirement.

# THEO 366 (formerly RET 366) Topics in Theology (3)

Examines in depth specific issues or doctrines. Course content varies according to

topic. Prerequisite: THEO 205.

#### THEO 487 (formerly RET 387) Biblical and Religious Studies Seminar (3)

Students integrate the different subjects they have studied as undergraduates and hone their skills for lifelong learning after college. The specific subject matter of the course will vary from semester to semester. As a seminar, students will be expected to present their own work and lead discussions. Prerequisite: Senior status or with Instructor's consent.

#### THEO 491 Independent Study (1-3)

Selected topics pursued independently with frequent consultation with a faculty supervisor.

#### THEO 497, 498 Major Honors (3)

Independent research program for students who have a strong academic record (3.5 cumulative GPA) for a minimum of five previous semesters of college study. Departmental approval required for enrollment.

### COMMUNICATION

Edward T. Arke, Ed.D. Chair, Department of Communication

#### Faculty

Professor K. Phipps Associate Professor E. Arke Assistant Professors J. Perkins-Buzo, K. Simcox, C. Simmons Instructor M. Holloway Lecturer

Lecturer N. McCown

#### **Majors and Minors**

The Department of Communication offers the following majors: Broadcasting (B.A.) Concentrations: Broadcast Journalism Broadcast Production Media Studies Communication (B.A.) Concentrations: Film and Digital Media Speech/Communication Public Relations

The Department of Communication offers the following minors: Broadcasting Communication

#### Communication

The Communication Major provides a broad background in the field with a concentration in one area. The Department offers concentrations in film and digital media, speech/communication and public relations. Students selecting the film and digital media concentration take approximately 39 credits in film study at Messiah College's Grantham and Philadelphia Campuses. Students selecting the speech/communication concentration and the public relations concentration are encouraged to spend one semester at the Philadelphia Campus. Career possibilities for graduates include work in the film and media industries, public relations, advertising, human resource management, politics, law and any career which relies significantly on interpersonal, group, or organizational skills. At least 18 credits in the major must be from upperdivision courses.

#### Communication Major - Core Courses (19 credits)

COMM 107 Introduction to Communication Seminar (1) One of the following: COMM 104 Fundamentals of Interpersonal Communication (3) COMM 106 Fundamentals of Public Communication (3) COMM 218 Mass Media and Society (3) One of the following: COMM 211 Media in Everyday Life (3) COMM 212 Christianity and Media Culture (3) COMM 341 Communication Theory (3) COMM 493 Communication Senior Seminar (3) One of the following: COMM 247 Writing for Mass Media (3) COMM 254 The Art and Science of Story (3) ENGL 112 Newswriting (3) ENGL 211 Writing for Business (3) ENGL 212 Magazine Writing (3) ENGL 304 Advanced Writing (3)

**NOTE:** COMM 247 can only be used to meet a requirement as either a writing course or in the Speech/Communication and Public Relations Concentrations.

#### Students select from one of three concentrations: Film and Digital Media Concentration (36–39 credits)

**NOTE:** Film and Digital Media concentration students should take COMM 254 to fulfill the writing requirement. To be admitted to the Film and Digital Media concentration students will be required to meet the standards of the admission protocol. A minimum 2.5 GPA and grade of at least a B- in COMM 217 is needed. Exceptions may be granted at the discretion of the Department.

COMM 217 Introduction to Film (3) COMM 225 Digital Editing (3) COMM 226 16mm Filmmaking (3) COMM 251 American Cinema I: 1890–1930 (3) COMM 252 American Cinema II: 1931–Present (3) COMM 328 Essence of Cinema (3)

Internship (6–8) +

Two courses (6-8 credits) from one of two areas:

1) Film Production

Two of the following:

COMM 255 Screenwriting Workshop (3)

COMM 326 Digital Production (3)

FMA 2241 (16mm) Filmmaking (4)\*

FMA 2551 Editing Film and Video (4)\*

FMA 2771 Producing (4)\*

FMA 3244 Lighting for Film and Video (4)\*

FMA 3361 Screen Performance (4)\*

FMA 3551 Advanced Editing (4)\*

FMA 4341 Screen Performance (4)\*

#### 2) Film Studies

COMM 327 International Cinema: Topics (3)++ One of the following:

One of the following:

COMM 255 Screenwriting Workshop (3)

COMM 326 Digital Production (3)

ENGL 126 From Script to Screen (3)

ENGL 324 From Fiction to Cinema (3)

FMA 2451 Experimental Video and Multi-Media (4)\*

FMA 3452 New Technologies Lab (4)\*

FMA 4674 Media Anthropology (3)\*

FMA 4698 History of Documentary (4)\*

All film production or film studies students must complete two (6–8 credits) of the following courses:

COMM 224 Pre-production (3) COMM 327 International Cinema: Topics (3)+ FMA 2242 Videography (4)\* FMA 2271 Producing (4)\* FMA 2451 Experimental Video and Multi-Media (4)\* FMA 2452 Multimedia Production (4)\* FMA 2551 Editing Film and Video (4)\* FMA 2673 Independent Film and Video (4)\* FMA 3242 Experimental TV (4)\* FMA 3244 Lighting for Film and Video (4)\* FMA 3246 Making Documentaries (4)\* FMA 3341 Scene Analyses for Writers/Directors (4)\* FMA 3361 Screen Performance (4)\* FMA 3451 Animation Workshop (4)\* FMA 3452 New Technologies (4)\* FMA 3670 Topics in Media Culture (4)\* FMA 4243 Film and Video Sounds (4)\* FMA 4341 Screen Directing (4)\*

FMA 4451 Digital Animation, Comp and Modeling (4)\*

FMA 4673 International Cinema (4)\*

FMA 4674 Media Anthropology (3)\* FMA 4698 History of Documentary (4)\* One of the following: FMA 3770 Topics in Film Study (4)\* FMA 4240 Topics in Production (4)\*

FMA 4440 Topics in Production  $(2-4)^*$ 

FMA 4670 Topics in Film Study (4)\*

\*Courses taught at Temple University through the Messiah College-Philadelphia Campus; these courses are subject to change. Students may read descriptions of these courses by going to Temple University's website: www.temple.edu. Students are required to spend at least one semester, but no more than four, at Messiah's Philadelphia Campus where they take course work through Temple University's Film and Media Arts program.

\*\*Internship requirements may be fulfilled at sites approved by the Department Chair. Messiah works with Temple's Internship Program in Los Angeles to assist with placements. Contact the Department Chair for more information.

+COMM 327 International Cinema may be taken twice as long as each course covers different cultures.

#### Speech/Communication Concentration (24 credits)

One of the following:
HDFS/PSYC 171 Introduction to Social Research (3)
SOCI 271 Research Methods (3)
COMM 313 Relational Communication (3)
Eighteen credits from the following with at least one course from each group.
a) Performance and Practice Group:
COMM 201 Oral Interpretation of Literature (3)
COMM 301 Persuasion: Theory and Practice (3)
COMM 333 Business and Organizational Communication (3)
COMM 391 Communication Practicum (1–3)
INTE 394 Internship (4–9)
b) Relational Group
COMM 241 Small Group Communication (3)
COMM 342 Intercultural Communication (3)
COMM 353 Crisis Communication and Media Relations (3)
COMM 354 Interpersonal Conflict
c) Media Group
COMM 211 Media in Everyday Life (3)
COMM 212 Christianity and Media Culture (3)
COMM 217 Introduction to Film (3)
COMM 223 Introduction to Radio (3)
COMM 247 Writing for Mass Media (3)
COMM 319 Sports Broadcasting (3)
COMM 323 Radio Production and Performance (4)

**NOTE:** COMM 360 Topics will apply to one of the above groups depending on the topic. A maximum of 3 credits of practicum/internship may be applied to the concentration.

#### Public Relations Concentration (21 credits)

COMM 205 Principles of Public Relations (3) COMM 247 Writing for Mass Media (3) COMM 301 Persuasion: Theory and Practice (3) COMM 333 Business and Organization Communication (3) COMM 353 Crisis Communication and Media Relations (3) MRKT 230 Marketing Principles (3) MRKT 337 Advertising (3)

**NOTE:** Communication majors with a film and digital media concentration or speech emphasis may not declare a Broadcasting minor and Broadcasting minors may not declare a Communication minor because of the significant overlap between these programs.

#### Communication Minor (18 credits)

One of the following: COMM 211 Media in Everyday Life (3) COMM 212 Christianity and Media Culture (3) COMM 218 Mass Media and Society (3) COMM 341 Communication Theory (3) Twelve credits COMM 200-level or above. (A film, public relations, or BTMM course at Temple University may replace one of the COMM courses.)

#### Broadcasting Major - Core Courses (46 credits)

One of the following: COMM 104 Fundamentals of Interpersonal Communication (3) COMM 106 Fundamentals of Public Communication (3) One of the following: COMM 211 Media in Everyday Life (3) COMM 212 Christianity and Media Culture (3) COMM 218 Mass Media and Society (3) COMM 247 Writing for Mass Media (3) COMM 323 Radio Production and Performance (4) COMM 341 Communication Theory (3) COMM 493 Communication Senior Seminar (3) One of the following: Internship, practicum at WVMM or in journalism/broadcasting (6)

A minor (18 credits) is required. No more than six credits may overlap (18) between the major and minor.

Students are also required to select from one of three concentrations: Broadcast Journalism Concentration (18 credits) ENGL 112 Newswriting (3) Fifteen credits from the following Temple University Courses: JOUR 1113 Audio/Visual Newsgathering (3)\* JOUR 2201 Public Affairs Reporting (3)\* JOUR 2501 Broadcast Newswriting (3)\* JOUR 2703 History of Journalism (3)\* JOUR 3196 Journalism and the Law (3)\* JOUR 3501 Radio News Reporting (3)\* JOUR 3502 TV News Reporting (3)\* JOUR 3503 Advanced Broadcast Journalism (4)\* JOUR 3587 WRTI Radio News Workshop (3)\* JOUR 3701 Contemporary Media Issues (3)\* JOUR 3702 Race and Racism in the News (3) JOUR 3704 Ethical Issues in Journalism (3)\* JOUR 3705 Gender and American Mass Media (3)\* JOUR 3706 International News Communications (3)\* JOUR 3707 Visual Communications (3)\* JOUR 3708 Newsroom Management (3)\* JOUR 4101 Multimedia Urban Reporting Lab (4)\* JOUR 4596 Broadcast Journalism Practicum (3)\*

#### Broadcast Production Concentration (19 credits)

COMM 223 Introduction to Radio (3)

Fifteen credits from the following Temple University Courses: BTMM 1101 Mass Communication Theory (3)\* BTMM 1701 Introduction to Media Technology (3)\* BTMM 2701 Introduction to Television Production (3)\* BTMM 2741 Introduction to Cybermedia (3)\* BTMM 2751 Introductory Digital Audio (4)\* BTMM 3701 Intermediate Television Production (4)\* BTMM 3709 Linear and Non-Linear Editing for the Media (4)\* BTMM 3721 Broadcast Performance (4)\* BTMM 3751 Intermediate Digital Audio (4)\* BTMM 4596 Broadcast Production Practicum (3)\* BTMM 4614 Creating a Media Business (4)\* BTMM 4663 CD Project Management (3)\* BTMM 4701 TV Producing and Directing (4)\* BTMM 4703 Making Corporate and Multi-Media Production (4)\* BTMM 4741 Cybermedia Workshop (4)\* BTMM 4571 Advanced Digital Audio (4)\* BTMM 4787 Television Production Workshop (8)\* BTMM 4728 Comedy Workshop (4)\* BTMM 4887 Radio Practicum (1-4)\*

#### Media Studies Concentration (18 credits)

COMM 217 Introduction to Film (3)

Fifteen credits from the following Temple University courses:

BTMM 2141 Mass Communication Research (3)\*

BTMM 2221 The Broadcasting System (3)\*

BTMM 2421 Popular Culture (3)\* BTMM 2741 Introduction to Cybermedia (3\*) BTMM 3224 The Cable Industry (3)\* BTMM 3490 Intermediate Topics: Social (1-4)\* BTMM 3611 Broadcast Advertising (3)\* BTMM 4153 Media Criticism (4)\* BTMM 4226 Public Broadcasting (3)\* BTMM 4272 Comparative Broadcasting (4)\* BTMM 4445 Media Images and Analysis (4)\* BTMM 4453 Economics of Information (4)\* BTMM 4496 Global Telecommunications (4)\* BTMM 4497 Mass Media and Children (4)\* BTMM 4890 Advanced Topics: Media Telecommunications (2-8)\* JOUR 3702 Race and Racism in the News (3)\* JOUR 3705 Gender and American Mass Media (3)\* JOUR 3706 International News Communications (3)\*

**NOTE:** The Broadcasting Major requires one year of study at the Messiah College-Philadelphia Campus in conjunction with Temple University.

\*Courses taught at Temple University through the Messiah College-Philadelphia Campus; these courses are subject to change. Students may read descriptions of these courses by going to Temple University's website: www.temple.edu.

#### Broadcasting Minor (18 credits)

One of the following: COMM 211 Media in Everyday Life (3) COMM 212 Christianity and Media Culture (3) COMM 218 Mass Media and Society (3) COMM 323 Radio Production and Performance (4) COMM 341 Communication Theory (3) Five credits selected from the following: COMM 247 Writing for Mass Media (3) One of the following: ENGL 126 From Script to Screen (3) ENGL 324 From Fiction to Cinema (3) INTE 394 Internship (4–9)\* COMM 391 Communications Practicum (1–3)\*

\*No more than 3 total credits from INTE 394 and COMM 391 may be applied to the minor.

#### COMM 104 Fundamentals of Interpersonal Communication (3)

A study of the basic principles of human communication focusing on interpersonal and small groups with some opportunity for public speaking as well. Meets General Education Oral Communication requirement.

#### COMM 106 Fundamentals of Public Communication (3)

A study of the basic principles of human communication focusing on public speaking with some consideration given to interpersonal and small groups as well. Meets General Education Oral Communication requirement.

#### COMM 107 Introduction to Communication Seminar (1)

Overview of the communication discipline with an introduction to the breadth of vocational options open to communication graduates. (Pass/Fail grade only.)

#### COMM 201 Oral Interpretation of Literature (3)

Introduction to the principles of performing literature aloud. Emphasizes techniques of literary analysis and oral presentation as they apply to narrative literature, dramatic literature, and poetry.

#### COMM 205 Principles of Public Relations (3)

Introduction to the nature, history, and current practice of public relations, emphasizing appropriate communication strategies for different publics and contexts including corporate, non-profit and government agencies. The focus will be on the public relations process of research, action planning, communication, implementation, and evaluation. Ethics, media relations, and community relations are also discussed.

#### COMM 211 Media in Everyday Life (3)

Examines the way media messages are interpreted and used in everyday life. Special consideration of children and adults as consumers of information and entertainment with a specific focus on violence and gender conditioning will be given.

#### COMM 212 Christianity and Media Culture (3)

An exploration of how Christian culture has arrived at its present posture toward contemporary mass-mediated culture, including an exploration of the roots and evolution of Christian attitudes toward film, television, radio, and other forms. Special attention is given to issues of race, gender, and ethnicity.

#### COMM 217 Introduction to Film (3)

Training in the language of cinema and video analysis and discussion of the basic issues involved in understanding film as an expressive cultural form. Areas covered include the shot, the scene, camera angles, lighting, montage, mis en scene, staging, camera movement, narrative structure, sound, film and digital media stocks, dialogue, and characterization.

#### COMM 218 Mass Media and Society (3)

Overview of the history, organization, economics, content, control, and effects of mass communications in the United States with some comparison with foreign systems.

#### COMM 223 Introduction to Radio (3)

An examination of the structure of the radio industry and radio stations. Topics will include radio programming formats, use of technology and broadcast sales. (Alternate years, offered Spring 2008.)

#### COMM 224 Pre-production (3)

Overview of areas of knowledge and skills ranging from staging and rehearsing actors to the process of media production from conceptualization to production management. Course work includes readings, lectures, case studies, and multi-genre assignments in developing hypothetical projects. Prerequisite: COMM 217.

#### COMM 225 Digital Editing (3)

Training in digital editing software programs such as Apple Final Cut Pro and Avid Digital Express as well as exposure to concepts of composition within scenes and issues of organization within the larger work (offered January term). Prerequisite: COMM 217. Priority given to film concentration students; by permission of the chair.

#### COMM 226 16mm Filmmaking (3)

This course provides a comprehensive introduction to techniques related to film production. Unlike digital production, film equipment requires much more intervention by the artist composing the film. Techniques dealing with the camera mechanism, lens, light, color, filters, and movement are the focus. Students will be better prepared for work in the film industry or within graduate studies programs after completing this course. Prerequisite: COMM 217 and COMM 225. Priority given to film concentration students, exceptions may be granted by the Instructor or by permission of the Chair.

#### COMM 241 Small Group Communication (3)

Theory, research, and practice related to the structure and functioning of groups, including leadership, decision making, problem solving, and those variables requisite to effective communication within a group.

#### COMM 247 Writing for Mass Media (3)

Introduction to and practice in writing for mass media, with a focus on commercial copy for the electronic media of radio and television.

#### COMM 251 American Cinema I: 1890–1930 (3)

This course examines the development of American cinema from Edison and Muybridge's first experiments with filming motion through the emergence of narrative film, through the development of Hollywood and the earliest days of sound film. Prerequisite: COMM 217. (Alternate years, offered Fall 2007.)

#### COMM 252 American Cinema II: 1931–Present (3)

This course traces Hollywood's golden age, its tribulation through the 1950s with the emergence of television and the McCarthy era, shifts in expressive strategies during the 1960s and 1970s and evolution through the 1980s and 1990s in response to technological developments and the waning of modern culture. Prerequisite: COMM 217. (Alternate years, offered Spring 2008.)

#### COMM 254 The Art and Science of Story (3)

This course uses scripts from significant films and viewings of those same films to analyze the most important features of film narrative. This course gives an introductory foundation for all other courses in screenwriting and teleplay writing.

#### COMM 255 Screenwriting Workshop (3)

In this intensive writing seminar, students progress from writing scenes for film and television to beginning consideration of writing an entire feature length/episode length script. Prerequisite: COMM 254.

#### COMM 301 Persuasion: Theory and Practice (3)

Principles and techniques of the art of persuasion as applied to oral discourse.

#### COMM 313 Relational Communication (3)

Theory, research, and practice of relational communication focusing on issues between romantic partners, friends, and family (Offered Fall term only.)

#### COMM 319 Sports Broadcasting (3)

This course examines the theory and application of techniques in sports broadcasting. We will examine a number of facets of sports broadcasting, including play-byplay, interviewing and anchoring sportscasts. Sports journalism and the history of this broadcasting specialty are also examined. A hands-on approach to the material is stressed. (Alternate years, offered J-Term 2008.)

#### COMM 323 Radio Production and Performance (4)

This course is devoted to the application and use of radio station facilities and equipment. It also emphasizes practice in different types of announcing, including discussion and demonstration of enunciation, articulaton, tone, and voice quality in broadcast performance (Alternate years, offered Spring 2009.)

#### COMM 326 Digital Production (3)

Intensive instruction and practice with the tools of recording and structuring digital media. Students will be grouped in four-person crews and will complete four to five digital media exercises dealing with lighting, sound, editing and other aspects of narrative and non-narrative construction. Prerequisites: COMM 217 and COMM 226.

#### COMM 327 International Cinema: Topics (3)

This course will focus on one selected national cinema. The formal, aesthetic, historical and theoretical developments of particular national cinemas will be examined. The course will also focus on the way in which particular cinematic strategies of expression emerge from specific cultural contexts and consider how specific national cinemas participate in and influence larger developments within cinema. May be repeated for credit. Prerequisite: COMM 217. (Alternate years, offered 2008–2009.)

#### COMM 328 Essence of Cinema (3)

This course will explore the classic texts of film theory from the earliest dreams of what cinema might become in the 1890s through contemporary explorations of film and digital media and their role in global culture. Special attention paid to aesthetics, narrative theory, formal questions, cinema's relationship to other arts, exhibition, understanding the audience and the viewing experience. Prerequisite: COMM 217.

#### COMM 333 Business and Organizational Communication (3)

Assessment of communication problems peculiar to business and industry. Practical training in analyzing communication networks and developing basic business com-

munication skills.

#### COMM 341 Communication Theory (3)

Basic critical and scientific theories of communication, emphasizing reducing communicative barriers and enhancing communicative effectiveness.

#### COMM 342 Intercultural Communication (3)

Analysis of communication variables in cross-cultural situations, focusing on the individual, social, and cultural bases of human communication. (Alternate years, offered 2008–2009.)

#### COMM 353 Crisis Communication and Media Relations (3)

Analysis of corporate, institutional and governmental conflict and crises. Consideration given to nature of social conflict, negotiation, problem-solving, crisis planning, spokesperson training, news conferences and news releases. (Alternate years, offered 2008–2009.)

#### COMM 354 Interpersonal Conflict (3)

Analysis of the nature and function of interpersonal conflict. Identification of personal conflict styles as well as productive and destructive communication strategies. (Alternate years, offered 2008–2009.)

#### COMM 360 Topics in Communication (3)

Special investigation into specific areas and applications in the field of communication. Topics will vary with offerings.

#### COMM 390 Radio Performance Practicum (1)

Students who perform assigned airshifts totaling at least 15 hours, according to the standards set out in the WVMM handbook, and meet specified practicum criteria may receive one elective credit hour per semester. May be repeated for a maximum of four credit hours per student.

#### COMM 391 Communication Practicum (1-3)

Work experience under professional supervision in such areas as broadcasting, organizational communication, Christian communication, public relations and information, advertising, entertainment, and visual media. Open to junior and senior communication students who have completed at least four communication courses. (Pass/Fail grade only.)

#### COMM 426 Senior Public Relations Campaign Project

Senior Communication majors will have a "hands-on" capstone opportunity by providing public relations consultation to a non-profit client. The project will be under the direction of a faculty advisor and culminate in a presentation of the group's findings to the client. Participation will be limited to a select group of students chosen via an application process conducted by the instructor.

#### COMM 491 Independent Study (1-3)

Independent study of research in communication under the supervision of an

instructor whose approval must precede enrollment.

#### COMM 493 Communication Senior Seminar (3)

Critical study of communication theory and practice from a Christian perspective, including consideration of ethics and career options.

#### COMM 497, 498 Major Honors (3, 3)

Independent research program for junior- and senior-level students who have strong academic record for a minimum of five previous semesters of college study. Overall G.P.A. of 3.5; G.P.A. of 3.7 in the major; and departmental approval required for enrollment.

### ENGLISH

Peter K. Powers, Ph.D. Chair, Department of English

#### Faculty

Professors C. Downing, P. Powers, S. Smith Associate Professors L. Lake, H. Walker Assistant Professors J. Corey, D. Dzaka, H. Lee, M. Roth Emeriti: P. Nisly

#### **Majors and Minors**

The Department of English offers the following majors: English (B.A.) English with Teaching Certification (B.A.) Humanities (B.A.) Journalism (B.A.)

The Department of English offers the following minors: English Journalism Teaching English to Speakers of Other Languages

#### English

The English program at Messiah College assists students in studying a wide array of literatures using a variety of critical thinking and writing skills to help them become perceptive readers, insightful thinkers, and responsible writers. Professors encourage students to develop perspectives on the relationship of Christian faith to all aspects of literary endeavor.

Because many careers call for close analysis and interpretation of texts as well as flu-

ency in writing, the English major prepares students for success in a variety of fields. Besides the obvious career choices of advanced scholarship, teaching, journalism, and publishing, Messiah English majors have pursued law, business, Christian ministry, public relations, and other professional careers.

#### English Major (39 credits)

ENGL 196 Introduction to English Studies (3) ENGL 304 Advanced Writing (3) ENGL 242 Medieval-Renaissance English Literature (3) One of the following: ENGL 252 American Literature before 1900 (3) ENGL 358 Selected American Authors/Topics before 1900 (3) One of the following: ENGL 352 Modern American Literature (3) ENGL 354 Contemporary American Poetry (3) ENGL 356 Ethnic Literatures of the United States (3) ENGL 359 Selected American Authors/Topics since 1900 (3) One of the following: ENGL 362 Postcolonial Literature (3) ENGL 369 Selected World Authors/Topics (3) One of the following: ENGL 394 Literary Criticism (3) ENGL 396 Composition Theory and Pedagogy (3) One of the following: ENGL 494 Literature Seminar (3) ENGL 496 Writing Seminar (3)

#### Students must choose from one of the following emphases:

Literature (15 credits) Five of the following: ENGL 244 Restoration and Early 18th Century Literature (3) ENGL 246 Romantic Period (3) ENGL 324 From Fiction to Cinema (3) ENGL 342 Victorian Period (3) ENGL 344 Modern British Literature (3) ENGL 347 Milton (3) ENGL 348 Shakespeare (3) ENGL 349 Selected British Authors/Topics (3) ENGL 2xx/3xx/4xx English elective or ENGL 198 Introduction to Creative Writing (3-6)

#### Writing (15 credits)

ENGL 198 Introduction to Creative Writing (3) Four of the following: ENGL 112 Newswriting (3) ENGL 211 Writing for Business (3) ENGL 212 Magazine Writing (3) ENGL 301 Literary Nonfiction Workshop (3) ENGL 302 Fiction Workshop (3)

ENGL 303 Playwriting Workshop (3) ENGL 305 Literary Journalism (3) ENGL 306 Poetry Workshop (3) ENGL 309 Selected Writing Topic/Genre (3) ENGL 2xx/3xx/4xx English elective (3) ENGL 230 Linguistics (3) English with Teaching Certification Major (79 credits) ENGL 196 Introduction to English Studies (3) ENGL 304 Advanced Writing (3) One of the following: ENGL 394 Literary Criticism (3) ENGL 396 Composition Theory and Pedagogy (3) ENGL 222 Young Adult Literature (3) ENGL 242 Medieval-Renaissance English Literature (3) One of the following: ENGL 252 American Literature before 1900 (3) ENGL 358 Selected American Authors/Topics before 1900 (3) One of the following: ENGL 352 Modern American Literature (3) ENGL 354 Contemporary American Poetry (3) ENGL 356 African-American Literature (3) ENGL 359 Selected American Authors/Topics since 1900 (3) One of the following: ENGL 362 Postcolonial Literature (3) ENGL 369 Selected World Authors/Topics (3) ENGL 494 Literature Seminar (3) ENGL 230 Linguistics (3) ENGL 330 Methods of Teaching English as a Second Language (3) Three of the following: ENGL 244 Restoration and Early 18th Century Literature (3) ENGL 246 Romantic Period (3) ENGL 324 From Fiction to Cinema (3) ENGL 342 Victorian Period (3) ENGL 344 Modern British Literature (3) ENGL 347 Milton (3) ENGL 348 Shakespeare (3) ENGL 349 Selected British Authors/Topics (3) ENGL xxx English elective (non-General Education) (3) One of the following: ENGL 198 Introduction to Creative Writing (3) COMM 201 Oral Interpretation of Literature (3) COMM 211 Media in Everyday Life (3) COMM 218 Mass Media and Society (3) THEA 110 Introduction to Theatre (3) THEA 120 Introduction of Acting (3) THEA 150 Introduction to Technical Theatre (3) THEA 261 Theatre for Young Audiences (3) 6 credits of MATH/COSC/STAT xxx GenEd Math/Comp. Sci./Statistics (6) EDUC 120 The Teaching Profession (with Field Experience) (1) EDUC 201 Education and American Society (3) EDUC 203 Educational Psychology (3) EDUC 318 Secondary Learning Environments (with Field Experience) (1) EDUC 331 Instructional Design and Assessment for Secondary Education (3) **Professional Semester:** ENGL 407 Secondary English Curriculum and Instruction (3) PSYC 311 Adolescent Development (3) EDUC 420 Professional Issues in Education (2) EDUC 435 Student Teaching: Secondary (9)

#### English Minor (18 credits)

Fifteen (15) credits must be 200-level or above Three credits of British Literature (3) Three credits of American Literature (3) Three credits of literature before 1900 (3) Nine credits of ENGL electives (9)

#### ENGL 112 (formerly ENG 109) Newswriting (3)

Introduction to journalism, including study and practice in writing news, with some attention to issues and controversies in journalism as they affect editors and writers.

#### ENGL 122 (formerly ENG 234) Introduction to Poetry (3)

Poems of various periods and genres will be studied with particular attention given to the English-American tradition. Students will learn how reading poetry differs from reading other forms of discourse, and how to enjoy reading poetry more fully. Meets General Education Literature requirement.

#### ENGL 124 (formerly ENG 228) Short Story (3)

An introduction to the genre of the short story. Examination of the elements (e.g., plot, characterization, narrative point of view, metaphor, symbol) of classic to contemporary stories, paying particular attention to the changes in the ways writers perceive the world. Meets General Education Literature requirement.

#### ENGL 126 (formerly ENG 226) From Script to Screen (3)

Introduction to strategies for interpreting major plays written in English with primary focus on Shakespeare. Evaluates changes and adaptations as plays are transformed into film, with a goal of helping students become critical viewers of the screen. Meets General Education Literature requirement.

#### ENGL 142 (formerly ENG 214) Selected Works of British Literature (3)

A consideration of the British literary tradition from Anglo-Saxon times to the 20th century, with a sampling of some characteristic writers and works from various periods. Meets General Education Literature requirement.

#### ENGL 144 (formerly ENG 212) Nineteenth-Century British Women Writers (3)

Introduction to several genres of literature written by outstanding British women writers of the 19th century. Through its focus on early writings in the women's movement, the course will provide a context for developments in 20th-century women's discourse. Meets General Education Literature requirement.

#### ENGL 146 (formerly ENG 215) Writing of the Inklings (3)

A study of literature composed by the Inklings, the British writing group that numbered among its members C. S. Lewis and J. R. R. Tolkien, as well as its peers and inspirers. Meets General Education Literature requirement.

#### ENGL 148 (formerly ENG 254) Introduction to Shakespeare (3)

Introductory study of selected plays and poems by Shakespeare. Meets General Education Literature requirement.

#### ENGL 152 (formerly ENG 218) Selected Works of American Literature (3)

Great works of American fiction, nonfiction, poetry, and drama will be read and discussed. Selections represent the colonial through the contemporary periods, but will vary from semester to semester and from instructor to instructor. Meets General Education Literature requirement.

### ENGL 154 (formerly ENG 242) Introduction to Ethnic Literatures of the United States (3)

Introduction to literature that explores the cultural diversity of the United States. Readings may be selected from the variety of ethnic literatures in the United States. At the discretion of the instructor individual courses may focus on a single ethnic literature such as African American or Chinese American literature, or may focus on comparing the literatures of various ethnic groups. Meets General Education Literature requirement.

#### ENGL 160 (formerly ENG 255) Introduction to World Literature (3)

Study of selected works other than British or American. Readings may be selected from African, Indian, Pacific Rim, Caribbean, and other literatures in translation. Meets General Education Literature requirement.

### ENGL 162 (formerly ENG 210) Of Gods and Humans: Literature of the Ancient World (3)

A study of some of the most important literary works of the Ancient World (Middle East, Greece, and Rome) with consideration given to the present relevance of the works as well as to their classical greatness. Meets General Education Literature requirement.

#### ENGL 164 (formerly ENG 224) Studies in the Bible as Literature (3)

Study of selections from the Bible with particular reference to literary types. Crosslisted with BIBL 287. Students may use this course to meet either the General Education Literature requirement or the General Education Knowledge of the Bible requirement (for students who entered Messiah College prior to Fall 2005), but not both.

#### ENGL 172 (formerly ENG 235) Literature and the Life of Faith (3)

Reading and discussion of fiction, poetry, and essays, primarily in the Judeo-Christian

tradition, which engage issues of faith and life. Meets General Education Literature requirement.

#### ENGL 174 (formerly ENG 231) Literature and the Environment (3)

Introduction to authors and works from the body of literature dealing with nature, creation, and the environment. Meets General Education Literature requirement.

#### ENGL 176 (formerly ENG 250) Twentieth-Century Women's Literature (3)

Modern works by women writers will be considered with an emphasis on how gender impacts literature. Meets General Education Literature requirement.

#### ENGL 196 (formerly ENG 108) Introduction to English Studies (3)

Focusing on the development of interpretive acuity in both written and oral discourse, this course offers an introduction to the history of literature and criticism in English and also provides insight into the English Major and its relevance to life beyond college.

#### ENGL 198 (formerly ENG 115) Introduction to Creative Writing (3)

An introduction to the principles and practice of imaginative writing in three genres: poetry, short story, and drama or creative non-fiction.

#### ENGL 211 Writing for Business (3)

Designed to improve clarity, conciseness, and speed in writing for the business world. Emphasis is on organizing written business communications to meet the readers' needs. Cross-listed with BUSA 211.

#### ENGL 212 (formerly ENG 306) Magazine Writing (3)

Introduction to magazine journalism, entailing the planning, research, and writing of several feature articles, and their submission for publication. Emphasizes interview techniques, correspondence with editors, and the writer's development of long-range publishing plans.

#### ENGL 222 (formerly ENG 316) Young Adult Literature (3)

Readings of texts written for young adults as the first audience and into the expanding scholarship in the discipline of young adult literature.

#### ENGL 230 (formerly LING 309) Linguistics (3)

An introduction to language and linguistics with an emphasis on tools and methods for language study.

#### ENGL 242 (formerly ENG 320) Medieval-Renaissance English Literature (3)

A survey of literary texts in their historical and cultural contexts from the early medieval period to the Restoration of Charles II in 1660, with a focus on such major figures as Chaucer, Shakespeare, and Milton.

#### ENGL 244 (formerly ENG 345) Restoration and Early 18<sup>th</sup> Century Literature (3)

Explores the literature of an age often praised as "The Enlightenment" but condemned as morally corrupt. Topics may include Restoration Comedy, Augustan Satire, the revival of classicism, and the rise of prose fiction.

#### ENGL 246 (formerly ENG 348) Romantic Period (3)

Principal works of the English Romantic period, studied in the context of historical, philosophical, and poetic revolutions of the era.

#### ENGL 252 (formerly ENG 381) American Literature Before 1900 (3)

Study of major American writers from 1700 to 1900, dealing chronologically with their important works, with emphasis on various philosophical movements and historical events.

#### ENGL 301 Literary Nonfiction Workshop (3)

Instruction and practice in writing creative non-fiction prose genres including memoir, lyric essays, and historical accounts, with special attention to the use of literary elements including characterization, understatement, irony, narrative voice, allegory, metaphor, and story structure. Students will emulate styles and techniques found in the assigned pieces, select some of these exercises for expansion, refinement, and in-class workshopping. Prerequisite ENG 115 or Instructor's consent.

#### ENGL 302 Fiction Workshop (3)

Instruction and practice in writing short stories, aided by reading and studying published short stories and novels. Students will learn how to prepare submissions for contests and publications. Prerequisite: ENGL 198 or the Instructor's consent.

#### ENGL 303 Playwriting Workshop (3)

Instruction and practice in the fundamentals of writing plays to be performed for the theater. Classroom work is a mix of reading contemporary plays and writing exercises to become acquainted with the principles of playwriting. Coursework culminates in writing a full one-act play and doing a staged reading for an audience. Prerequisite ENGL 115 or Instructor's consent.

#### ENGL 304 Advanced Writing (3)

Introduction to and practice in advanced levels of expository writing, as well as focus on evaluation skills and the process of writing.

#### ENGL 305 Literary Journalism (3)

This course helps students develop their skills in writing about literature for non-academic audiences. Students will give extensive attention to the various forms of book reviewing and the business of literary journalism. At the discretion of the instructor some attention will be given to author profiles, interviews, and cultural commentary. Because literary journalism often addresses questions of aesthetic quality, students will be introduced to some of the major theoretical issues concerning aesthetic judgment and taste. Finally, because the course focuses on reviewing recent fiction in the United States, students will be introduced to major trends in contemporary fiction and the cultural context from which it springs.

#### ENGL 306 (formerly ENG 303) Poetry Workshop (3)

Creative writing workshop emphasizing revision of material. Students read extensively from their own poetry, read the published poetry of others, and learn how to prepare submissions for contests and publications. Prerequisite: ENGL 198 or the Instructor's consent.

#### ENGL 309 (formerly ENG 376) Selected Writing Topic/Genre (3)

Intensive study and practice of a selected topic, genre, technique, or school of writing. Course emphasizes extensive revision and in-class critique (subjects to be announced).

#### ENGL 324 (formerly ENG 372) From Fiction to Cinema (3)

Consideration of basic elements of literary and film analysis with an emphasis on short stories and novels that have been made into films. Examples will be considered with the hope of discovering some of the advantages and disadvantages of translating fiction into film. Meets General Education Literature requirement.

### ENGL 330 (formerly LING 312) Methodology in Teaching English as a Second Language (3)

Emphasizes contemporary programs, materials, and methods of teaching English to speakers of other languages. Review of research and available materials. Practicum required.

#### ENGL 342 (formerly ENG 350) Victorian Period (3)

Major Victorian writers studied against the social, philosophical, and historical background of their time.

#### ENGL 344 (formerly ENG 352) Modern British Literature (3)

Authors from Conrad to the mid- $20^{\text{th}}$  Century representing major literary trends in the period.

#### ENGL 346 (formerly ENG 321) The English Novel (3)

Development of the English novel as an art form from its beginning to the 20th Century, including critical reading of about ten novels by representative novelists.

#### ENGL 347 Milton (3)

Advanced study of the English poet John Milton, including all of Milton's major poems and selections from his minor poems and prose works. The course will attend to the historical, political, theological and cultural contexts of England in the 17th Century. The course will investigate both Milton's classicism (Renaissance) and biblicism (Reformation) in order to discern and appropriate his particular embodiment of Christian humanism. Finally, the course will also investigate Milton's vocation as a Christian poet who engages his task as a form of spiritual and public service, asking whether Milton can serve as a model for the Christian poet/artist in our own culture.

#### ENGL 348 (formerly ENG 364) Shakespeare (3)

Advanced study of Shakespeare's dramatic texts, with particular attention to the cultural and historical context for these texts, along with some consideration of Shakespeare as cultural icon.

#### ENGL 349 (formerly ENG 368) Selected British Authors/Topics (3)

Intensive study of a major author, a group of authors, a literary movement, a genre or some other selected topic focusing on British literary traditions (subjects to be announced).

#### ENGL 352 (formerly ENG 382) Modern American Literature (3)

Study of 20<sup>th</sup>-Century American authors to the mid-20<sup>th</sup>-Century, with particular emphasis on modernism in literature. Includes fiction, plays, and poetry.

#### ENGL 354 (formerly ENG 385) Contemporary American Poetry (3)

Survey of major American poets from World War II to the present, emphasizing the schools, movements, or regions with which these writers have been associated.

#### ENGL 356 Ethnic Literature of the United States (3)

Advanced study of literature that emphasizes the ethnic diversity of the United States. Particular attention will be given to intersection of race and ethnicity as reflected in the form and content of literary works. Readings may be selected from the variety of ethnic literatures. At the discretion of the instructor individual courses may focus on a single ethnic literature, or may focus on comparing the literatures of various ethnic groups.

#### ENGL 358 (formerly ENG 366) Selected American Authors/Topics Before 1900 (3)

Intensive study of a major author, a group of authors, a literary movement, a genre or some other selected topic focusing on American literary traditions prior to 1900 (subjects to be announced).

# ENGL 359 (formerly ENG 367) Selected American Authors/Topics Since 1900 (3) Intensive study of a major author, a group of authors, a literary movement, a genre or some other selected topic focusing on American literary traditions since 1900 (subjects to be announced).

#### ENGL 362 (formerly ENG 392) Postcolonial Literature (3)

Advanced study of non-Western literature written in English. Readings may be selected from African, Indian, Pacific Rim, and/or Caribbean literatures. At the instructor's discretion, students will focus on a single literature or a comparative analysis of more than one literature. Some attention will be given to theoretical and cultural issues deriving from the encounter of diverse world cultures with English linguistic and literary traditions.

#### ENGL 369 (formerly ENG 369) Selected World Authors/Topics (3)

Intensive study of a major author, a group of authors, a literary movement, a genre or some other selected topic focusing on literary traditions other than British or American (subjects to be announced).

#### ENGL 379 (formerly ENG 371) Selected General Authors/Topics (3)

Intensive study of a group of authors, a literary movement, a genre or some other selected topic that crosses the geographical boundaries of traditional literary courses, (i.e., courses that focus on modernism, postmodernism, religion and literature or

other topics that are not defined by geographical and national boundaries) (subjects to be announced).

#### ENGL 391 English-Journalism Practicum (1-3)

Work experience under professional supervision in areas such as public relations, journalism, and publishing. Open to junior and senior English/journalism majors who have completed at least four English/journalism courses. (Pass/Fail grade only.)

#### ENGL 392 (formerly ENG 393) Student Publications Practicum (1-3)

The editor-in-chief of official student publications may receive three elective credits per semester for significant contributions to the publications on a regular basis. The section editors of the official student publications may receive one elective credit per semester for significant contributions to the publications on a regular basis. May be repeated for a total of six credits. Students must complete both ENGL 112 Newswriting and ENGL 212 Magazine Writing prior to or concurrently with their service as editors in order to receive academic credit. (Pass/Fail grade only.) Consent of faculty advisor for the publication is required for enrollment.

#### ENGL 394 (formerly ENG 308) Literary Criticism (3)

Study of the chronological and topical development of literary criticism designed to introduce critical theory and critical practice.

#### ENGL 396 (formerly ENG 307) Composition Theory and Pedagogy (3)

Introduction to current theory and pedagogical practices in Composition. The class will examine various notions of writing and their implications for students' own practices as writers, editors, tutors, or prospective teachers. Students may be required to do a service learning project such as on or off campus tutoring, or the production of a magazine.

#### ENGL 407 Secondary English Curriculum and Instruction (3)

A seminar emphasizing disciplinary content issues that are specific to English teaching. Areas of focus include curricular and instructional decision-making processes; classroom management strategies; assessment techniques; adaptations for exceptional learners; instructional technology applications; and professional development. Concurrent enrollment with EDUC 420, EDUC 435, and PSYC/ HDFS 311. Prerequisite: admission to the Professional Semester.

#### ENGL 430 (formerly LING 313) Seminar and Field Experience in TESOL (3)

Advanced study of methodology with opportunity to combine theory and practice. Supervised field experience required. Prerequisite: LANG 312. (Alternate years, offered 2008-2009.)

#### ENGL 491 Independent Study (1-6)

Independent study or research (normally no more than three credits per term) under the supervision of an instructor whose approval must precede enrollment (minimum GPA of 3.0 required).

#### ENGL 494 (formerly ENG 493) Literature Seminar (3)

Study and practice in bibliographical and critical methods. Consideration of Christian responses to the discipline. Preparation and presentation of major project.

#### ENGL 496 (formerly ENG 494) Writing Seminar (3)

Exploration of the relationship of the Christian faith to the writer. Preparation of a major project for possible publication. Prerequisite: Two previous Messiah College writing courses or Instructor's consent.

#### ENGL 497, 498 Major Honors (3, 3)

Independent research program for junior- and senior-level students who have a strong academic record for a minimum of five previous semesters of college study. Overall G.P.A. of 3.5; G.P.A. of 3.7 in the major; and departmental approval required for enrollment.

#### Humanities

Humanities Major (36 credits)

This is an interdisciplinary major allowing great flexibility for students to structure their own program in consultation with their academic advisor. Please refer to the "Inter-disciplinary Humanities Major" section of the Catalog for more information about this program.

#### Journalism

The Journalism Major is a professional writing major preparing students for careers in magazine writing, newspaper writing or other careers in journalism. Students complete one year of their program at Messiah College-Philadelphia Campus.

#### Journalism Major (58-63 credits)

COMM 218 Mass Media and Society (3) COMM 341 Communication Theory (3) ENGL 112 Newswriting (3) ENGL 196 Introduction to English Studies (3) ENGL 212 Magazine Writing (3) ENGL 496 Writing Seminar (3) One of the following: One year on editorial staff of Swinging Bridge (2–6) Internship or Practicum in journalism/publishing (4) A minor (18–21 credits) is required. No more than six credits may overlap between the major and minor. Eighteen JOUR credits at Temple University including: JOUR 2101 Journalism Research (3) JOUR 3196 Journalism and the Law (3) or IOUR 3704 Ethical Issues in Journalism (3) One of the following:

JOUR 3701 Contemporary Media Issues (3) JOUR 3702 Race and Racism in the News (3) JOUR 3703 History of Journalism (3) STOC 2551 Mass Media Research (3) Nine credits chosen from the following: JOUR 2202 Editing the News (3) JOUR 2251 Sports Writing (2) JOUR 2252 Writing Humor (2) JOUR 3201 Investigative Reporting (3)\* JOUR 3252 Editorial Writing (2) JOUR 3303 Magazine Design (3) JOUR 3304 Magazine Editing/Design (4)\* JOUR 3601 Publishing to the Web (3)\* JPRA xxxx Journalism elective (200-level or above) (3)

**NOTE:** The Journalism major requires one year of study at the Messiah College-Philadelphia Campus in conjunction with Temple University.

\*See Temple Catalog for prerequisites

#### Journalism Minor

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Journalism Minor (18 credits)

COMM 218 Mass Media and Society (3)

ENGL 112 Newswriting (3)

ENGL 306 Magazine Writing (3)

Three of the following:

JOUR 1114 Design for Journalists (3)

JOUR 2101 Electronic Information Gathering (3)

JOUR 2202 Editing the News (3)

JOUR 2501 Broadcast News Writing (3)

JOUR 3201 Investigative Reporting (3)

JOUR 3301 Magazine Article Editing (3)

JOUR 3703 History of Journalism (3)

JOUR 3704 Ethical Issues in Journalism (3)

ENGL 304 Advanced Writing (3)
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**NOTE:** Journalism Minor requires one semester at the Messiah College-Philadelphia Campus. JOUR courses are only taught at Temple University.

#### Teaching English to Speakers of Other Languages Minor (TESOL)

Courses in theoretical and applied linguistics prepare students to learn, teach, and analyze language using methods and tools from contemporary linguistic theory.

Teaching English to Speakers of Other Languages Specialist Certificate (15–24 credits)\*

ANTH 101 Introduction to Cultural Anthropology (3)
LING 309 Linguistics (3)
LING 312 Methodology in Teaching English as a Second Language (3)
LING 313 Seminar and Field Experience in TESOL (3)
EDUC 246 Socio-Cultural Perspectives on Education (3)
Competence in a second language equivalent to the completion of the 201 level (0–9)

\*Available only to students already pursuing an Early Childhood, Elementary, or Secondary teaching certification.

#### Teaching English to Speakers of Other Languages (TESOL) Minor (15-24 credits)

ANTH 101 Introduction to Cultural Anthropology (3)

LING 309 Linguistics (3)

LING 312 Methodology in Teaching English as a Second Language (3)

LING 313 Seminar and Field Experience in TESOL (3)

EDUC 246 Socio-Cultural Perspectives on Education (3)

Competence in a second language equivalent to the completion of the 201 level (0-9)

#### LING 309 (formerly LNG 309) Linguistics (3)

An introduction to language and linguistics with an emphasis on tools and methods for language study.

### LING 312 (formerly LNG 312) Methodology in Teaching English as a Second Language (3)

Emphasizes contemporary programs, materials, and methods of teaching English to speakers of other languages. Review of research and available materials. Practicum required.

#### LING 313 (formerly LNG 313) Seminar and Field Experience in TESOL (3)

Advanced study of methodology with opportunity to combine theory and practice. Supervised field experience required. Prerequisite: LANG 312. (Alternate years,, offered 2008–2009).

### HISTORY

#### Norman J. Wilson, Ph.D.

Chair, Department of History

#### Faculty

Professors J. Huffman, N. Wilson

Associate Professors J. Fea, J. LaGrand, B. Michael

Assistant Professors D. Pettegrew, A. Stoner-Eby

#### **Majors and Minors**

The Department of History offers the following majors: History (B.A.) Concentrations: American History Classical and Medieval European History Modern European History Public History World History History with Social Studies Teaching Certification (B.A.) Humanities (B.A.)

The Department of History offers the following minor: History

#### **Curricular Opportunities**

The Department of History provides a wide range of course offerings in American, European, and World History. In addition, the Department faculty place a strong emphasis on the cultivation of specific skills and career-related abilities such as critical thinking, high quality written and oral communication, and methods of research. At Messiah College the academic study of history is also grounded in the Christian liberal arts tradition, and as such it promotes life-long learning and historical reflection on today's society and culture.

In addition to course offerings, the Department offers many enrichment opportunities for majors—including working with professors on research projects; internships with museums, historical archives, and governmental agencies; study semesters around the world; and teaching in local schools. Students enjoy the benefit of studying in several learning environments, creatively connecting the past to the present. Graduates from this Department are prepared to enter a variety of professions and occupations from collegiate and secondary level teaching, museums, archives, historic preservation, public history, and journalism to government service, law, business administration and management. The discipline of history develops analytical, communication, and organizational skills that prepare students for a broad range of careers.

#### History

#### History Major (39-43 credits)

In addition to intensive examination of a wide range of historical periods and subjects, the history major allows room for students to pursue other studies. For example, some take a second major, and many complete minors in areas from English, foreign languages, economics, and journalism to communication, business, and politics. Students are also required to seek experiential learning, either through study abroad or through an internship experience.

HIST 141 U.S. History Survey to 1865 (3) HIST 142 U.S. History Survey Since 1865 (3) One of the following: HIST 101 Western Civilization Before 1500 (3) HIST 102 Western Civilization Since 1500 (3) One of the following: HIST 171 World Civilizations: Bronze Age to 1500 (3) HIST 172 World Civilizations: 1500 to Present(3) HIST 258 Historical Methods (3) One 300-level Classical and Medieval European History course\* (3) One 300-level Modern European History course\* (3) One 300-level Non-Western History course\* (3) One 300-level American History course\* (3) HIST 401 Historiography and Philosophy of History (3) Three additional 300-level history courses (9 hours total) Experiential Learning Component\*\* (0-4)

### Students may use their three additional 300-level history courses to pursue one of the following history concentrations:

American History (9 credits)

Three of the following:HIST 151 The Wild, Wild West: Battles Over the American West and the Western Image (3)HIST 341 Colonial America (3)

HIST 342 America in the Age of the Revolution (3)

HIST 344 Civil War America (3)

HIST 346 From Omaha to Hiroshima: U.S. History, 1890-1945 (3)

HIST 347 Modern America: U.S. History, 1945–Present (3)

HIST 351 Native American History (3)

HIST 352 African-American History Since 1865 (3)

HIST 353 Immigrant America (3)

HIST 355 U.S. Urban History (3)

HIST 362 United States Foreign Policy (3)

HIST 391 Historical Study of Peace (3)

HIST 392 Women and Gender in History (3)

#### Classical and Medieval European History (9 credits)

Three of the following:

HIST 301 Ancient Greece (3)

HIST 302 Ancient Rome (3)

HIST 303 Late Antiquity (3)

HIST 305 Archaeology and Historical Interpretation: Greece and Rome (3)

HIST 310 Medieval Europe (3)

HIST 313 Renaissance and Reformation Europe (3)

HIST 319 Topics in Classical and Medieval European History (3)

#### Modern European History (9 credits)

Three of the following:

HIST 132 European Missionaries in Africa (3)

HIST 304 Tudor/Stuart England: 1400-1700 (3)

HIST 321 The Age of Monarchy: 17th and 18th Century Europe (3)

HIST 322 Modern Europe: 1789–1918 (3)

HIST 323 Europe in the 20th Century (3)

HIST 324 European Imperialism and Its Legacies: 1500 to Present (3)

HIST 331 Modern Britain (3)

HIST 332 Modern Germany (3)

HIST 391 Historical Study of Peace (3)

HIST 392 Women and Gender in History (3)

#### Public History (13-18 credits)

HIST 393 Public History

Historical Internship (INTE 394/395; required from Experiential Learning Component – 4 to 9 credits)

Two of the following:

HIST 151 The Wild, Wild West: Battles Over the American West and the Western Image (3)

HIST 341 Colonial America (3)

HIST 344 Civil War America (3)

HIST 355 U.S. Urban History (3)

HIST 399 Topics: History of Pennsylvania (3)

HIST 495 Internship in Historical Research (6 to 9)

#### World History (9 credits)

- Three of the following: HIST 132 European Missionaries in Africa (3) HIST 371 Premodern Civilizations of Asia (3) HIST 372 Modern Civilizations of Asia 93) HIST 373 History of India before 1500 (3) HIST 374 History of Modern India and Pakistan (3) HIST 375 Gandhi's India: 1869–1948 (3) HIST 379 History of the Middle East (3) HIST 381 History of Africa (3) HIST 383 South Africa: Struggle for Freedom (3) HIST 391 Historical Study of Peace (3) HIST 392 Women and Gender in History (3)
- \* HIST 391 Historical Study of Peace, HIST 392 Women and Gender in History, and HIST 393 Public History count as concentration courses but do not count as the "One 300-level American, Modern European, Non-Western, or Classical and Medieval European History course."

\*\*History majors must participate in one of the following options:

**Option 1** – Participation in an approved off-campus study program, with at least one history course in the semester's curriculum. The history course(s) will count toward either the core requirements or the elective requirements, and therefore will result in no net increase in credits required for the major. See your advisor or Department Chair for a complete list and more information about the study abroad programs.

**Option 2** – An approved historical Internship (INTE 394/5) of up to nine credits during the academic year or during the summer in one of the following areas: archives, museums, historical libraries and societies, historical preservation, historical research, public history, or Richmond University Internships in London.

#### History Major with Social Studies Certification (88 credits)

History Majors wishing to be certified for social studies teaching on the secondary level (grades 7–12) may do so by admission into the Teacher Education Program. In addition to the history major, students use their elective credits for supporting courses in economics, politics, sociology, psychology, geography, and education.

#### Completion of the History major plus the following courses:

GEOG 103 Regional Geography of the World (3) POLI 113 American Government (3) One of the following: POLI 212 International Politics (3) POLI 213 Comparative Politics (3) ECON 110 Contemporary Economics (3) SOCI 101 Principles of Sociology (3) ENGL xxx American or British Literature (3) Six credits of MATH/COSC/STAT xxx General Education Mathematics/ Computer Science/Statistics (6) Education Requirements: EDUC 120 The Teaching Profession (with Field Experience) (1)
EDUC 201 Education and American Society (3)
EDUC 203 Educational Psychology (3)
EDUC 318 Secondary Learning Environments (with Field Experience) (1)
EDUC 331 Instructional Design and Assessment for Secondary Education (3)
Professional Semester:
HIST 407 Secondary Social Studies Curriculum and Instruction (3)
PSYC/HDFS 311 Adolescent Development (3)
EDUC 420 Professional Issues in Education (2)
EDUC 435 Student Teaching: Secondary (9)

#### History Minor (18 credits)

One of the following: HIST 141 Survey of U.S. History Before 1865 (3) HIST 142 Survey of U.S. History Since 1865 (3) HIST 258 Historical Methods (3) Three credits upper-division American history (3) Three credits upper-division non-Western history (3) Three credits HIST electives (3)

#### **Humanities**

#### Humanities Major (36 credits)

This is an interdisciplinary major allowing great flexibility for students to structure their own program in consultation with their academic advisor. Please refer to the "Inter-disciplinary Humanities Major" section of the Catalog for more information about this program.

#### HIST 101 (formerly HIS 105) Western Civilization Before 1500 (3)

A survey of Western Civilization from pre-history to 1500. Major themes include the fundamental nature of human civilization, the Judeo-Christian tradition and its place among the civilizations of human history, and the nature of various cultural worldviews that emerged in classical and medieval Western civilization. Meets General Education European History requirement.

#### HIST 102 (formerly HIS 106) Western Civilization Since 1500 (3)

A survey of the social, economic, political, religious, and cultural developments in Western Civilization from 1500 to the present. Major themes include the emergence of a modern Western worldview, how with this worldview European nations came to dominate the other world civilizations, and how the traumas of the 20<sup>th</sup> Century caused a profound questioning of this modern world model. Meets General Education European History requirement.

### HIST 131 (formerly HIS 157) The Emergence of Modernity in the Western Imagination (3)

This course explores the accelerating pace of change that accompanied the emergence of modernity in Western Civilizations. It focuses on those areas of human thought and imagination that have crafted the ideas and values that distinguish the modern West from other times and other locations. Emphasis will be placed on how ideas and intellectuals have both shaped and evaluated social, economic, and political changes since the onset of the early modern era. Meets the General Education European History requirement.

#### HIST 132 European Missionaries in Africa (3)

This course focuses on one of the most significant developments of European history-the interaction of European peoples with the rest of the world after Columbus "discovered" the Americas in 1492. In particular, it examines the European missionary movement in Africa. This movement led to one of the most important legacies of Western interaction with Africa–African Christianity. Meets General Education European History requirement. (Offered January Term only.)

#### HIST 134 A Social History of Medieval England (3)

An exploration of the ways ordinary (and some not-so-ordinary) people coped with both daily life as well as major historical events that occurred in England from the Norman Conquest to the Tudor dynasty. Special emphasis is placed on life within the communities of family, village, court, church, and city. Meets General Education European History requirement. (Offered January Term only.)

#### HIST 141 (formerly HIS 103) U.S. History Survey to 1865 (3)

A survey stressing political, economic, diplomatic, and social themes. Begins with discussion of pre-Columbian America and ends with the Civil War. Meets General Education U.S. History requirement.

#### HIST 142 (formerly HIS 104) U.S. History Survey Since 1865 (3)

A survey stressing political, economic, diplomatic, and social themes. Begins with Reconstruction and continues through the present day. Meets General Education U.S. History requirement.

### HIST 151 (formerly HIS 152) The Wild, Wild West: Battles Over the American West and the Western Image (3)

A study of the history and mythology of the American West, including the effects of the Western image on Americans as a whole. Meets General Education U.S. History requirement. (Offered January Term only.)

#### HIST 154 Vietnam War America (3)

A study of the Vietnam War including its colonial roots, its military components, and its enduring influence on American society. Meets General Education U.S. History requirement. (Offered January Term only.)

#### HIST 156 Social Movements in Twentieth-Century America (3)

An examination of organized social movements (e.g., Progressivism, women's suffrage/rights, the Civil Rights movement and the Christian Right) that sought to transform some aspect of 20<sup>th</sup> century American society. Placing these movements into their historical contexts, this course examines their goals, methods, outcomes and their opponents—to better understand the nature of American society. Meets General Education U.S. History requirement. (Offered January Term only.)

#### HIST 171 (formerly HIS 233) World Civilizations: Bronze Age to 1500 (3)

A comparative survey of the social, cultural, political, religious, and economic developments in civilizations outside the western tradition from pre-history to 1500. Major themes include the fundamental nature of human civilization, the classical traditions of civilizations which emerged in Asia, Africa, the Near East, and the pre-Columbian Americas, and the growing interactions between these civilizations in classical and medieval world history. Meets General Education Non-Western Studies requirement.

#### HIST 172 (formerly HIS 236) World Civilizations: 1500 to Present (3)

A comparative survey of the social, cultural, political, religious, and economic developments in civilizations outside the western tradition from 1500 to the present. Major themes include the effects of Western imperialism on these civilizations, their responses to modernization, globalization, and westernization, and the post-colonial transformations of civilizations during the 20<sup>th</sup> Century. Meets General Education Non-Western Studies requirement.

#### HIST 258 Historical Methods (3)

An introduction to the "doing" of history including techniques, procedures, and skills of the working historian. The course will concentrate on research methodology, analytical and synthetic thinking skills, and the ability to organize and report research findings in both written and oral form. This course is designed specifically for sophomore History Majors and Minors and humanities-history concentration majors. (Offered Fall Semester only.)

#### HIST 301 Ancient Greece (3)

A survey of the ancient Greek world from prehistory to the period of the Roman Empire. The course focuses on Greek political ideals, socio-economic conditions, religious traditions, daily life, and the cultural contributions of ancient Greece, including historical writing, democratic systems, philosophy, drama, art, and architecture.

#### HIST 302 Ancient Rome (3)

A study of the Roman world examining the growth of Rome from a small city-state to the dominant power of the Mediterranean. The course focuses on political ideals, culture, socio-economic conditions, daily life, religion, and the rise of Christianity within the Roman Empire.

#### HIST 303 Late Antiquity: AD 250-700 (3)

A study of the transformation of the Roman world from the third to seventh centuries AD, examining the end of the ancient world and the birth of new medieval societies in Europe and the Mediterranean. The course gives attention to such topics as the Christianization of the Roman Empire, shifting boundaries of empire and political structures, changes in society and economy, transformation of town and countryside, Germanic migrations, the rise of the papacy, and the emergence of Islam.

#### HIST 304 (formerly HIS 359) Tudor/Stuart England: 1400–1700 (3)

An introduction to the history of England from the Later Middle Ages through the Tudor/Stuart era. Major themes include social, economic, and religious change and the ways in which those changes influenced politics and culture from the Wars of the Roses through the Elizabethan Age and the English Civil War.

#### HIST 305 Topics: Archaeology and Historical Interpretation: Greece and Rome (3)

An introduction to the methods of archaeology as they relate to and produce historical analysis, interpretation, and conclusions. The course focuses on the material cultures of Greece and Rome as revealed through several centuries of archaeological investigation.

#### HIST 310 (formerly HIST 302/HIS 343) Medieval Europe: AD 700-1500 (3)

A survey of the cultural, social, economic, religious, and political developments in Europe from the eighth to fifteenth centuries AD. Major themes include the the emergence of medieval social institutions and modes of thought, Christian monasticism and spirituality, and the cultural interactions of the Latin West, the Byzantine East, and the Islamic world.

#### HIST 319 Topics in Classical and Medieval European History (3)

Selected topics related to a specific area of Classical and Medieval European history such as Greek and Roman history, Late Antiquity, the Medieval world, and Mediterranean archaeology.

### HIST 321 (formerly HIS 321) The Age of Monarchy: 17th- and 18th-Century Europe (3)

A study of European society, politics, and culture in the "early modern" period, from the age of Religious Wars through the American War of Independence and the French Revolution. Topics include the rise of modern nation-states, absolute monarchs, constitutional governments, the spread of printing, the Enlightenment and its critics, changing patterns and practices of daily life, traditional religion in an emerging scientific culture, and Europe's colonial settlements.

#### HIST 322 (formerly HIS 352) Modern Europe: 1789–1918 (3)

A study of European society, politics, and culture from the Age of Napoleon through the First World War. Topics include the development of modern Western ideologies such as nationalism, romanticism, liberalism, capitalism, socialism, and imperialism; political revolutions and reforms; industrialization, urbanization, and the new commodity culture; changing class, family, and gender relations; the cult of progress; and the status of religion in an age of doubt.

#### HIST 323 (formerly HIS 353) Europe in the 20th Century (3)

A study of European society, politics, and culture from the Russian Revolution to the present day. Topics include the World Wars and the Holocaust; the disintegration of Europe's overseas empires; women's, students', and labor movements; changing family structures and social reforms; communism, the Cold War, and the collapse of the Soviet Union; European unification and the spread of democracy; ongoing ethnic and religious conflicts; and visions for the new millenium.

#### HIST 324 European Imperialism and Its Legacies: 1500 to Present (3)

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This course focuses on one of the most crucial facets of modern European history-the interaction of European peoples with the rest of the world after Columbus "discovered" the Americas in 1492. This course examines European imperialism in the Americas after 1492 as well as the "New Imperialism" of the late 19th century, which occurred in a very different historical context. It considers the two-way significance of European imperialism—its impact on the Americas, Africa, and Asia, and on Europe itself.

#### HIST 331 (formerly HIS 361) Modern Britain (3)

A survey of British society, politics, and culture from the 18th century to the present day. Beginning with the unification of England, Wales, and Scotland in 1707, we shall examine how an island nation smaller than the state of Texas became the world's richest power and claimed dominion over one-fifth of the world's population, and then began its 20th-Century industrial decline.

#### HIST 332 (formerly HIS 368) Modern Germany (3)

A survey of the emergence of the modern state of Germany from the aftermath of the Thirty Years War (1618–1648) to the reunification of this nation in 1991. Major themes include the forces of nationalism, liberalism, and imperialism; the Nazi era and the subsequent rehabilitation of Germany within the Cold War and post-Cold War context.

#### HIST 341 (formerly HIS 337) Colonial America (3)

A study of the political, social, and religious history of the North American colonies from 1620 to 1763. Emphases include the transformation of European and African settlers into a distinctly American people, and the often stormy relationships between Native Americans and European immigrants.

#### HIST 342 (formerly HIS 335) America in the Age of the Revolution (3)

An examination of the development of the United States between 1790 and 1848. Emphasis is given to the political, social, economic, and cultural factors which shaped American life during the Jeffersonian and Jacksonian eras.

#### HIST 344 (formerly HIS 324) Civil War America (3)

An examination of the causes, nature, and consequences of the American Civil War. Covers the period from 1848–1877 and discusses such topics as the nature of slavery, the rise of abolitionism, the collapse and reconstruction of the American political system, and the realities of war. Meets General Education U.S. History requirement.

### HIST 346 (formerly HIS 336) From Omaha to Hiroshima: U.S. History, 1890–1945 (3)

A study of the U.S. from the Populist movement through the end of World War II. Focus is on the transformation of a rural, agrarian society into an urban industrial world power.

## HIST 347 (formerly HIS 338) Modern America: U.S. History, 1945–Present (3) A study of the U.S. from the end of World War II to the present. Special attention given to the social and cultural influences of the Cold War, changes in the political

economy, and protest movements in the late 20th Century.

#### HIST 351 (formerly HIS 333) Native American History (3)

A survey of Native American history from before European contact to the present day. Addresses social, cultural, economic, political, and military issues. Meets General Education Pluralism requirement.

#### HIST 352 (formerly HIS 327) African-American History Since 1865 (3)

A study of historical change in the lives, experiences, legal status, and social status of African-Americans from the abolition of slavery to the present. Special attention is given to African-American campaigns to secure political and social equality. Meets General Education Pluralism requirement.

#### HIST 353 (formerly HIS 339) Immigrant America (3)

A history of immigration and immigrant groups in the United States from 1830 to the present. Covers major waves of immigration and focuses on the diverse cultural heritage, social structure, and political activism of immigrants from Europe, the Americas, and Asia. Meets General Education Pluralism requirement.

#### HIST 355 (formerly HIS 347) U.S. Urban History (3)

An interdisciplinary examination of American cities from the Colonial Era to the present. Addresses social, economic, political, and technological issues. Meets General Education Pluralism requirement.

#### HIST 362 (formerly HIS 315) U.S. Foreign Policy (3)

An examination of U.S. foreign policy with special attention given to the Cold War and its aftermath. Cross-listed with POLI 315.

#### HIST 371 (formerly HIS 342) Premodern Civilizations of Asia (3)

A broad introduction to the historical transformations of government and society in Asia from the earliest times to the 16th Century. The twin themes of order and encounters will form the thematic foundations for analyzing the different ways in which Asian societies in China, Japan, and India grew in complexity as they crafted elaborate institutional arrangements for governance, and also as they became interconnected within wider circuits of exchange of ideas, commodities, and populations. The course will end at the moment of early modern encounters with Europeans.

#### HIST 372 (formerly HIS 349) Modern Civilizations of Asia (3)

A broad introduction to the historical transformations of government and society in Asia from the 16th Century onward. Focusing on China, Japan, India, and southeast Asia, a number of inter-related themes will be explored: the cultures of these regions, the different ways in which they were brought under the influence of western powers, the subsequent transformations and adaptations these societies underwent, and the sometimes painful emergence of new nation states in Asia. Topics such as capitalism, cross-cultural encounter, resistance, governance, gender, social inequality, institutional change, nationalism, and revolution will form the critical focus of this course.

#### HIST 373 (formerly HIS 344) History of India before 1500 (3)

An exploration of Indus Valley cultures, the Vedic age, Hindu, Buddhistic, and Jaina 3241d-vMwssichul30kling@cmslan2007pp20088medieval state formations, Islamicate cul-

ture and Sultanic regimes. Major themes include questions of culture, exchange, state making, governance, and world views, which reveal the multilayered and complex character of the subcontinent's history—one that goes beyond simple labels of "Hindu" and "Muslim."

#### HIST 374 (formerly HIS 346) History of Modern India and Pakistan (3)

An examination of the broad contours of south Asian history after 1500 by considering the histories of those parts of the sub-continent covered by India and Pakistan (and by extension, Bangladesh). There will also be a brief detour through the Himalayan world by looking closely at the history of Gorkha (present-day Nepal). Major themes include: the Mughal Empire, European colonial interventions and indigenous responses (reform, rebellion, and nationalism), and the painful emergence of south Asian nations and their postcolonial predicaments. These themes will also intersect with the following concerns: Mughal state making, colonial governance and its forms of knowledge, subaltern histories, gender and caste studies, communalism, and discourses on development.

#### HIST 375 (formerly HIS 354) Gandhi's India: 1869–1948 (3)

An examination of the dominant themes of Indian history that unfolded during the lifetime of one of its greatest leaders, *mahatma* Gandhi. Major themes include: the life, teachings and political practices of the *mahatma*, his allies and detractors, the growth of Indian nationalism with all its internal tensions, the colonial state and its forms of knowledge, subaltern social movements, gender relations, elite and popular cultural expressions, communalism, the Partition (1947) and formation of Pakistan, the postcolonial Indian state, environmental histories, Indian diasporas, and the subcontinent's development regimes.

#### HIST 379 History of the Middle East (3)

This course introduces students to the history of the Middle East. It provides an opportunity to move beyond the headlines that appear in the news media almost every day. The course surveys Arab history in the Middle East and North Africa focusing particularly on the rise of Islam, subsequent Islamic kingdoms and empires, and the interaction of the Islamic world with the West. Particular attention will also be paid to understanding the religion of Islam as well as the Israeli-Palestinian conflict. Meets General Education Non-Western Studies requirement.

#### HIST 381 History of Africa (3)

This course introduces students to the richness and diversity of African history from earliest times to the present. From ancient Egypt to the post-colonial states; from medieval Islamic and Christian kingdoms to the modern missionary movement; from the Atlantic slave trade to the effects of European colonialism; from the involvement of medieval Swahili city-states in the world economy to the international debt crisis of African countries today; from the nationalist movements that won independence from European rule to the struggles of black South Africans against the apartheid regime, this course examines key themes and topics in the history of the enormous continent we call Africa.

#### HIST 383 South Africa: Struggle for Freedom (3)

This course examines one of the most amazing freedom movements of the 20th cen-

tury. In 1994, black South Africans finally achieved majority rule after more than 100 years of struggle against white minority rule. This course will explore the peoples and societies of South Africa, and the ways in which they responded to the increasing pressures and expansion of white rule. Particular attention will be paid to the movements which fought against the most racist system the world has seen: the Afrikaner apartheid regime established in 1948. The role of Christianity and the church and the role of the international community, particularly the U.S., in the anti-apartheid struggle will also be examined. Meets the General Education NonWestern Studies requirement.

# HIST 391 (formerly HIS 304) Historical Study of Peace (3)

This course centers on how people throughout history and across the world have responded to situations of conflict and oppression. Grounded in complicated historical reality, this course examines various social and political contexts in which humans have faced violence and injustice and the ways in which individuals and communities responded hopefully and positively if not always successfully. Particular attention will be paid to the role of religion in general and Christianity in particular in shaping people's ideas and actions in situations of conflict and oppression.

# HIST 392 (formerly HIS 313) Women and Gender in History (3)

This course puts women and gender at the center of historical inquiry using a comparative perspective. Thus, the construction of masculinity and femininity and the relations between men and women will be examined across the globe from earliest times to the present. In the Americas, Europe, Asia, Africa, and the Middle East, the significance of women and gender will be explored in such central institutions as the state, family, religion, and economy. Particular attention will be paid to the ways that women have negotiated their position throughout history, including the modern feminist movement that we know today. Meets the General Education Pluralism requirement.

#### HIST 393 Public History (3)

A study of how history is presented in the public sphere—including museums, commemorations, documentaries, community histories, and public memory. Addresses a variety of activities and careers for historians outside of academia. May include or be taken in conjunction with an internship.

# HIST 399(formerly HIS 360) Topics in History (3)

Selected topics related to a specific area of historical inquiry including American history, European history, non-Western history, and historiography.

# HIST 401 (formerly HIS 420) Historiography and Philosophy of History (3)

A study of the meaning and interpretation of history, with special attention to movements of historical thought and the historians who influenced those movements. This capstone seminar course is designed specifically for senior History Majors and Humanities–History Concentration Majors. (Offered Fall Semester only).

#### HIST 407 Secondary Social Studies Curriculum and Instruction (3)

A seminar emphasizing disciplinary content issues that are specific to social studies teaching. Areas of focus include curricular and instructional decision-making

processes; classroom management strategies; assessment techniques; adaptations for exceptional learners; instructional technology applications; and professional development. Concurrent enrollment with EDUC 420, EDUC 435, and PSYC/HDFS 311. Prerequisite: admission to the Professional Semester.

#### HIST 491 Independent Study (1-3)

Independent study or research under the supervision of an instructor whose approval must precede the student's enrollment.

#### HIST 495 Internship in Historical Research (6-9)

Assignment under professional guidance in an archives or historical collection.

#### HIST 497, 498 Major Honors (6)

Independent research program for students who have strong academic records for a minimum of five previous semesters of collegiate study. Overall GPA of 3.5 and Department of History faculty approval required for enrollment.

# Geography

#### GEOG 103 Regional Geography of the World (3)

A study of the world's major realms and regions. Major emphasis is placed upon mastering an understanding of the geographical characteristics distinctive to each of the earth's various realms and regions. <u>The Five Themes of Geography</u>: location geography, cultural geography, political geography, economic geography and physical geography are highlighted. This course will introduce the students to both the "Pennsylvania Academic Standards for Geography" and "Geography for Life: National Geography Standards."

# Latin

# LATN 101 Fundamentals of Latin I (3)

The essentials of Latin grammar, syntax, and vocabulary are studied to build comprehension in reading and writing elementary Latin. Students will also learn more about the structures of their own language as well as the nature of classical Latin culture and society through readings from representative ancient authors. Meets General Education Language requirement.

# LATN 102 Fundamentals of Latin II (3)

The study of more subtle grammatical forms, syntax and vocabulary building are emphasized in an effort to prepare students to translate almost any classical Latin text. The study of classical Latin culture and society continues through readings from representative ancient authors. Prerequisite: LATN 101. Meets General Education Language requirement.

# LATN 201 Intermediate Latin (3)

Review of Latin grammar and composition along with extensive cultural and literary readings from authors like Cicero, Caesar, Livy, Vergil, Ovid, Pliny, Augustine, Jerome's Vulgate Bible, and some medieval Latin texts. Prerequisites: LATN 101 and 102. Meets General Education Language requirement.

# MODERN LANGUAGES

John A. Beaney, Ph.D. Chair, Department of Modern Languages

# Faculty

Professor J. Beaney Associate Professors L. Beck, K. Yúnez Assistant Professors M. Ciesielkiewicz, S. Rodriguez Senior Lecturer A. Ginck

Lecturer A. Arnedo-Aldrich

# **Majors and Minors**

The Department of Modern Languages offers the following majors: French (B.A.) German (B.A.) Spanish (B.A.) Spanish Business (B.A.)

The Department of Modern Languages offers the following minors: French German Spanish

Special Programs Philipps Universität–Marburg, Deutschland Universidad de Barcelona, España Universidad de San Francisco-Quito, Ecuador Université de Strasbourg, France

# **Modern Languages**

Students who major in French, German, or Spanish learn to communicate effectively with speakers of these languages, gain an understanding of how they perceive the world, and critically reflect on their own culture. To this end, they study the literary tradition of the French, German, or Spanish people and examine historical and contemporary cultures. Career possibilities include government, business, missions, translating and interpreting, teaching, and international placements in business or service.

All modern language majors fulfill some of their required courses in study abroad programs offered through Brethren Colleges Abroad. The French major requires study at the Université de Strasbourg. The German major requires study at Philipps-Universität–Marburg. The Spanish major requires study at the Universidad de Barcelona or the Universidad de San Francisco de Quito.

The study of language is required for students in all majors. The General Education Language/Cultures requirement can be met by the completion of three semesters of one modern language or by completing two semesters of one language in addition to a cross-cultural study tour (see General Education Requirements).

# French

The French major encompasses a wide variety of courses to study the language itself, as well as the history, literature, culture, and civilization of French-speaking people. Introductory level courses focus on grammar, phonetics, conversation, and composition, taught with an emphasis on oral proficiency. Intermediate and advanced courses are taught in French.

#### French Major (42 credits)

FREN 101 Fundamentals of French I (3) FREN 102 Fundamentals of French II (3) FREN 201 Intermediate French (3) FREN 206 French Culture and Language (3) LANG 493 Modern Languages Seminar (3) Twenty-seven credits from the following: At least nine (9) credits of the following: FREN 301 Contemporary French Culture (3) FREN 320 Selected Topics in French (3) FREN 401 Advanced Composition and Conversation (3) FREN 402 Advanced Composition and Conversation (3) At least fifteen (15) credits of the following: Approved French courses through the Brethren Colleges Abroad Program at the Université de Strasbourg. Students may select among courses in grammar, literature, history, art history, or political science. See the Department of Modern Languages for approved course descriptions.

#### French with Teaching Certification Major (80 credits)

Completion of the French major as listed plus the following courses: Six credits in MATH/COSC/STAT xxx General Education Mathematics/Computer Science/Statistics (6) ENGL xxx American or British Literature (3)

EDUC 120 The Teaching Profession (with Field Experience) (1)

EDUC 201 Education and American Society (3)

EDUC 203 Educational Psychology (3)

EDUC 318 Secondary Learning Environments (with Field Experience) (1)

EDUC 331 Instructional Design and Assessment for Secondary Education (3)

LANG 320 Foreign Language Teaching Methodology (2)

#### **Professional Semester**

LANG 407 Language Curriculum and Instruction (2)

HDFS/PSYC 311 Adolescent Development (3)

EDUC 420 Professional Issues in Education (2)

EDUC 435 Student Teaching: Secondary (9)

#### French Minor (21 credits)

FREN 201 Intermediate French (3)

FREN 206 French Culture and Language (3)

Two of the following:

FREN 301 Contemporary French Culture (3)

FREN 320 Selected Topics in French (3)

FREN 401 Advanced Composition and Conversation (3)

FREN 402 Advanced Composition and Conversation (3)

Nine additional credits fulfilled at either the Grantham Campus, or the Université de Strasbourg, France, from the approved list.

#### FREN 101, 102 Fundamentals of French I, II (3, 3)

Intensive study of the fundamentals of French grammar within a communicative approach to language learning. Introduction to French culture. Meets General Education Languages and Culture requirement.

#### FREN 201 Intermediate French (3)

Continuation of grammar principles with practical application in conversation. Introduction to composition through selected cultural and literary readings. Prerequisite: FREN 102 or the equivalent. Meets General Education Languages and Culture requirement.

#### FREN 206 French Culture and Language (3)

Study of the culture, geography, and history of France and the French-speaking world. Prerequisite: FREN 201 or equivalent.

#### FREN 301 Contemporary French Culture (3)

Topics include the French concepts of family, home, friendships, etc. Prerequisite: FREN 206 or Instructor's consent. (Alternate years, offered 2008–2009.)

#### FREN 320 Selected Topics in French (3)

Intensive study of a selected author, genre, literary movement, French-speaking country, or current events derived from periodicals and/or the internet.

#### FREN 391 Independent Study (1-3)

Advanced language study or research. (Maximum of 6 credits)

#### FREN 401, 402 Advanced Composition and Conversation (3, 3)

Conversation and composition on a variety of contemporary topics.

# German

The German Major encompasses a wide variety of courses to study the language itself, as well as the history, literature, culture, and civilization of German-speaking people. Introductory level courses focus on grammar, phonetics, conversation, and composition, taught with an emphasis on oral proficiency. Intermediate and advanced courses are taught in German.

#### German Major (42 credits)

GERM 101 Fundamentals of German I (3)

GERM 102 Fundamentals of German II (3)

GERM 201 Intermediate German (3)

GERM 206 Contemporary German Culture (3)

LANG 493 Modern Languages Seminar (3)

Twenty-seven credits of approved German courses beyond the 206 level from one of the following two options:

#### Option I (Two-Semester Study Abroad)

One of the following:

GERM 211 Unified Germany (3)

GERM 301 Readings in German Literature I (3)

GERM 302 Readings in German Literature II (3)

Twenty-four credits of approved German courses through the Brethren Colleges Abroad Program at Philipps-Universität Marburg, Germany. Students may select among courses in grammar, literature, history, or political science. See the Department of Modern Languages for approved course descriptions.

#### Option II (One-Semester Study Abroad)

GERM 211 Unified Germany (3)

GERM 301 Readings in German Literature I (3)

GERM 302 Readings in German Literature II (3)

Eighteen credits of approved German courses through the Brethren Colleges Abroad Program at Philipps-Universität Marburg, Germany. Students may select among courses in grammar, literature, history, or political science. See the Department of Modern Languages for approved course descriptions.

#### German with Teaching Certification Major (80 credits)

Completion of the German major as listed plus the following courses:

Six credits in MATH/COSC/STAT xxx General Education Mathematics/ Computer Science/Statistics (6)

ENGL xxx American or British Literature (3)

EDUC 120 The Teaching Profession (with Field Experience) (1)

EDUC 201 Education and American Society (3)

EDUC 203 Educational Psychology (3)

EDUC 318 Secondary Learning Environments (with Field Experience) (1)

EDUC 331 Instructional Design and Assessment for Secondary Education (3)

LANG 320 Foreign Language Teaching Methodology (2)

#### **Professional Semester**

LANG 407 Language Curriculum and Instruction (2) HDFS/PSYC 311 Adolescent Development (3) EDUC 420 Professional Issues in Education (2) EDUC 420 Professional Issues in Education (2) EDUC 435 Student Teaching: Secondary (9)

#### German Minor (21 credits)

GERM 201 Intermediate German (3)
GERM 206 Contemporary German Culture (3)
One of the following:
GERM 211 Unified Germany (3)
GERM 301 Readings in German Literature I (3)
GERM 302 Readings in German Literature II (3)
Twelve additional credits fulfilled at Philipps-Universität Marburg, Germany, from the approved list. (12)

# GERM 101, 102 Fundamentals of German I, II (3, 3)

Intensive study of the fundamentals of German grammar within a communicative approach to language learning. Introduction to German culture. Meets General Education Languages and Culture requirement.

#### GERM 201 Intermediate German (3)

Review and refinement of German language skills. Discussion of various themes in German culture such as the family, leisure activities, divided and unified Germany, and music. Prerequisite: GERM 102 or equivalent. Meets General Education Languages and Culture requirement.

#### GERM 206 Contemporary German Culture (3)

Advanced conversational and reading skills centered on current issues in Germany, such as the environment and alternative energy sources, transportation, and the changing demographics of German society. Prerequisite: GERM 201 or equivalent.

#### GERM 211 Unified Germany (3)

The self perception and expression of the German people since political unification. Topics may include German and European identity, foreigners in Germany, youth, religious faith, and East German nostalgia.

#### GERM 301 Readings in German Literature I (3)

Selected literary works from Das Nibelungenlied to Goethe. Prerequisite: GERM 206

or the equivalent. Meets General Education Literature requirement.

#### GERM 302 Readings in German Literature II (3)

Selected literary works from the 19th and 20th centuries. Meets General Education Literature requirement. Prerequisite: GERM 206 or the equivalent.

#### GERM 491 Independent Study (1-3)

Advanced study or research in German.

# Spanish

The Spanish Major encompasses a wide variety of courses to study the language itself, as well as the history, literature, culture, and civilization of the Spanish-speaking peoples. Introductory level courses focus on grammar, phonetics, conversation, and composition, taught with an emphasis on oral proficiency. Intermediate and advanced courses are taught in Spanish.

#### Spanish Major (45 credits)

SPAN 101 Fundamentals of Spanish I (3)

SPAN 102 Fundamentals of Spanish II (3)

SPAN 201 Intermediate Spanish (3)

SPAN 206 Spanish Conversation and Composition (3)

Five of the following (including at least two 300-level courses):

SPAN 210 Latin American Plays of Protest (3)

SPAN 211 Spanish Theatre Production (3)

SPAN 212 Post-Franco Spain (3)

SPAN 214 The Struggle for Spanish Identity (3)

SPAN 221 Business Spanish (3)

SPAN 301 Topics in Latin American Literature (3)

SPAN 302 Culture and Identity in Latin America (3)

SPAN 308 Applied Phonetics (3)

SPAN 311 Topics in Spanish Peninsular Literature (3)

SPAN 314 The Counter Reformation and the Spanish Baroque (3)

SPAN 320 Spanish Linguistics (3)

SPAN 322 Contemporary Mexico (3)

LANG 493 Modern Languages Seminar (3)

Fifteen credits of the following:

Approved Spanish courses through the Brethren Colleges Abroad program at either the University of Barcelona, Spain, or the University of San Francisco, Quito, Ecuador. Students should select courses in a variety of humanities courses that may include grammar, literature, history, art history, or political science. See the Department of Modern Languages for approved course descriptions.

#### Spanish with Teaching Certification (83 credits)

Completion of the Spanish major as listed plus the following courses:

Six credits in MATH/COSC/STAT xxx General Education Mathematics/Computer Science/Statistics (6)

ENGL xxx American or British Literature (3)

EDUC 120 The Teaching Profession (with Field Experience)(1)

EDUC 201 Education and American Society (3) EDUC 203 Educational Psychology (3) EDUC 318 Secondary Learning Environments (with Field Experience) (1) EDUC 331 Instructional Design and Assessment for Secondary Education (3) LANG 320 Foreign Language Teaching Methodology (2) **Professional Semester** LANG 407 Language Curriculum and Instruction (2) HDFS/PSYC 311 Adolescent Development (3) EDUC 420 Professional Issues in Education (2) EDUC 435 Student Teaching: Secondary (9) Spanish Minor (21 credits) SPAN 201 Intermediate Spanish (3) SPAN 206 Spanish Conversation and Composition (3) Two of the following (including at least one 300 level) SPAN 210 Latin American Plays of Protest (3) SPAN 211 Spanish Theatre Production (3) SPAN 212 Post-Franco Spain (3) SPAN 214 The Struggle for Spanish Identity (3) SPAN 221 Business Spanish (3) SPAN 301 Topics in Latin American Literature (3) SPAN 302 Culture and Identity in Latin America (3) SPAN 308 Applied Phonetics (3) SPAN 311 Topics in Spanish Peninsular Literature (3) SPAN 314 The Counter Reformation and the Spanish Baroque (3) SPAN 320 Spanish Linguistics (3) SPAN 322 Contemporary Mexico (3)

Nine additional credits fulfilled at either the Grantham campus, Barcelona, Spain, or Quito, Ecuador from the approved list on the department's website.

# Spanish Business

The Spanish Business Major is sponsored by the Department of Modern Languages and the Department of Management and Business. It offers a core business curriculum and weaves second language study throughout the entire four years. Special attention is given to developing a cultural understanding with direct experience in Latin America.

# Spanish Business (76–77 credits) SPAN 101 Fundamentals of Spanish I (3) SPAN 102 Fundamentals of Spanish II (3) SPAN 201 Intermediate Spanish (3) SPAN 206 Spanish Conversation and Composition (3) SPAN 221 Business Spanish (3) Three of the following (including at least one 300-level course): SPAN 210 Latin American Plays of Protest (3) SPAN 211 Spanish Theatre Production (3)

- SPAN 212 Post-Franco Spain (3)
- SPAN 214 The Struggle for Spanish Identity (3)
- SPAN 301 Topics in Latin American Literature (3)
- SPAN 302 Culture and Identity in Latin America (3)
- SPAN 308 Applied Phonetics (3)
- SPAN 311 Topics in Spanish Peninsular Literature (3)
- SPAN 314 The Counter Reformation and the Spanish Baroque (3)
- SPAN 320 Spanish Linguistics (3)
- SPAN 322 Contemporary Mexico (3)
- LANG 493 Modern Languages Seminar (3)
- ACCT 141 Financial Accounting (3)
- BIS 230 Computer Applications (3)\*
- BUSA 102 Opportunities in Business (1)
- BUSA 281 Applied Statistics for Management (3)

One of the following:

- ECON 110 Economics of Social Issues (3)
- ECON 117 Issues in Environmental Economics (3)
- ECON 210 Contemporary Economics (3)
- ECON 312 Economic Development (3)
- HRM 120 Principles of Management (3)
- IBUS 375 International Business and World Economy (3)
- IBUS 377 Ministry in International Business (3)
- MRKT 230 Marketing Principles (3)
- One of the following:
  - MATH 107 Applied Math for Management (3)
  - MATH 108 Intuitive Calculus with Applications (3)
  - MATH 111 Calculus I (4)
- Fifteen credits of the following:
- Approved Spanish and business courses through the Brethren Colleges Abroad program at the University of San Francisco, Quito, Ecuador. Students must choose two business courses from the approved list and three or four other courses in grammar, literature, history, art history, or political science. See the Department of Modern Languages for approved course descriptions.

# All students must pass the Computer Competency Exam to complete their major.

\*All students must pass the Computer Competency Exam, administered by the Department of Management and Business, prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

# SPAN 101, 102 Fundamentals of Spanish I, II (3, 3)

Intensive study of the fundamentals of Spanish grammar within a communicative approach to language learning. Introduction to Hispanic culture. Meets General Education Languages and Culture requirement.

# SPAN 201 Intermediate Spanish (3)

Continuation of grammar principles with practical application in conversation. Introduction to composition through selected cultural and literary readings.

Prerequisite: SPAN 102 or the equivalent. Meets General Education Languages and Culture requirement.

#### SPAN 206 Spanish Conversation and Composition (3)

Advanced practice in oral and written Spanish based on everyday situations. Study of Hispanic culture through selected readings. Prerequisite: SPAN 201 or the equivalent.

#### SPAN 210 Latin American Plays of Protest (3)

Contemporary drama that addresses issues of social justice as well as sociopolitical tensions and how they affect the lives of ordinary people of multiple Latin American nations. Prerequisite: SPAN 206 or the equivalent. Meets General Education Non-Western requirement.

#### SPAN 211 Spanish Theatre Production (3)

Students in this experiential course form part of an ensemble that will produce a short Spanish language play. Prerequisite: SPAN 206 or high intermediate proficiency. Participation by audition.

#### SPAN 212 Post-Franco Spain (3)

The government, the military, the Church and Opus Dei, the constitutional monarchy, nationalisms, the European Union, immigration, national stereotypes, and the role of women will be examined in relation to the Civil War, the Franco regime, and the democratic period in Spain since 1975. Prerequisite: SPAN 206 or the equivalent.

#### SPAN 214 The Struggle for Spanish Identity (3)

The loss of the last colonies in 1898 and the political, religious, and social conflicts that led to anarchy, the dictatorship of Primo de Rivera, the Second Republic, the Civil War, and the repression of the Franco regime. An examination of the artistic and literary expression that both accentuated and represented these conflicts, including the work of Gaudí, Las Generaciónes del 98 y 27, and Picasso. Prerequisite: SPAN 206 or the equivalent.

#### SPAN 221 Business Spanish (3)

Introduction to the Spanish of commerce and international business as well as the art of negotiation in the Spanish-speaking world. Emphasis on oral and written communication, including basic commercial practices, terminology, and documents. Prerequisite: SPAN 206 or the equivalent.

#### SPAN 301 Topics in Latin American Literature (3)

Selected literary works from contemporary authors and genres. Prerequisite SPAN 206 or the equivalent. Meets General Education Literature requirement.

#### SPAN 302 Culture and Identity in Latin America (3)

Survey of Spanish American culture and civilization from pre-Columbian civilizations to the present. Prerequisite: SPAN 206 or the equivalent. Meets General Education Non-Western Studies requirement.

#### SPAN 308 Applied Phonetics (3)

An examination of the Spanish articulatory system including an introduction of pertinent theoretical concepts in phonetics and phonology and the application of these concepts in various exercises of written transcription and oral production. Class discussion may also address issues related to regional variation and Hispanic dialectology. Prerequisite: SPAN 206 or the equivalent.

#### SPAN 311 Topics in Spanish Peninsular Literature (3)

A formal and cultural analysis of selected literary movements, authors, and themes of Spanish Peninsular literature. Development of a critical and analytical capacity and sensitivity toward literary language through the reading of a selection of poetic, dramatic, or narrative works. Prerequisite: SPAN 206 or the equivalent. (Alternate years, offered 2008–2009.) Meets General Education Literature requirement.

#### SPAN 314 The Counter Reformation and the Spanish Baroque (3)

The artistic, political, and religious expression of the Spanish Baroque. Selected works of Góngora, Quevedo, Calderón, the Spanish mystics, including Santa Teresa de Jesús and San Juan de la Cruz, and painters such as Murillo, Velázquez, Zurbarán and others. The decline of the Habsburgs, the Council of Trent, and the role of the Catholic Church in Spanish society of the Baroque period.

#### SPAN 320 Spanish Linguistics (3)

A linguistic study of Spanish, including its historical development, contemporary dialectal variation, and contrastive analysis of English and Spanish. Concepts from descriptive linguistics will be introduced to allow exploration of phonology, morphology, syntax, and semantics, while an introduction to sociolinguistics will lead to discussion of the impact of dialect on personal and national identity. Prerequisite: SPAN 206 or the equivalent.

#### SPAN 322 Contemporary Mexico (3)

An exploration of Mexican society and culture through the examination of topics such as social class, education, urbanization, religious faith and expression, indigenous and national identity, the family, and economic development. Some attention will also be given to U.S.-Mexican relations and border issues. Prerequisite: SPAN 206 or the equivalent.

#### SPAN 491 Independent Study (1-3)

Advanced Hispanic language/culture study or research.

# Language

LANG 320 (formerly LNG 320) Foreign Language Teaching Methodology (2) Provides an examination of the spectrum of theories, techniques, methods and approaches to the teaching of foreign languages, with a special emphasis on those that are proficiency based. In addition to learning how to teach second language

skills, students will also learn how to effectively promote cultural understanding in the foreign language classroom. Students will be expected to develop instructional materials and show how they plan to utilize "realia" or authentic materials in their classroom teaching.

#### LANG 391 (formerly LNG 391) Foreign Language Practicum (1-3)

Collaboration with instructor in teaching a catalogued modern language course at the fundamental or intermediate level. Open to students who have acquired proficiency in the language of instruction. Prerequisite: Instructor's consent.

#### LANG 407 (formerly LNG 407) Language Curriculum and Instruction (2)

A seminar emphasizing disciplinary content issues that are specific to modern language teaching. Areas of focus include curricular and instructional decision-making processes; classroom management strategies; assessment techniques; adaptations for exceptional learners; instructional technology applications; and professional development. Concurrent enrollment with EDUC 420, EDUC 435, and PSYC/HDFS 311. Prerequisite: admission to the Professional Semester.

#### LANG 493 (formerly LNG 493) Modern Languages Seminar (3)

Integration of theory, research, and practice for modern language students. Considers how Christian perspectives inform, critique, and further a professional orientation in modern languages, and includes a critical study of the philosophical and ethical issues related to the field.

# ACADEMIC ENGLISH PROGRAM

The following AEP courses are offered as a part of the Academic English Program. Through these courses, non-native speakers can improve their proficiency in contemporary American English while earning full academic credit during their first semester.

#### AEP 105 (formerly LNG 105) American Oral Communication (3)

A study of communicative norms for public and interpersonal communication in the American academic context. Meets General Education Oral Communication requirement.

#### AEP 202 (formerly LNG 202) American Fiction (3)

Reading and discussion of works from various genres, including both prominent and less-known authors representing the diversity of American Literature. Meets General Education Literature requirement.

#### AEP 206 (formerly LNG 206) Structures and Idioms of American English (3)

Advanced practice in the grammar of American English with some focus on contemporary grammatical theory.

# PHILOSOPHY

Caleb D. Miller, Ph.D. Chair, Department of Philosophy

# Faculty

Professors R. Basinger, R. Collins, C. Miller Assistant Professors D. Schenk, T. Schoettle

# **Majors and Minors**

The Department of Philosophy offers the following majors: Humanities (B.A.) Philosophy (B.A.)

The Department of Philosophy offers the following minor: Philosophy

# **Program Options**

The programs in the Department of Philosophy are designed to introduce students to a careful, systematic investigation of fundamental issues of reality and human experience. By addressing such issues as whether or not we have free will, God's relation to the world and to evil, and the nature and origin of morality, philosophy equips students with the sort of background and intellectual skills that will enrich their lives, enhance their effectiveness in virtually any career, and enable them to develop a distinctively Christian view of the world.

The Department of Philosophy offers two majors and one minor. The major in philosophy offers intensive training in analytical and critical thinking skills, a broad historical background in Western thought, and an exposure to Non-Western philosophy. This training can serve as a valuable basis for more advanced studies in graduate, law, or divinity school, and enhance the effectiveness of graduates in other professions. Moreover the Philosophy Major serves the church and the world by equipping Christians, whether laypersons or seminary-trained leaders, with the ability to address fundamental issues of concern to every person.

The cross-disciplinary Humanities Major is offered in cooperation with several departments in the School of the Humanities. It allows students great flexibility in structuring their own programs in consultation with an advisor.

The Philosophy Minor is designed for students who wish to supplement their primary education in another field with the study of philosophy. It also allows great flexibility to explore those areas of philosophy that are of the most interest and benefit the individual student.

# **Humanities**

#### Humanities Major (36 credits)

This is an interdisciplinary major allowing great flexibility for students to structure their own program in consultation with their academic advisor. Please refer to the "Inter-disciplinary Humanities Major" section of the Catalog for more information about this program.

#### Philosophy

Philosophy Major (36 credits) One of the following: PHIL 101 Problems in Philosophy (3) PHIL 102 History of Philosophy (3) PHIL 220 Introduction to Logic (3) PHIL 247 Ancient and Medieval Philosophy (3) PHIL 253 Modern Philosophy (3) PHIL 310 Contemporary Continental Philosophy (3) PHIL 318 Asian Philosophy (3) PHIL 341 Epistemology and Metaphysics (3) PHIL 345 Philosophy of Religion (3) One of the following: PHIL 325 Moral Problems (3) PHIL 382 Ethics (3) PHIL 460 Philosophy Seminar (3) 300-level PHIL electives (6)

#### Philosophy Minor (18 credits)

One of the following: PHIL 101 Problems in Philosophy (3) PHIL 102 History of Philosophy (3) Five additional courses PHIL electives (15)

#### PHIL 101 (formerly PHI 241) Problems of Philosophy (3)

Both critical and constructive thinking is developed in dealing with the theory of human knowledge and the theory of reality. Meets General Education Philosophy

requirement.

# PHIL 102 (formerly PHI 231) History of Philosophy (3)

Study of Western philosophical systems from the sixth century B.C. to the present with particular attention to major historical periods and developments. Meets General Education Philosophy requirement.

# PHIL 220 Introduction to Logic (3)

Practical introduction to the principles of effective reasoning. Emphasizes the nature of inductive and deductive arguments, the identification of informal fallacies and the improvement of reasoning ability. (Alternate years, offered 2007–2008.)

# PHIL 247 Ancient and Medieval Philosophy (3)

A study of Western philosophy from its beginnings in the ancient Greek world through the Middle Ages, with an emphasis on the following philosophers: Plato, Aristotle, Augustine, and Aquinas. Prerequisite: PHIL 101 or 102. (Alternate years, offered 2007–2008.)

# PHIL 253 Modern Philosophy (3)

A study of Western philosophy since the Middle Ages, with an emphasis on leading philosophers of the 17th and 18th Centuries such as Descartes, Locke, Hume, and Kant. Prerequisite: PHIL 101 or 102. (Alternate years, offered 2008–2009.)

# PHIL 310 Contemporary Continental Philosophy (3)

An examination of key movements such as phenomenology, existentialism, hermeneutics, and postmodernism, with particular emphasis on the work of Husserl, Heidegger, Levinas, and Derrida.

# PHIL 318 Asian Philosophy (3)

Investigation of the most important Asian philosophers and schools of philosophy. Prerequisite: PHIL 101 or 102. Meets General Education Non-Western Studies requirement. (Alternate years, offered 2008–2009.)

# PHIL 325 Moral Problems (3)

The analysis and consideration of such problems in applied ethics as abortion, war, the authority of government, affirmative action, homosexuality, and hunger. Special consideration is given to the relationship of these problems to issues of moral theory. Meets General Education Ethics requirement.

# PHIL 341 Epistemology and Metaphysics (3)

The analytical study of central epistemological concepts such as knowledge, rationality, intuition, belief, and perception and of central metaphysical problems such as the mind/body problem, personal identity, freedom and determinism, and the relationship of reality to human cognition. There will be a special emphasis on issues of importance to Christian faith, such as the epistemology of religious belief, and on the relationship of epistemological issues to metaphysical issues.

# PHIL 342 Aesthetics (3)

An exploration of the history of aesthetic theory with particular focus on the philosophy of imagination in relation to Christian thought.

#### PHIL 345 Philosophy of Religion (3)

Major issues in philosophy of religion, with special attention to the evidence for God's existence and the Christian faith, the problem of evil, faith and reason, alternatives to Christian belief, and philosophical analyses of key Christian doctrines such as the doctrine of Atonement, Incarnation, and Hell. Meets General Education World Views requirement.

#### PHIL 360 Topics in Philosophy (3)

Selected topics in philosophy not currently included in course offerings such as philosophical problems, figures, schools of thought, or historical periods. May be repeated for credit. Prerequisite: PHIL 101 or 102.

#### PHIL 362 Philosophy of Science (3)

Investigation of the methods of science, its ability to gain knowledge of the world, its historical development and its relation to religion. Prerequisite: PHIL 101 or 102.

#### PHIL 382 Ethics (3)

Constructive and analytical involvement in the questions of normative ethics and metaethics. Philosophical and religious resources are appropriated. Special consideration of the ethical relevance in contemporary society. Meets General Education Ethics requirement.

#### PHIL 460 Philosophy Seminar (3)

Research seminar on selected philosophical themes such as realism, relativism, virtue, justice, or rationality. The writing and class presentation of a major research paper is required. Open only to juniors and seniors. Prerequisite: Six credits PHIL 300-level or above. (Alternate years, offered 2008–2009.)

#### PHIL 491 Independent Study (1-3)

Selected subjects pursued independently with frequent consultation with a faculty supervisor.

#### PHIL 497, 498 Major Honors (3, 3)

Independent research program for students who have a strong academic record (3.5 cumulative GPA) for a minimum of five previous semesters of college study. Departmental approval required for enrollment.

# POLITICS

John C. Harles, D.Phil. Chair, Department of Politics

# Faculty

Professors D. Curry, J. Harles Associate Professor R. Lauermann Assistant Professor P. Rego

# **Majors and Minors**

The Department of Politics offers the following majors:

Environmental Studies (B.A.) [Interdisciplinary major. Please refer to the Department of Biological Sciences for more information aout this major.]
Politics (B.A.)
Concentrations:

International Relations
Political Studies

Politics (B.A.) with an M.S. in Public Policy and Management
(joint degree offered with Carnegie Mellon University)

The Department of Politics offers the following minors: Politics Pre-Law

# **Curricular Opportunities**

The Politics Program introduces students to the major sub-fields of this discipline — American and comparative politics, international politics, and political theory — all within the context of a rigorous liberal arts education. By creating an intimate and collegial learning environment, one placing a premium on individual student initiative, the Department of Politics produces intellectually agile, socially fluent, and selfconfident graduates.

Politics Majors nurture the analytical, verbal, and written abilities that are the hallmark of the liberal arts. Our faculty encourage students to think independently, to engage opposing points of view, and to develop an abiding concern for public life in the interest of social justice. Moreover, the study of politics is an especially useful means of understanding the forces of globalization—the power relationships responsible for an increasingly integrated world. The Department of Politics aims to educate students for democracy and for thoughtful and meaningful participation in the political process. As students of politics our task is to interpret the world and to change it.

# Politics

# Politics Major: Core Requirements (21-30 credits)

POLI 113 American Government (3)
POLI 204 History of Political Thought (3)
POLI 212 International Politics (3)
POLI 213 Comparative Politics (3)
POLI 243 Political Research Methods (3)
POLI 494 Politics Seminar (3)
ECON 110 Economics of Social Issues (3)

#### One of the following concentrations:

Political Studies Concentration (30 credits) Thirty credits selected from additional POLI courses or HIST 362 International Relations Concentration (36 credits) POLI 362 Theories of International Relations (3) Four of the following: HIST 362 U.S. Foreign Policy (3) POLI 219 African Politics (3) POLI 222 Politics in Latin America (3) POLI 342 Politics in Canada (3) POLI 348 Politics of the United Kingdom (3) POLI 360 Special Topics in Politics (3) Twelve credits of additional POLI courses (12) One of the following: HIST 322 Modern Europe (3) HIST 323 Europe in the 20th Century (3) HIST 332 Modern Germany (3) HIST 372 Modern Civilizations of Asia (3) HIST 374 History of Modern India and Pakistan (3) Any other approved European or non-Western HIST course (3) ECON 210 Contemporary Economics (3)

One of the following: ECON 312 Economic Development (3) IBUS 375 International Business and World Economy (3)

Nine credits is the maximum number of internship/practica credits that can apply toward the Politics Major.

**Politics with Political Studies/MS in Public Policy and Management** – Messiah College (three years) and Carnegie Mellon University (two years)

Qualified students interested in pursuing graduate school in public policy are eligible to participate in an accelerated 32 program in conjunction with Carnegie Mellon University's Heinz School of Public Policy and Management. Students participating in this program complete three years of academic work at Messiah College followed by two years of graduate work at the Heinz School. At the end of the five year program the student receives a B.A. in Politics from Messiah College and a Master of Science in Public Policy and Management from Carnegie Mellon University. Students applying to this program must be approved by the Messiah program coordinator and meet all Carnegie Mellon Heinz School admission requirements.

Messiah College Courses (3 years)

POLI 113 American Government (3)
POLI 204 History of Political Thought (3)
POLI 212 International Politics (3)
POLI 213 Comparative Politics (3)
POLI 323 Public Policy (3)
POLI 243 Political Research Methods (3)
ECON 110 Economics of Social Issues (3)
Fifteen credits selected from additional POLI courses or HIST 315 (15)

**NOTE:** The submission of a five to seven page faith-politics integration paper under the direction of the Program Coordinator will be required for admission into the Public Policy and Management program.

Carnegie Mellon University Courses (2 years)

Four 12-unit\* courses in public policy, political science, and/or methodology from Carnegie Mellon University's MS in Public Policy and Management curriculum

MS Public Policy and Management Capstone Course (3)

\*Carnegie Mellon University defines a 12-unit course as the equivalent of a threesemester-hour course.

#### **Politics Minor**

Two of the following: POLI 113 American Government (3) POLI 204 History of Political Thought (3) POLI 212 International Politics (3) POLI 213 Comparative Politics (3) Twelve credits POLI courses (may include HIST 362) (12) No more than three credits from approved internships or practica (3)

#### Pre-Law Minor (21 credits)

POLI 113 American Government (3)
POLI 214 American Constitutional Law (3)
PHIL 220 Introduction to Logic (3)
Three credit 300-level ENGL literature elective (3)
Three credit 300-level HIST elective (3)
Two of the following:
BUSA 381 Business Law I (3) or BUSA 382 Business Law II (3)
POLI 392 Pre-Law Practicum (3)
POLI 316 Topics in Constitutional Civil Liberties (3)

#### POLI 113 American Government (3)

An introduction to the structure and operation of the executive, legislative, and judicial branches of the federal government, with special attention to the impact of the electorate, parties, and interest groups on the federal policy-making process. Meets General Education Social Science requirement.

#### POLI 204 History of Political Thought (3)

Considers the evolution of political ideas as reflected in the work of Western political philosophers from Plato to Marx.

#### POLI 212 International Politics (3)

An introduction to contemporary international politics. Special attention is given to the nature of the nation-state system, globalization, economic and political development, and regional politics, including Europe and the Middle East.

#### POLI 213 Comparative Politics (3)

An introduction to the basic ideas and structures of political life. Particular attention given to examining the dominant belief systems of modern political regimes. Among the institutions considered: parties, interest groups, elections, legislatures, and executives. Meets General Education Social Science requirement.

#### POLI 214 American Constitutional Law (3)

An examination of the structure and development of the Constitution within the context of defining the powers of the three branches of the federal government. Specific attention is given to selected U.S. Supreme Court decisions relevant to the protection of individual rights.

#### POLI 219 African Politics (3)

Examines the process of nation-building in Africa since 1960. Emphasis is placed on personal rule theory and democratization. Meets General Education Non-Western Studies requiremen. (Alternate years, offered 2008–2009.)

# POLI 220 Parties and Elections (3)

An examination of the role of American political parties and the nomination and electoral process at the national level. Special emphasis on the voting behavior of individuals and groups. (Alternate years, offered 2008–2009.)

# POLI 222 Politics in Latin America (3)

This course will examine the interdependent relations of various factors (political, social, historical, cultural, and economic) both internal and external to the political system in Latin American states. Students will develop an appreciation of the nature of cross-national/cultural analysis, as well as an understanding of the impact of global policies on Latin American states. The culmination of this course will result in the acquisition of analytical skills to explain patterns of political stability and political change within nation-states and regions of this area. Meets General Education Non-Western Studies requirement.

# POLI 231 Politics in Film (3)

This course will examine the ways in which films contribute to political understanding by reflecting political culture and structure. Political themes to be covered include: the historical and potential roles of the executive, legislative, and judicial branches; racial and gender inequality; and issues in civil liberties. Prerequisite: POLI 113 or by Instructor's consent.

# POLI 240 American Presidency (3)

A study of the changing role of the president in the United States. Special emphasis given to the powers and limitations of the office, decision-making process, and the importance of personality. (Alternate years, offered 2007–2008.)

# POLI 243 Political Research Methods (3)

In this course students will learn how to investigate a political question, enabling them to: evaluate the process of research in political science; focus on research design; recognize the importance of reading comprehension and writing skills as prerequisites for good research; discuss ethical issues in research; acquire conceptual components of the research process (theories, hypotheses, etc.); understand qualitative and quantitative methods of analysis and processing; develop computer-based training in quantitative analysis and interpretation of basic statistics. Required of all politics majors.

# POLI 315 United States Foreign Policy (3)

An examination of U.S. foreign policy with special attention given to the Cold War and its aftermath. Cross-listed with HIST 315.

# POLI 316 Constitutional Civil Liberties (3)

A consideration of U.S. Supreme Court decisions interpreting the Bill of Rights. Particular attention is given to cases involving Amendments 1, 4, 5, 6, and 8 of the Constitution.

# POLI 320 Ethnic and Racial Politics in America (3)

A thematic approach to the study of ethnicity and race in American political life.

Topics include the politics of immigration, partisanship and machine politics, public policy and race, and the Civil Rights movement. Meets General Education Pluralism requirement. (Alternate years, offered 2008–2009.)

#### POLI 323 Public Policy (3)

Examines the planning, implementation, and evaluation of public policy with special attention given to public policy at the state and federal level. Specific public policy issues, including social, economic, and environmental topics, are discussed. Prerequisite: POLI 113 (alternate years).

#### POLI 327 Representation and Democracy (3)

This course will explore the nature and practice of representative government in democratic settings of advanced industrial nations (U.S., Canada, and Western Europe). This course will be divided into two segments. First, students will examine the normative and empirical theoretical issues of representation, as well as its relationship to democracy. The second half of the course will permit students to investigate different systems of representation in practice (i.e. presidential v. parliamentary). Students will be required to do a term paper on the theory and practice of representation in an advanced industrial democracy.

#### POLI 330 Terrorism (3)

Investigates the theory and practice of terrorism as a means of political change. Also considers approaches to, as well as the moral basis of, counter-terrorism. Meets General Education Ethics requirement. (Alternate years, offered 2007–2008.)

#### POLI 332 Congress (3)

A study of legislators, the legislative process, structures, and policy impact of the United States Senate and House of Representatives. (Alternate years, offered 2007–2008.)

#### POLI 338 Religion and American Politics (3)

A study of the ways in which the values and interests of major religious groups in the United States influence the political process and public policy. Meets General Education Pluralism requirement.

#### POLI 342 Politics in Canada (3)

An introduction to the institutions and processes of Canadian government. Particular attention given to the United States as a comparative point of reference. Topics include multiculturalism, constitutional reform, provincial-federal relations, national identity, the party system, the prime minister and the cabinet.

#### POLI 348 Politics of the United Kingdom (3)

Examines the institutional, intellectual, and sociological context of British politics. Topics considered include: political culture, party system, parliament, prime minister and cabinet, race and ethnicity, Britain and the European Union.

#### POLI 360 Special Topics in Politics (3)

Selected topics related to a specific area of politics including American government,

comparative politics, international politics, and normative theory.

#### POLI 362 Theories of International Relations (3)

A survey of theoretical approaches to international relations, including realism, theories of conflict, integration, and decision making. Examines contending normative and empirical methodologies. (Alternate years, offered 2008–2009.)

#### POLI 391 Politics Practicum (1-3)

Practical experience under professional supervision, open to juniors and seniors.

#### POLI 392 Pre-Law Practicum (1-3)

Practical experience in a law firm under professional supervision. Open to juniors and seniors considering law school.

#### POLI 491 Independent Study (1-3)

Independent study or research under the supervision of an instructor.

#### POLI 494 Politics Seminar (3)

Serves as the capstone course for politics majors. Stresses critical discussion of influential works in 20th-century political studies. Required of all politics majors.

#### POLI 495 Internship in Political Research (6-9)

Practical experience in politics and government obtained through placement in a state office or political organization.

#### POLI 497, 498 Major Honors (3, 3)

Independent research program for students who have strong academic records for a minimum of five previous semesters of collegiate study. Overall GPA of 3.5 and Department of Politics faculty approval required for enrollment.

# INTERDISCIPLINARY HUMANITIES MAJOR

Messiah College has long valued an integrative approach to liberal arts learning, and this commitment is embodied in our interdisciplinary Humanities Major program. This major allows great flexibility for students to structure their own course of study in consultation with their academic advisor. Students select a concentration in Art History, History, Literature, or Philosophy, and then enrich this focus with cognate courses in the program's other humanities disciplines as well as with a wide range of additional electives. Students are also encouraged to seek experiential learning, either through study abroad or through an internship experience.

Humanities majors therefore enjoy the benefit of studying with several academic departments and have an excellent record of being well prepared for both graduate study as well as a wide variety of careers. The breadth of learning and experiences that this program provides not only enriches the personal lives of its students but also offers them the intellectual and cultural tools needed to seek their vocation in our complex, ever-changing world.

#### Humanities Major (36 credits)

HUMA 201 Humanities Past and Present (3) HUMA 401 Humanities Senior Seminar (3) Eighteen credits in the primary area of study (18) Twelve credits in the secondary area of study (12)

At least 21 credits must be upper division courses (300- and 400-level courses). No more than a two course overlap with General Education requirements is allowed for the completion of major requirements. Students pursue a primary and a secondary area of study from the humanities disciplines of art history, communication, history, literature, philosophy, politics, and religious studies. Students pursuing an area of study in communication, politics, or religious studies must choose courses from the following lists:

The foreign language courses in the Literature area of study have 6–12 credits of prerequisites which may add to the size of the major. These foreign language courses are GERM 301, GERM 302, LATN 201, SPAN 210, SPAN 301, SPAN 311, and FREN 320.

Students pursuing areas of study in Communication, Religion, and Politics must choose courses from the following lists:

#### Communication

- COMM 211 Media in Everyday Life (3)
- COMM 212 Christianity and Media Culture (3)
- COMM 217 Introduction to Film (3)
- COMM 218 Mass Media and Society (3)
- COMM 241 Small Group Communication (3)
- COMM 251 American Cinema I: 1890–1930 (3)
- COMM 252 American Cinema II: 1931–Present (3)
- COMM 254 Art and Science of Story (3)
- COMM 301 Persuasion (3)
- COMM 313 Relational Communication (3)
- COMM 327 International Cinema: Topics (3)
- COMM 341 Communication Theory (3)
- COMM 342 Intercultural Communication (3)
- COMM 354 Interpersonal Communication (3)

#### Politics

- POLI 204 History of Political Thought (3)
- POLI 214 American Constitutional Law (3)
- POLI 231 Politics in Film (3)
- POLI 316 Topics in Constitutional Civil Liberties (3)
- POLI 320 Ethnic and Racial Politics in America (3)
- POLI 327 Representation and Democracy (3)
- POLI 338 Religion and American Politics (3)

#### **Religious Studies**

- BIBL 251 Archaeology of the New Testament World (3)
- BIBL 271 Archaeology of the Old Testament World (3)
- BIBL 291 War, Peace, and Justice in the Biblical Texts (3)
- BIBL 293 The Bible and Social Ethics (3)
- BIBL 307 Biblical Backgrounds (3)
- BIBL 381 Biblical Interpretation and Criticism (3)
- RELI 205 Religions of the World (3)
- RELI 227 Judaism (3)
- RELI 229 Islam (3)
- RELI 244 Introduction to the History of Christianity (3)
- RELI 321 Christianity in Latin America (3)
- RELI 329 Christianity in Africa (3)
- RELI 332 Christianity in Asia (3)
- RELI 333 Religions of India (3)
- RELI 334 Religions of China and Japan (3)
- RELI 340 New Religious Movements (3)
- RELI 355 Religion in the United States (3)
- THEO 3xx Christian Theologies of Religious Pluralism
- THEO 3xx Modern Theology
- THEO 3xx Contemporary Theology
- THEO 354 Women Theologians in the United States

# School of Mathematics, Engineering, and Business

W. Ray Norman, Ph.D. Dean

- Department of Engineering
- Department of Management and Business
- Department of Mathematical Sciences
- The Collaboratory for Strategic Partnerships and Applied Research

The mission of the School of Mathematics, Engineering and Business is to graduate students who are competent in their disciplines, broadly educated in the liberal arts, aware of the ethical challenges and dilemmas of a fallen world and prepared to be lifelong learners. Faculty, staff and students will work together, both in and outside the classroom, to foster professional, intellectual and spiritual maturity in preparation to live, learn, and serve in the workplace, the church, and the world as agents of redemption, peace, reconciliation, and justice on behalf of Christ. The educational programs of our three academic departments are enhanced by experiential and servicelearning opportunities in the Collaboratory for Strategic Partnerships and Applied Research. Building on a foundation of excellent classroom instruction, the Collaboratory provides students with hands-on opportunities to apply academic knowledge to real world problems. As students partner with faculty and off-campus missions and service organizations to address the pressing needs of our day, they develop competencies and vocational vision for lifelong servant-leadership, and the maturity of Christian faith to act on their convictions.

# ENGINEERING

# Carl A. Erikson, Jr., M.S.E.E.

Chair, Department of Engineering

# Faculty

Professors D. Pratt, D. Vader Associate Professors H. Underwood, T. Whitmoyer, T. VanDyke Assistant Professors C. Erikson, D. Gray, B. Ressler

# Major

The Department of Engineering offers the following major: Engineering (B.S.E.) Concentrations: Computer Electrical Mechanical

# Mission

Graduates of the Engineering Program will be technically *competent* and broadly *educated*, prepared for interdisciplinary work in the global workplace. The character and conduct of Messiah engineering graduates will be *consistent* with Christian faith commitments. We accomplish this mission through engineering instruction and experiences, an education in the liberal arts tradition and mentoring relationships with students.

# **Objectives**

To demonstrate technical competency Messiah engineers will:

• identify and formulate engineering problems;

- design and use engineering components, systems and processes to help solve practical problems;
- apply knowledge of mathematics and science to solve engineering problems;
- use modern engineering tools, techniques and skills to solve engineering problems;
- design and conduct experiments, analyze and interpret data.

To demonstrate breadth of education Messiah engineers will:

- effectively use written and oral communication;
- work productively on multidisciplinary teams;
- engage in lifelong learning.

To demonstrate consistency with Christian faith commitments Messiah engineers will:

- keep a personal ethical lifestyle consistent with the Christian faith;
- work toward the integration of Christian faith, learning, and professional life.

# Engineering

Messiah College awards a Bachelor of Science in Engineering (BSE) with a computer, electrical, or mechanical concentration. Students with advanced placement credit may complete two concentrations. The BSE degree program is accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

Messiah's engineering students explore both the art and science of engineering in preparation for creative professional practice. Building on a foundation of mathematics and the basic sciences, the engineering faculty uses course projects to ready students for entry-level engineering employment and/or advanced studies.

Engineering students at Messiah also consider the value and social impact of technology. Students are encouraged to explore service and missions opportunities for engineers, and to participate in activities that build leadership skills under the guidance of faculty members.

The following are recommended for prospective students in addition to the standard admissions requirements of the College:

- 1. Rank in the top 20% of high school class.
- 2. Complete four units or more of college preparatory mathematics, one unit of chemistry, and one unit of physics. A course or other preparation in computer programming is also helpful.
- 3. Earn a combined SAT score (Math, Verbal) of 1100 or higher or a composite ACT score of 22 or higher. A minimum mathematics SAT score of 600 or ACT score of 25 is highly desirable.

#### Admission to the Engineering Major

Admission to the Engineering major is a two-step process. First, a student must declare a Pre-Engineering major as a first-year student, transfer student, or change of major. Pre-Engineering majors are eligible to enroll in the lower division engineering courses subject to the normal prerequisites. Second, to advance to upper division courses in the engineering curriculum, Pre-engineering students are required to apply for admission into the engineering major by declaring a concentration (Computer, Electrical, or Mechanical) and by completing the following prerequisite courses (or the equivalents) with a grade of "C" or higher: MATH 111, MATH 112, MATH 211, PHYS 211, PHYS 212, ENGR 231, and ENGR 262.

The student begins the application process by completing items one through three of the "Application for Admission to Engineering Major (BSE) Program" form and submitting the form to her or his academic advisor. The academic advisor forwards the application to the Chair of the Department of Engineering. The Department Chair's approval and signature on this document admit the student to the Engineering major. The Department Chair will notify the applicant and her or his academic advisor of the decision in writing by the specified deadlines. Pre-Engineering students are strongly encouraged to apply for admission to the Engineering major as soon as eligible. The typical student who begins first-year studies as a Pre-Engineering major will complete all prerequisite courses by the end of the third semester. **Students who have not been admitted into the Engineering major will NOT be allowed to register for 300-level or higher classes offered by the Department of Engineering.** 

The deadlines for applications for continuing Messiah College students: Spring semester: October 15, with notification by November 1 Fall semester: March 15, with notification by April 1 The deadline for transfer students:

First day of classes, with notification by the last day to add classes.

#### Engineering Major - Core Courses (31 credits)

ENGR 101 Engineering Graphics (2) ENGR 102 Introduction to Engineering (2) ENGR 201 Group Orientation (1) ENGR 231 Engineering Statics (3) ENGR 242 Experimental Methods (3) ENGR 254 Materials Engineering (4) ENGR 262 Circuit Analysis (4) ENGR 290 Engineering Economics (2) ENGR 301 Seminar I (1) ENGR 302 Seminar II (1) ENGR 366 Control Systems (4) ENGR 488 Project III (2) ENGR 489 Project IV (2) Required Supporting Courses (30 credits) CHEM 105 General Chemistry I (4) MATH 111 Calculus I (4) MATH 112 Calculus II (4) MATH 211 Calculus III (4) MATH 261 Linear Algebra (3) MATH 308 Differential Equations (3) PHYS 211, 212 General Physics I, II (4, 4)

One of the following concentrations:

1) Computer Concentration (28 credits) COSC 181 Computer Programming I (3) COSC 182 Computer Programming II (3) COSC 281 Assembly Language (3) COSC 282 Data Structures (3) ENGR 340 Analog Electronics (3) ENGR 342 Microprocessor Applications (4) ENGR 349 Digital Electronics (3) Six credits approved ENGR/COSC electives (6) 2) Electrical Concentration (28 credits) COSC 181 Computer Programming I (3) ENGR 288 Project I (1) ENGR 340 Analog Electronics (3) ENGR 342 Microprocessor Applications (4) ENGR 349 Digital Electronics (3) ENGR 364 Electrical Devices (4) ENGR 365 Linear Systems (3) ENGR 367 Electromagnetics (3) ENGR 369 Communications Systems (3) ENGR 388 Project II (1) 3) Mechanical Concentration (28 credits) ENGR 232 Engineering Dynamics (3) ENGR 288 Project I (1) ENGR 333 Mechanics of Materials (3) ENGR 371 Thermodynamics (3) ENGR 372 Fluid Mechanics (4) ENGR 373 Instrumentation and Measurement (3) ENGR 374 Heat Transfer Analysis and Design (4) ENGR 381 Mechanical Design (3) ENGR 384 Manufacturing Process (3) ENGR 388 Projecct II (1)

#### ENGR 101 Engineering Graphics (2)

Emphasis on graphics as a means for communicating ideas. Hand drawing and sketching, Computer-Aided Drawing (CAD) and solid modeling. Design projects.

# ENGR 102 Introduction to Engineering (2)

Introduction to the engineering professions and the engineering design process. Variety of topics include history of engineering, academic success skills, appropriate technology, and ethics. Industry speakers are scheduled. Creative design projects and problem solving are stressed.

# ENGR 201 Group Orientation (1)

Instruction in teamwork and project management. Study of topics specific to the student's Project/Group. Certification in the use of shop tools and instruments strategic to the student's Project/Group. Prerequisite: ENGR 102 or Instructor's consent.

# ENGR 231 Engineering Statics (3)

Mathematics, Engineering and Business Vector mechanics of force and moment systems in two and three dimensions, free body diagrams and the static equilibrium of structures, centroids, moments of inertia, frictional systems. Prerequisite: PHYS 211.

#### ENGR 232 Engineering Dynamics (3)

Kinematics and kinetics of particles and particle systems. Work-energy and impulsemomentum applications to particles. Rotation and translation of rigid bodies. Analysis of rigid-body motions and forces using Newton's Second Law and energy methods. Prerequisite: ENGR 231 and PHYS 211.

#### ENGR 242 Experimental Methods (3)

Introduction to the modeling of systems and the analysis of experimental data. Topics include elementary error analysis, dimensional analysis using the Buckingham-Pi Theorem, one-sample estimation and hypothesis testing, correlation of data, interpolation, regression analysis, numerical methods for approximation and integration, and application of Laplace and Fourier transforms. Technical writing, computer usage, and presentation of data are emphasized. Prerequisite: PHYS 211.

#### ENGR 254 Materials Engineering (4)

Study of material structure, properties, and processing. Methods of controlling material properties are emphasized, along with material selection for engineering design and the manufacture of products. Ceramic, polymer and composite materials are surveyed, with in-depth study of metals and alloys. Field trips may be required. Design projects are sponsored by clients from the Collaboratory for Strategic Partnerships and Applied Research. Prerequisite: MATH 211 or Instructor's consent.

#### ENGR 262 Circuit Analysis (4)

Coverage includes basic DC and AC circuit theory. Laboratory sessions parallel and supplement classroom topics and provide methods for students to design and troubleshoot basic circuits. Prerequisite: MATH 111.

#### ENGR 288 Project I (1)

Students engage the knowledge content of their academic discipline in the context of a specific technology problem or need and in collaboration with a client organization or community. Prerequisite: ENGR 201 in previous semester.

#### ENGR 290 Engineering Economics (2)

Theory of economic decision making based on comparison of worth of alternative choice of action relative to cost involved. Includes time value mechanisms and depreciation methods. Prerequisite: Junior status.

#### ENGR 301 Seminar I (1)

Introduction to philosophical and cultural perspectives about technology. Exploration of North American and other cultural perspectives as they relate to Christian faith and engineering practice. Study and conversation about the concept of vocation. Prerequisite: Admission to the major or faculty sponsorship.

#### ENGR 302 Seminar II (1)

Continuation of ENGR 301 Seminar I. Exploration of service, leadership, stewardship, and discipleship as they relate to Christian faith and vocation. A capstone paper is required. Prerequisite: ENGR 301.

#### ENGR 333 Mechanics of Materials (3)

Introduction to relationships between stress and strain at a point. Elementary analysis of stress distributions and deformations of prismic members subjected to axial loading. Examination of torsional loading of uniform cylindrical members and bending of uniform section beams in both elastic and inelastic modes. Study of application of combined loading and an introduction to statically indeterminate problems. Prerequisites: MATH 211 and ENGR 231 or Instructor's consent.

#### ENGR 340 Analog Electronics (3)

Exploration of the theory of operation of discrete semiconductor devices and the design of circuits using these devices, including diodes, BJT and FET transistors, and integrated circuits. Laboratory sessions are held on alternate weeks. Design project. Prerequisite: ENGR 262.

#### ENGR 341 Microwaves (3)

Introduction to microwave theory and techniques: electromagnetic waves, transmission lines, waveguides, microwave circuits, ferrite media, plasma properties, oscillators, amplifiers, other special devices and measurements. Modern applications of miniaturized semiconductor devices, stripline methods for low power circuits and s-parameter characterization. Prerequisites: ENGR 340 and 367.

#### ENGR 342 Microprocessor Applications (4)

Theory and application of microprocessors in engineering design with emphasis on practical applications. Students will learn both software programming and hardware interfacing. Laboratories involve the design, construction, and programming of microcontroller-based projects. Design project. Prerequisite: ENGR 349.

#### ENGR 343 Power Systems Engineering (3)

Study of power system components, load flow, and voltage control. System fault studies are related to system protection. Prerequisite: ENGR 262.

# ENGR 349 Digital Electronics (3)

Introduction to the theory of digital electronic design, including gate level logic circuits, component minimization techniques, combinational and sequential circuits, and MSI and LSI integrated circuits. Laboratory sessions held on alternate weeks. Design project. Prerequisite: ENGR 340 or concurrent enrollment.

#### ENGR 364 Electrical Devices (4)

Extension of topics begun in ENGR 340 with emphasis on integrated circuit (IC) semiconductor devices. Topics include operational amplifiers, discrete amplifier and oscillator designs with feedback and stability considerations, active filters including classical and IC implementation, quasi-linear circuits including rectifiers, limiters, comparators, and the Schmitt Trigger. Design project. Prerequisite: ENGR 340.

# ENGR 365 Linear Systems (3)

Mathematics, Engineering and Business Introduction to analysis and design of linear shift-invariant discrete-time systems for digital signal processing (DSP) and other applications. Linear difference equations, block diagrams, impulse-response sequences, state-variables and MATLAB computer code are illustrated as tools for modeling single input-output systems. Frequency response and stability are examined. Fourier and z-transform methods are introduced. Exercises in digital filter design are included. Prerequisite: MATH 308.

# ENGR 366 Control Systems (4)

Fundamental theory for feedback control of physical processes. Study includes transient and steady state frequency response, stability analysis, control modes, and simulation of control systems. Prerequisite: MATH 308.

# ENGR 367 Electromagnetics (3)

Exploration of electromagnetic phenomena for contemporary engineering applications. Emphasis on Maxwell's equations, transmission lines, and wireless technology. Selected topics such as electrodynamics, fiber optics, bioelectro magnetics and effects in high-speed digital systems addressed as student interest and time permits. Vector calculus and alternative coordinate systems. Effects of material properties. Special project allows hands-on experience and investigation of current literature. Prerequisites: MATH 308 and PHYS 212.

# ENGR 369 Communications Systems (3)

Study of analog and digital electronic communications systems and techniques. Topics include signals, noise, bandwidth, modulation, coding, transmitter versus receiver circuiting, wired versus wireless links, high-frequency devices, and specialized systems as student interest and time permits. Laboratory exercises include use of modulators, spectrum analyzer, and time domain reflectometer (TDR). Prerequisite: ENGR 364. Also recommended: ENGR 365 and 367.

# ENGR 371 Thermodynamics (3)

Introduction to the science and engineering uses of energy. Thermodynamic properties and data, the first and second laws of thermodynamics, entropy and availability concepts, and control volume analyses are considered. Thermodynamic systems and cycles for power generation, refrigeration, and heat pumping are also examined. Prerequisites: MATH 211 and PHYS 212 or Instructor's consent.

# ENGR 372 Fluid Mechanics (4)

Study of static and dynamic effects in fluids. Lagrangian and Eulerian analysis are considered. Continuity, momentum, and energy equations are developed in integral and differential form for incompressible flows. Introduction to boundary layer theory and transient fluid motion. Laboratory and design projects build on theory. Prerequisites: MATH 211 and ENGR 232.

# ENGR 373 Instrumentation and Measurement (3)

Treatment of experimental data obtained using mechanical and electrical instruments. Determination of statistical relevance of measurements. Experiments designed to reinforce measurement principles and techniques. Student presentations and demonstrations. Laboratory sessions on alternating week basis. Prerequisite: ENGR 262.

#### ENGR 374 Heat Transfer Analysis and Design (4)

Fundamentals of conduction, convection, and radiation heat transfer theory applied to engineering problems. Steady and transient conduction, forced and free convection, multi-mode heat transfer, heat exchanger design, and methods for enhancement are considered. Laboratory and design projects build on theory. Computer modeling. Prerequisites: ENGR 371, ENGR 372, MATH 308.

#### ENGR 380 Kinematics and Dynamics of Machines (3)

Analysis and synthesis of moving machine elements. In-depth study of velocity and acceleration characteristics of linkages, cams, and gear trains. Dynamic effects caused by Coriolis and spinning bodies will be explored. Computer simulation software is used. Student projects are required. Prerequisites: MATH 308 and ENGR 232.

#### ENGR 381 Mechanical Design (3)

Investigation of fundamental mechanical design concepts and methods. Application of engineering mechanics, materials, and manufacturing concepts in analysis are used to design mechanical elements and systems. Topics include combined stress, contact stress, stress concentration, fatigue, deflection, and theories of failure. Computer modeling. Design projects. Prerequisite: ENGR 333.

#### ENGR 382 Vibrations (3)

Single and multiple degree of freedom systems are studied using computer and physical models. Both free and forced vibration with and without damping are treated. Design of a system to provide a proposed response is required. Prerequisites: MATH 308 and ENGR 232.

#### ENGR 384 Manufacturing Processes (3)

Study of manufacturing methods required for production: tooling techniques, fabrication techniques, machinability of materials, robotics, etc. Field trips to local industrial facilities arranged. Students will participate in a group project involving the design and construction of an automated manufacturing line. Laboratory sessions held on alternate weeks. Prerequisites: ENGR 254, ENGR 333, and Senior status, or Instructor's consent.

#### ENGR 385 Machine Design (3)

Comprehensive study of the design and analysis of commonly used mechanical components. Topics extend those studied in ENGR 333 and 381. Prerequisite: ENGR 381.

#### ENGR 388 Project II (1)

Continuation of ENGR 288 Project I. Optional leadership and project management opportunities available by invitation. Prerequisite: ENGR 288.

#### ENGR 389 Engineering Practicum (1-3)

Faculty supervised engineering experience. Students work on interdisciplinary teams toward completion of engineering projects sponsored by the Collaboratory for

Strategic Partnerships and Applied Research. Team members from any major may register for a single credit hour. Upper division engineering majors with leadership roles may register for up to 3 credit hours. Pass/fail grading. Prerequisite: approval of the project advisor.

#### ENGR 488 Project III (2)

Capstone project and continuation of ENGR 388 Project II. Students provide technical leadership on a Project Team. Prerequisite: ENGR 301 and ENGR 388 for Mechanical and Electrical concentrations; ENGR 201 and ENGR 301 for Computer concentration.

## ENGR 489 Project IV (2)

Capstone project and continuation of ENGR 488 Project III. Document and present the team's work at the School of Mathematics, Engineering, and Business Scholarship Day. Mentor and transfer technical leadership responsibilities to incoming senior engineering majors. Prerequisites: ENGR 302, ENGR 488 in previous semester.

## ENGR 495 Topics in Engineering (3)

Study of selected topics in engineering. Content dependent on student and faculty interest. Prerequisite: Junior or Senior status.

## ENGR 496 Independent Study (1-3)

Independent study in engineering under the direction of an instructor. Department approval is required.

# MANAGEMENT AND BUSINESS

## Vincent A. LaFrance, Ph.D.

Chair, Department of Management and Business

# Faculty

Professors R. Johnson, V. LaFrance

Associate Professors T. Chilcote, J. Dose, R. Kilmer, J. Krimmel, B. Nejmeh, G. Page

Assistant Professors T. Earhart, D. Hagenbuch, Y. Martin

# **Majors and Minors**

The Department of Management and Business offers the following majors: Accounting (B.S.) Business Administration (B.S.) Concentrations: Finance Leadership Management Business Information Systems (B.S.) Economics (B.S./B.A.) E-Marketing (B.S.) Entrepreneurship (B.S.) Human Resource Management (B.S.) International Business (B.S.) Marketing (B.S.)

The Department of Management and Business offers the following minors: Accounting Business Administration Business Information Systems Economics Human Resource Management Leadership Special Programs

International Business Institute

The Spanish Business major can be found in the Department of Modern Languages. The Arts Management major can be found in the School of the Arts.

# Mission

The mission of the Department of Management and Business is **to educate** men and women toward professional excellence in key fields of business and economics, **to disciple** students toward godly character and Christian values, and **to inspire** graduates toward an integration of faith and vocation so to become servant-leaders and caring citizens in the workplace, local community, and global marketplace.

# **Objectives**

Upon graduating from Messiah College with a major in the Department of Management and Business students should:

- 1. Possess leadership, critical thinking, problem solving, and decision-making skills;
- 2. Demonstrate effective oral, written, and interpersonal communication;
- 3. Work effectively in teams;
- 4. Have an appreciation of information technology and be competent in computer use and in computer-related problem-solving;
- 5. Be able to understand and analyze financial statements;
- 6. Understand the legal environment of business and be familiar with the primary laws regulating the typical business operation;
- 7. Have an understanding of the opportunities and implications of globalization for U.S. business and the world community;
- 8. Have a Christian faith-based approach to moral decision-making and an awareness of ethical issues common in the workplace;
- 9. Be prepared academically for graduate study;
- 10. Have developed a biblical work ethic, matured in Christian character and faith, and committed themselves to the stewardship of God's creation.

# **Department Core Requirements**

All majors within the Department of Management and Business take foundational courses in accounting, business information systems, business law, economics, finance, management, marketing, and statistics. Students then elect to major in one of nine disciplines. The e-marketing and entrepreneurship majors require study at the Messiah College-Philadelphia Campus.

Course work offers sound preparation for employment in both public and private accounting, large and small businesses, governmental service, and nonprofit organizations.

Students may also choose to enrich their business education program either at Messiah's Philadelphia Campus in collaboration with Temple University or at numerous study abroad locations.

All majors (except the Bachelor of Arts in Economics) are required to take the following core courses to provide a broad background in the area of business administration:

ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) BIS 230 Computer Applications (3)\* BUSA 102 Opportunities in Business (1) BUSA 281 Applied Statistics for Management (3) BUSA 350 Financial Management (3) One of the following: BUSA 381 Business Law I (3) BUSA 382 Business Law II (3) BUSA 459 Strategic Management (3) ECON 110 Economics of Social Issues (3) ECON 210 Contemporary Economics (3) HRM 120 Principles of Management (3) MRKT 230 Marketing Principles (3) One of the following, based on a student's major: BIS 381 Information Systems and Managers (3) BUSA 356 Decision-Making Tools in Management (3) BUSA 360 Operations Management (3) ECON 302 Managerial Economics (3) One of the following depending on the major: MATH 107 Applied Mathematics for Management (3) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) All students must pass the Computer Competency Exam to complete their major.

All students must pass the Computer Competency Exam to complete their major. \*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

# Accounting

This major specifically prepares students to meet the ever-increasing market demand for liberally trained accountants. Messiah College students have the option of concentrating in either public or corporate accounting. After taking a special review course in their senior year, students are prepared for the CPA examination before they graduate. Over the past ten years, Messiah College students who have taken the CPA exam have ranked first or second in the state for percentage of parts passed.

Accounting Major (58–59 credits)

ACCT 141 Financial Accounting (3)

ACCT 142 Managerial Accounting (3)

ACCT 301 Intermediate Accounting I (3)

ACCT 302 Intermediate Accounting II (3)

ACCT 303 Intermediate Accounting III (3)

ACCT 343 Cost Accounting (3)

ACCT 347 Federal Income Taxes I (3)

ACCT 442 Auditing (3)

BIS 230 Computer Applications (3)\*

BUSA 102 Opportunities in Business (1)

BUSA 281 Applied Statistics for Management (3)

BUSA 350 Financial Management (3)

One of the following:

BUSA 381 Business Law I (3)

BUSA 382 Business Law II (3)

BUSA 459 Strategic Management (3)

ECON 110 Economics of Social Issues (3)

ECON 210 Contemporary Economics (3)

HRM 120 Principles of Management (3)

MRKT 230 Marketing Principles (3)

One of the following:

BIS 381 Information Systems and Managers (3)

BUSA 356 Decision-Making Tools in Management (3)

BUSA 360 Operations Management (3)

ECON 302 Managerial Economics (3)

One of the following:

MATH 107 Applied Mathematics for Management (3)

MATH 108 Intuitive Calculus with Applications (3)

MATH 111 Calculus I (4)

All students must pass the Computer Competency Exam to complete their major. \*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

#### Accounting Minor (18 credits)

ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) ACCT 301 Intermediate Accounting I (3) One of the following: ACCT 247 Basic Income Tax (3) ACCT 347 Federal Income Taxes I (3) Six additional credits Accounting courses (6) All students must pass the department-administered Computer Competency

Exam as part of the minor requirements.

# ACCT 141 Financial Accounting (3)

Accounting procedures, use of special journals, general and subsidiary ledgers, preparation of financial statements, and contents of accounts and external reporting concepts.

# ACCT 142 Managerial Accounting (3)

Uses information gathered from accounting records to prepare internal reports, compile analyses, and prepare recommendations to assist management in control and decision making. Prerequisite: ACCT 141.

## ACCT 247 Basic Income Tax (3)

Provisions of the Internal Revenue Code and the revenue codes of the state of Pennsylvania and various local governments as they relate to low income, elderly, and handicapped individuals are presented. Part of the course requirements include the preparation of tax returns during the tax filing season.

## ACCT 301 Intermediate Accounting I (3)

Critical study of generally accepted accounting principles as they relate to financial reporting, including theoretical foundations, accounting model and information processing, financial statements, future and present value, and inventory management and valuation. A component of this course is dedicated to learning writing and presentation skills related to the practice of accounting. Prerequisites: ACCT 142 and BIS 230.

# ACCT 302 Intermediate Accounting II (3)

Analysis of accounting valuation problems and procedures, including discussion of revenue and expense recognition, operational assets, property, plant and equipment, intangible assets, investments in debt and equity securities, short-term and long-term liabilities, and financial statement analysis. A component of this course is dedicated to learning letter- and memo-writing skills related to the practice of accounting. Prerequisite: ACCT 301.

## ACCT 303 Intermediate Accounting III (3)

Analysis of more complex accounting topics, including leases, pension plans, income taxes, corporation formation, stockholders' equity and retained earnings, earnings per share, statement of cash flows, and changes and error corrections. A component of this course is dedicated to working within groups and learning report writing and presentation skills related to the practice of accounting. Prerequisite: ACCT 302.

#### ACCT 343 Cost Accounting (3)

Job order and process cost accounting as well as standard cost systems. Includes the quantitative aspects of managerial accounting, cost-volume-profit analysis, budgeting, and the concept of relevant costs in managerial decisions. A computer spreadsheet program is utilized for each topic. Prerequisites: ACCT 142 and BIS 230.

# ACCT 347 Federal Income Taxes I (3)

The provisions of the Internal Revenue Code as it relates to taxes of individual and sole proprietor. Prerequisites: ACCT 141 and BIS 230.

#### ACCT 348 Federal Income Taxes II (3)

The provisions of the Internal Revenue Code as it relates to taxes of partnerships and corporations. Prerequisite: ACCT 347.

# ACCT 440 Advanced Accounting (3)

Accounting for partnerships and business combinations with particular emphasis on consolidated financial statements. Also includes other topical issues in accounting. Prerequisite: ACCT 301.

## ACCT 442 Auditing (3)

Study of an auditor's professional responsibilities within the accounting profession. Emphasis on the purposes and kinds of audits, systems of internal control, audit objectives and procedures, and financial reporting including audit and other reports. Prerequisite: ACCT 301.

#### ACCT 448 Regulation (3)

Comprehensive review of federal taxation, ethics, professional and legal responsibilities, and business law and the skills needed to apply that knowledge. Prerequisites: BUSA 381 or BUSA 382 and ACCT 347.

#### ACCT 449 Financial Accounting & Reporting (4)

Comprehensive review of the knowledge of accounting principles generally accepted in the United States of America (GAAP) for business enterprises, not-for-profitorganizations, and governmental entities, and the skills needed to apply that knowledge. Content covered in this course includes financial accounting concepts and standards, and their application. Prerequisite: ACCT 302.

# **Business Administration**

The Business Administration Major offers students the opportunity to tailor their curriculum to a customized program of study across business disciplines emphasizing career themes such as: 1) general management, 2) development of quantitative analysis skills in a business context, and 3) preparation for management of small businesses.

#### **Generalist Track Requirements**

In addition to the core courses of the Management and Business program, 24 credits of upper-level business courses are distributed across at least four business disciplines and electives.

#### Finance Concentration

The finance concentration has been designed specifically for students with career interests in corporate finance, the financial markets, or in financial institutions.

#### Leadership Concentration

The leadership concentration is available for students who have a dual interest in business administration and leadership.

#### Management Concentration

The management concentration is offered for students with interest in the management of operations or organizations.

#### Business Administration Major - Core Courses (34 credits)

ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) BIS 230 Computer Applications (3)\* BUSA 102 Opportunities in Business (1) BUSA 281 Applied Statistics for Management (3)

BUSA 350 Financial Management (3)

One of the following:

BUSA 381 Business Law I (3)

BUSA 382 Business Law II (3)

BUSA 459 Strategic Management (3)

ECON 110 Economics of Social Issues (3)

ECON 210 Contemporary Economics (3)

HRM 120 Principles of Management (3)

MRKT 230 Marketing Principles (3)

All students must pass the Computer Competency Exam to complete their major. \*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

# The remainder of the major requirements are fulfilled by either the generalist track or one of the concentrations:

## Generalist Track (24–25 credits)

One of the following: MATH 107 Applied Math for Management (3) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) One of the following: BIS 381 Information Systems and Managers (3) BUSA 356 Decision-Making Tools in Management (3) BUSA 360 Operations Management (3) ECON 302 Managerial Economics (3) Six credits of 300- or 400-level from departmental courses Four of the following: 300- or 400-level Accounting Course (3) 300- or 400-level Business Informations Systems Course (3) 300- or 400-level Economics Course (3) 300- or 400-level Human Resources Course (3) 300- or 400-level International Business Course (3) 300- or 400-level Leadership Course (3) 300- or 400-level Marketing Course (3)

# Finance Concentration (24-25 credits)

One of the following: MATH 108 Intuitive Calculus with Applications(3) MATH 111 Calculus I (4) BUSA 351 Investments (3) BUSA 356 Decision-Making Tools in Management (3) BUSA 450 Corporate Finance (3) ECON 307 Money and Banking (3) IBUS 375 International Business and World Economy (3) Plus six additional credits selected from: ACCT 301 Intermediate Accounting (3) ACCT 343 Cost Accounting (3) ACCT 347, 348 Federal Income Taxes I, II (3, 3) BIS 381 Information Systems and Managers (3) ECON 302 Managerial Economics (3) BUSA 380 Small Business Development (3) BUSA 381, 382 Business Law I, II (3, 3) Internship in Finance (max. of 3 credits toward Concentration)

\*Students may not use the same Business Law course (BUSA 381 or 382) to complete both the core and the concentration.

#### Leadership Concentration (24-25 credits)

One of the following: MATH 107 Applied Mathematics for Management (3) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) One of the following: BUSA 356 Decision-Making Tools in Management (3) BUSA 360 Operations Management (3) HRM 311 Organizational Behavior (3) LEAD 310 Leadership Theory and Development (3) LEAD/HRM 312 Leading Organizational Change (3) One of the following: COMM 301 Persuasion: Theory and Practice (3) COMM 333 Business and Organizational Communication (3) COMM 353 Crisis Communication and Media Relations (3) LEAD 391 Leadership Practicum (3) LEAD 401 Issues and Challenges in Leadership (3)

#### Management Concentration (24-25 credits)

One of the following: MATH 107 Applied Mathematics for Management (3) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) ACCT 343 Cost Accounting (3) BIS 381 Information Systems and Managers (3) BUSA 356 Decision-Making Tools for Management (3) BUSA 360 Operations Management (3) ECON 302 Managerial Economics (3) One of the following: HRM 301 Human Resource Management (3) HRM 311 Organizational Behavior (3) HRM 312 Leading Organizational Change (3) IBUS 375 International Business and World Economy (3)

#### Business Administration Minor (19 credits)

ACCT 141 Financial Accounting (3) BIS 230 Computer Applications (3)\* BUSA 102 Opportunities in Business (1) ECON 110 Economics of Social Issues (3)

HRM 120 Principles of Management (3)

MRKT 230 Marketing Principles (3)

Three credit elective from ACCT, BIS, BUSA, ECON, HRM,

IBUS, LEAD, or MRKT (may not include BUSA 130) (3)

# All students must pass the Computer Competency Exam as part of the minor requirements.

\*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

# BUSA 102 Opportunities in Business (1)

To familiarize students with the various disciplines taught within the field of business, the interrelatedness of the business disciplines, career possibilities available, the faculty of the department, and the relatedness to the liberal arts. (Pass/Fail grade only.)

# BUSA 130 Personal Finance (3)

Career planning, budgeting, income taxes, investing and saving, various aspects of banking, credit and home ownership, insurance (life, auto, home), and estate planning with an integration of Christian faith throughout.

# BUSA 211 Writing for Business (3)

Designed to improve clarity, conciseness, and speed in writing for the business world. Emphasis is on organizing written business communications to meet the readers' needs. Cross-listed with ENGL 211.

# BUSA 281 Applied Statistics for Management (3)

Topics in probability and statistics: descriptive measures, distributions, one-sample estimation and hypothesis testing, correlation, simple linear regression, categorical data. Prerequisite: MATH 107 or equivalent.

#### BUSA 350 Financial Management (3)

An overview of the significant functions and roles performed by the corporate financial manager. Students will gain a working knowledge of managerial finance by learning to: develop a systematic approach to financial analysis; apply techniques for planning, managing, evaluating and recommending improvements in the organization's financial performance. Major topics include financial asset valuation, risk and return, and capital budgeting. Prerequisites: ACCT 142, ECON 210, MATH 107 or 108 or 111.

# BUSA 351 Investments (3)

Deals with a thorough analysis of the theory and application of investments in relation to business cycles, institutional behavior and risk and return opportunities in the economic context. The course is presented from the investor's viewpoint and incorporates applied and empirical methodologies while covering investment strategies and policies. Major content areas include an introduction to the investment environment, modern portfolio theory, capital markets and instruments, security analysis, portfolio management, and derivatives. Prerequisites: BUSA 281 and 350.

# BUSA 352 Management in the Netherlands (3)

Students will travel to the Netherlands where Messiah has a relationship with a Dutch Christian college and study Dutch culture and management practices. Students will visit business and cultural sites, live with Dutch students, and participate in a business course with Dutch students. Prerequisites: HRM 120 and at least 6 credits of 300- or 400-level departmental courses. Meets General Education Cross-Cultural Studies requirement. (Alternate years, offered May Term 2009).

# BUSA 356 Decision-Making Tools in Management (3)

To develop facility with analytical tools including two-sample testing; ANOVA; non-parametric testing; multiple regression; time series and indexing; project planning, scheduling, and control; productivity measuring; and quality control. Prerequisite: BUSA 281.

# BUSA 360 Operations Management (3)

Study of the effective and efficient production of goods and services in both nonprofit and for profit organizations with emphasis on planning and scheduling of operations, design of production systems, allocation of resources including manpower, equipment, and control. Prerequisites: BUSA 281, BIS 230 or equivalent (offered on demand).

# BUSA 380 Small Business Development (3)

A survey of the entrepreneurial process and the various aspects of launching a new venture. Topics covered include organizational models and team formation; legal structures; idea definition; raising capital; sales and marketing; business and financial models; product and service development; management; operations; customer support and sustainability. Current thinking in the business as mission and transformational development movements will be surveyed. Students will form interdisciplinary teams around a specific business venture approved by the instructor. Each team will develop a business plan for their venture based on course guidelines which will include an integration of the business as mission and transformational development models. Teams will critique each other's plans. Prerequisites: ACCT 142, BIS 230, BUSA 350, HRM 120, and MRKT 230, or Instructor's consent.

# BUSA 381 Business Law I (3)

Introduction to the American legal process with emphasis on contract law.

# BUSA 382 Business Law II (3)

Study of selected legal principles applicable to business, including the law of agency, employment and labor, creditor rights, bankruptcy, insurance, real property, and wills.

# BUSA 391 Business Practicum (1-3)

Practical business-related experience under professional supervision or supervised participation as a teaching assistant in departmental courses. Open to juniors and seniors in the Department of Management and Business. Other students by department approval.

#### BUSA 450 Corporate Finance (3)

An advanced course in corporate finance. The core material will include working capital management, financial planning and forecasting, risk analysis in capital budgeting, capital structure theories, raising capital, and risk management. In addition, at least one current issue will be analyzed (e.g., corporate social responsibility). Prerequisites: BUSA 281, BUSA 350.

#### BUSA 459 Strategic Management (3)

Integrative course that focuses on strategic planning, policy formulation, and corporate-wide decision making through the use of comprehensive case problems. Prerequisites: HRM 120, MRKT 230, BIS 230, BUSA 350 and 381 or 382.

#### BUSA 491 Independent Study in Management and Business (1-3)

Independent study in management and business (offered on demand).

#### BUSA 497, 498 Major Honors (3, 3)

Independent research program for students who have a strong academic record for a minimum of five previous semesters of college study. Overall GPA of 3.5; GPA of 3.75 in the major; and departmental approval required for enrollment. Open only to seniors. (These courses may not be used to fulfill major requirements, but will be free electives.)

# **Business Information Systems**

This major meets the increasing demand for business students with the ability to develop, manage and use information technology. It provides a balance of business, computer science and information systems courses using state of the art computer hardware and software for hands-on learning. This major is focused on creating information technology graduates who can make a positive difference in a world longing for technologically competent and ethically grounded leaders. This major emphasizes leadership, systems analysis and design, electronic commerce, programming, databases, and networks.

#### Business Information Systems Major (64-65 credits)

ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) BIS 230 Computer Applications (3)\* BIS 381 Information Systems and Managers(3) BIS 411 Systems Analysis and Design Concepts (3) BIS 412 Systems Analysis and Design Applications (3) *Three of the following (not used to fulfill other requirements):* BIS 251 Hardware and Software (3) BIS 333 Business Systems Applications (3) BIS 343 Introduction to E-Commerce (3) BIS 401 Webmasters and Servers (3) BIS 402 Applied Networks and Telecommunications (3) BIS 490 Topics in Information Systems (3)

Mathematics, Engineerinç and Business

BUSA 360 Operations Management (3) COSC 182 Computer Programming II (3) COSC 333 Database Applications (3) COSC 335 Software Engineering I (3) GIS 245 Geographic Information Systems (3) One of the following: BIS 333 Business Systems Applications (3) COSC 182 Computer Programming II (3) BUSA 102 Opportunities in Business (1) BUSA 281 Applied Statistics for Management (3) BUSA 350 Financial Management (3) One of the following: BUSA 381 Business Law I (3) BUSA 382 Business Law II (3) BUSA 459 Strategic Management (3) ECON 110 Economics of Social Issues (3) ECON 210 Contemporary Economics (3) HRM 120 Principles of Management (3) MRKT 230 Marketing Principles (3) COSC 181 Computer Programming I (3) COSC 332 Database Concepts (3) One of the following: MATH 107 Applied Mathematics for Management (3) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) All students must pass the Computer Competency Exam to complete their major.

\*All students must pass the Computer Competency Exam to computer their major. \*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

#### Business Information Systems Minor (18 credits)

- BIS 230 Computer Applications (3)\*
- BIS 381 Information Systems and Managers (3)
- BIS 411 Systems Analysis and Design Concepts (3)

Three of the following:

BIS 251 Hardware and Software (3)

BIS 333 Business Systems Applications (3)

BIS 343 Introduction to E-Commerce (3)

BIS 401 Webmasters and Servers (3)

BIS 402 Applied Networks and Telecommunications (3)

BIS 412 Systems Analysis and Design Applications (3)

BIS 490 Topics in Information Systems (3)

COSC 181 Computer Programming I (3)

All students must pass the Computer Competency Exam to complete their major. \*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

# BIS 130 Introduction to Computers (3)

This course provides an introduction to information technology through the use of computer hardware and software. Terms and concepts related to the use of information technology are covered and students are given the opportunity for hands-on experience with microcomputer software such as word processing, presentations, spreadsheets and web page development as well as the use of the Internet and the World Wide Web. Prerequisite: Computer Competency Exam.

## BIS 230 Computer Applications (3)

Students learn advanced features of computer business software in areas such as website development, spreadsheets, and databases. Focus is placed on students being able to effectively and efficiently work in teams and learn, use, and teach computer applications in a business environment. Prerequisite: Computer Competency Exam. (Letter grade only.)

## BIS 251 Hardware and Software (3)

Examines the basic components of hardware and the software of a variety of computers ranging from desktops to personal digital assistants. In addition to understanding the theory of how things work, students will be expected to troubleshoot and find solutions to actual computer problems without knowing in advance whether the problems actually exist or whether the problems are caused by the hardware, software, or both. Prerequisite: BIS 230.

## BIS 333 Business Systems Applications (3)

This course acquaints students with a variety of ways in which computer applications are created, evaluated and used in a business environment. Students will participate in the application development process using an object-oriented language such as Visual Basic. Prerequisites: BIS 230 and COSC 181 or equivalent. (Letter grade only.)

# BIS 343 Introduction to E-Commerce (3)

This course provides an introduction to both the strategic and the technical essentials of developing and managing e-commerce sites. Students will research web design and build their own e-commerce site as a final project, with practical application of the principles emphasized in the course material. Team projects will research and report on e-commerce topics throughout the course. Extensive use of Internet research techniques will be emphasized. Topics will include Internet security and authentication techniques, website design and management issues, web access to databases, Internet marketing strategies, electronic payment issues, and enterprise Ecommerce tools. Prerequisites: BIS 230, MRKT 230.

#### BIS 381 Information Systems and Managers (3)

This course explores the way information technology is used to support the decisionmaking process of managers at all organizational levels. It is designed to show students a variety of ways in which computer-based information systems are used in the business environment. Special attention is given to computer user support and ethical issues in the management of information systems. Although it is not required for this course, the recommended sequence for BIS majors is: BIS 230, COSC 181, COSC 182 or BIS 333, and then BIS 381. Prerequisite: BIS 230 or equivalent.

## BIS 401 Webmasters and Servers (3)

Examines that part of information systems that deals with the world of hyperlinks and the World Wide Web. In addition to learning and understanding the technologies used by web servers, creators, and maintainers this course examines the human side of providing long distance "people-less" interfaces for users. Students will learn how to help website owners determine costs, define requirements, develop alternatives, choose solutions, build, deploy, maintain, and evaluate sustainable websites. Ethics in dealing with data security and personal privacy on intranets, extranets, and the Internet as well as long-term societal implications of the technology will also be discussed. Extensive hands-on work developing, building, and maintaining websites and installing, setting up, and using web servers will be performed throughout the course. Prerequisites: COSC 181 and BIS 381.

# BIS 402 Applied Networks and Telecommunications (3)

This course provides knowledge of networking and telecommunication technologies, hardware and software. Students learn how to evaluate, select and implement different network and telecommunication solutions within an organization. Specific topics include network topologies and protocols, cost/benefit analysis, setting up a local area network, security, network management and network performance analysis. Prerequisite: BIS 381 or permission of the instructor.

# BIS 411 Systems Analysis and Design Concepts (3)

This course introduces students to the art and science of examining and creating information-based system solutions for business problems. Holistic systems approaches such as life cycle development are emphasized. Traditional structured methods, object oriented methods and emerging development paradigms are examined. Students apply systems analysis and design methods using several case studies. They also develop skills to review and assess system analysis and design models. Prerequisite: BIS 381. (Letter grade only.)

# BIS 412 Systems Analysis and Design Applications (3)

Students will form teams and complete a semester project. The project will require student teams to integrate material from other courses to plan, define, analyze, design, build, test and deploy an information system solution to solve a real business problem. Prerequisite: BIS411. (Letter grade only.)

# BIS 490 Topics in Information Systems (3)

Each offering may deal with a different information systems area of current and practical relevance. Topics will be selected based on current and emerging issues, trends and technologies related to information systems. Such topics may include Decision Support Systems, Management Information Systems, computer simulation, advanced displays, intelligent interfaces, system planning and execution tools, Genetic Algorithms, Fuzzy Logic, Knowledge Based Systems, software metrics, information system acquisition models, computer forensics, and specific functional areas such as health care and financial information systems. This course may be taken more than once for credit (with a different topic). Prerequisite: BIS 230.

# BIS 491 Independent Study (1-3)

Independent study in business information systems under the direction of an instructor.

# Economics

This major fosters an appreciation of the importance of personal economic life as well as an understanding of the U.S. economic system and the global context within which it operates. The B.S. in Economics is intended for the student who wants to major in economics but also receive a broad background in business. The B.A. in Economics is designed for the student who wants to focus on economics, but do so within a liberal arts curriculum. Both majors offer broad preparation for any career choice while also providing a solid foundation for graduate studies in economics, law or business.

# Economics Major (Bachelor of Science; 61-62 credits)

ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) BIS 230 Computer Applications (3)\* BUSA 102 Opportunities in Business (1) BUSA 281 Applied Statistics for Management (3) BUSA 350 Financial Management (3) BUSA 459 Strategic Management (3) One of the following: BUSA 381 Business Law I (3) BUSA 382 Business Law II (3) One of the following: BIS 381 Information Systems and Managers (3) BUSA 356 Decision-Making Tools in Management (3) BUSA 360 Operations Management (3) ECON 110 Economics of Social Issues (3) ECON 210 Contemporary Economics (3) ECON 301 Intermediate Macroeconomics (3) ECON 302 Managerial Economics (3) ECON 303 Comparative Political Economy (3) Four of the following (12 hours total): ECON 117 Issues in Environmental Economics (3) ECON 307 Money and Banking (3) ECON 312 Economic Development (3) ECON 315 The Economics of Wages and Employment (3) IBUS 375 International Business and World Economy (3) HRM 120 Principles of Management (3) One of the following: MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) MRKT 230 Marketing Principles (3) All students must pass the Computer Competency Exam to complete their majors. \*All students must pass the department-administered Computer Competency Exam

Mathematics, Engineering and Business prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

#### Economics Major (Bachelor of Arts; 39-40 credits)

ACCT 141 Financial Accounting (3) BIS 230 Computer Applications (3)\* ECON 110 Economics of Social Issues (3) ECON 210 Contemporary Economics (3) ECON 301 Intermediate Macroeconomics (3) ECON 302 Managerial Economics (3) ECON 303 Comparative Political Economy (3) Four of the following (12 hours total): ECON 117 Issues in Environmental Economics (3) ECON 307 Money and Banking (3) ECON 312 Economic Development (3) ECON 315 The Economics of Wages and Employment (3) IBUS 375 International Business and World Economy (3) One of the following: BUSA 281 Applied Statistics for Management (3) STAT 269 Introductory Statistics (3) STAT 291 Statistics for Mathematical Sciences I (3) One of the following: MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4)

All students must pass the Computer Competency Exam to complete their major. \*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

#### Economics Minor (18 credits)

ECON 110 Economics of Social Issues (3) ECON 210 Contemporary Economics (3) One of the following: ECON 301 Intermediate Macroeconomics (3) ECON 302 Managerial Economics (3) Nine additional credits of ECON courses, one of which may be IBUS 375 (9)

All students must pass the department-administered Computer Competency Exam as part of the minor requirements.

# ECON 110 Economics of Social Issues (3)

An examination of particular contemporary social issues such as crime, poverty, environmental quality, discrimination, healthcare, international trade, and unemployment, using analytical tools of economics. Fundamental aspects of the price system are emphasized throughout the course. Meets General Education Social Science requirement.

#### ECON 117 Issues in Environmental Economics (3)

Introduction to the nature and application of the methods of economic analysis to

the problems and issues associated with the environment. Deals with case studies and policy options relevant to local, national, and international environmental concerns. Meets General Education Social Science requirement.

#### ECON 210 Contemporary Economics (3)

The application of various economic models to contemporary economic problems, expanding upon the analysis developed in ECON 110. Emphasis is placed upon the ability to use and critique these models as tools to understand both the nature of these problems and the basis for contending policy options. Focuses upon macroeconomic issues and the role or institutional and social structures. Prerequisite: ECON 110 or 117.

## ECON 301 Intermediate Macroeconomics (3)

Examines the development of various macroeconomic models as tools for analyzing factors which influence the level of national income, output, inflation, employment, etc. Explains the usefulness and limitations of these models in determining appropriate fiscal, monetary and international trade policies. Prerequisites: ECON 110 or 117; ECON 210; MATH 107, MATH 108, or MATH 111; and BUSA 281.

## ECON 302 Managerial Economics (3)

Application of microeconomic concepts to decision-making processes of business. Primary focus is on demand, cost, production, market structure, and pricing policies. Prerequisites: ECON 110 or 117 and 210.

## ECON 303 Comparative Political Economy (3)

This course examines the historical development of economic analysis and current economic schools of thought in a philosophical, social, political, and cultural context. Included among the various schools of thought to be examined are "Classical" and "Modern Liberalism," Marxian, Keynesian, "New" Classical/Supply-Side Analysis, and Institutional. An emphasis is placed upon examining and critiquing the underlying methodological and philosophical principles of each school of thought, and exploring the implicit and explicit links between economics and politics. Prerequisites: ECON 110 or 117 and 210 or Instructor's consent.

# ECON 307 Money and Banking (3)

The role of finance in the economy and the nature of money and other financial assets. Emphasizes the role of principal financial markets and their relationship to the economy through study of fund flows, monetary theory, and policy. Prerequisite: ECON 210.

# ECON 309 Topics in Economics (3)

Each offering of this course will deal with a different area of economic analysis. Possible topics include public finance, comparative economic systems, urban and regional economics, and econometrics. Prerequisite: ECON 110 or 117, and 210.

#### ECON 312 Economic Development (3)

Examination of the process of economic development with reference to developing countries. Considers a variety of case studies and viewpoints. Prerequisite: ECON

110 or 117 and 210.

#### ECON 315 The Economics of Wages and Employment (3)

The economics of labor markets, labor unions, and collective bargaining. Topics include labor force participation, labor mobility, employment and unemployment, wage rate determination (education, training, labor market discrimination, and collective bargaining strategies), and public policies affecting income distribution. Both orthodox and heterodox frameworks of analysis are considered, with attention placed on questions of justice and equity. Prerequisites: ECON 110 or 117 and 210.

# E-Marketing

This major requires two semesters at the Messiah College-Philadelphia Campus in collaboration with Temple University. The purpose of this major is to provide students with study in the tools and functional areas necessary to use electronic marketing in the business-to-business, business-to-consumer, consumer-to-consumer, and consumer-to-business sectors. Students must have a 3.0 GPA overall and in their business requirements to enroll in e-marketing courses.

The following courses must be taken prior to enrollment in the e-marketing courses: ACCT 141, 142, BIS 230, 381, BUSA 281, ECON 110, 210, HRM 120 (May be taken at Temple University), MATH 107 or 108 or 111, MRKT 230, 333

## E-Marketing Major (64-65 credits)

ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) BIS 230 Computer Applications (3)\* BIS 381 Information Systems and Managers (3) BUSA 102 Opportunities in Business (1) BUSA 281 Applied Statistics for Management (3) BUSA 350 Financial Management (3) BUSA 356 Decision-Making Tools in Management (3) One of the following: BUSA 381 Business Law I (3) BUSA 382 Business Law II (3) BUSA 459 Strategic Management (3) ECON 110 Economics of Social Issues (3) ECON 210 Contemporary Economics (3) HRM 120 Principles of Management (3) One of the following: MATH 107 Applied Mathematics for Management (3) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) MRKT 230 Marketing Principles (3) MRKT 333 Consumer Behavior (3) Six of the following (18 credits total): MKTG 3502 Information Management for Electronic Commerce (3)\*\* MKTG 3506 E-Retailing and Supply Chain Management (3)\*\* MKTG 3507 Direct Marketing and E-Commerce Channels (3)\*\* MKTG 3508 Strategic Application of Technology in Marketing (3)\*\* MKTG 3509 Business-to-Business Marketing with E-Commerce (3)\*\* MKTG 4596 Marketing Strategy Planning (3)\*\* One of the following: ECON 3xxx Upper-Division Economics Elective (3)\*\* GSM 3501 Entrepreneurship (3)\*\* MKTG 3553 International Marketing (3)\*\*

All students must pass the Computer Competency Exam to complete their major. \*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

\*\*Offered in Philadelphia in conjunction with Temple University.

# Entrepreneurship

The role of entrepreneurs in the 21<sup>st</sup> Century economic world is both critical and extensive. Many of our leading companies began as entrepreneurial start-ups and the information technology revolution has encouraged all manner of entrepreneurial activity. Many of our students come from family businesses or want to start their own businesses and this major provides support for such interests. Students must have a 3.0 GPA in their business requirements to enroll in entrepreneurship courses. All students are expected to participate in the Entrepreneurial Student Association while at the Philadelphia Campus.

The following courses must be taken prior to enrollment in the entrepreneurship courses: ACCT 141, 142, 343, BIS 230, BUSA 281, 350, 356, ECON 110, 210, HRM 120, MATH 107 or 108 or 111, MRKT 230

#### Entrepreneurship Major (67-68 credits)

ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) ACCT 343 Cost Accounting (3) BIS 230 Computer Applications (3)\* BIS 381 Information Systems and Managers (3) BUSA 102 Opportunities in Business (3) BUSA 281 Applied Statistics for Management (3) BUSA 350 Financial Management (3) BUSA 356 Decision-Making Tools in Management (3) One of the following: BUSA 381 Business Law I (3) BUSA 382 Business Law II (3) BUSA 459 Strategic Management (3) ECON 110 Economics of Social Issues (3) ECON 210 Contemporary Economics (3) One of the following: BUSA 380 Small Business Development (3)

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ECON 302 Managerial Economics (3) ECON 307 Money and Banking (3) HRM 120 Principles of Management (3) MRKT 230 Marketing Principles (3) One of the following: MATH 107 Applied Mathematics for Management (3) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) GSM 111 Entrepreneurship (3)\*\* GSM 362 Senior Entrepreneurship Seminar (3)\*\* GSM 380 Global Strategic Management (3)\*\* GSM 385 Internship in Entrepreneurship I (3)\*\* GSM 386 Internship in Entrepreneurship II (3)\*\* MRKT 210 Marketing Research (3)\*\* All students must pass the Computer Competency Exam to complete their major.

\*All students must pass the Computer Competency Exam to complete their major. \*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

\*\*Offered in Philadelphia in conjunction with Temple University.

# **Human Resource Management**

Human resources—perhaps the most critical assets or resources for any organization—are the focus of this major. The study of human behavior within the context of the organization is designed to prepare students for careers in employee relations, training and development, compensation, industrial relations, and general management.

#### Human Resource Management Major (58-59 credits)

ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) BIS 230 Computer Applications (3)\* BUSA 102 Opportunities in Business (1) BUSA 281 Applied Statistics for Management (3) BUSA 350 Financial Management (3) One of the following: BUSA 381 Business Law I (3) BUSA 382 Business Law II (3) BUSA 459 Strategic Management (3) ECON 110 Economics of Social Issues (3) ECON 210 Contemporary Economics (3) MRKT 230 Marketing Principles (3) One of the following: BIS 381 Information Sysems and Managers (3) BUSA 356 Decision-Making Tools in Management (3) BUSA 360 Operations Management (3)

ECON 302 Managerial Economics (3) HRM 120 Principles of Management (3) HRM 301 Human Resource Management (3) HRM 311 Organizational Behavior (3) HRM 356 Compensation and Benefits Management (3) One of the following: HRM 351 Working Internationally HRM 352 Management in the Netherlands (3) HRM 430 Human Resource Management Senior Seminar (1) Two of the following: LEAD 310 Leadership Theory and Development (3) HRM/LEAD 312 Leading Organizational Change (3) HRM 346 Labor Relations (3) ECON 315 The Economics of Wages and Employment (3) HDFS/PSYC 312 Adult Develoment (3) Internship/Practicum in Human Resource Management (max. of 3 credits toward major) (3) One of the following: MATH 107 Applied Mathematics for Management (3) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4)

All students must pass the Computer Competency Exam to complete their major. \*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

#### Human Resource Management Minor (18 credits)

HRM 120 Principles of Management (3)
HRM 301 Human Resource Management (3)
HRM 311 Organizational Behavior (3)
HRM 356 Compensation and Benefits Management (3)
Six credits chosen from:
LEAD 310 Leadership Theory and Development (3)
HRM/LEAD 312 Leading Organizational Change (3)
HRM 346 Labor Relations (3)
HRM 351 Working Internationally (3)
HRM 352 Management in the Netherlands (3)
ECON 315 The Economics of Wages and Employment (3)
Internship/Practicum in Human Resource Management (3)
All students must pass the department-administered Computer Competency
Exam as part of the minor requirements.

# HRM 120 Principles of Management (3)

An introduction to the basic processes of management including human behavior in the workplace, leadership, teams, quality, change, organizational structure and design, international management, and management ethics.

# HRM 301 Human Resource Management (3)

Mathematics, Engineering and Business Examination of the process and problems in effectively selecting, developing, utilizing, and evaluating human resources in an organization. Prerequisite: HRM 120 or Instructor's consent. (Offered Spring Semesters only.)

# HRM 311 Organizational Behavior (3)

Principles, concepts, and processes involved in the interface among individuals, groups, and organizations. Topics such as personality, perception, leadership development, role theory, motivation, power and conflict, group behavior, and job design. Prerequisite: HRM 120 or Instructor's consent.

# HRM/LEAD 312 Leading Organizational Change (3)

The current environment in which organizations operate is characterized by unprecedented change powered by rapidly emerging technologies, information overload, globalization, higher customer expectations, and changing values, lifestyles, and attitudes. This requires effective leaders to be proactive toward change or be lost in the tide. This course examines change from an organizational perspective by exploring the change process, representative change interventions, and the role of the leader in working with organizational members to accomplish successful change initiatives. Course concepts are drawn from many disciplines and explore change at individual, group, and organizational levels. Students will have the opportunity to analyze success, failure, and multiple dilemmas of public and private sector organizations in order to better understand the causes, implications, potential leader action, and strategies of organizational change. Cross-listed with LEAD 312. Prerequisite: HRM 120 or Instructor's consent.

# HRM 346 Labor Relations (3)

Study of labor management relations through a review of history, analysis of the collective bargaining process, and evaluation of the role of government. Prerequisite: HRM 120 or Instructor's consent.

# HRM 351 Working Internationally

Human resource management practices in other countries differ from those in the U.S., each having advantages and disadvantages. This course investigates how a country's history, culture, religion, politics, and economy impact the practice of HRM. Human resource systems in the European Union in general and the Netherlands in particular will be analyzed and compared. Different paradigms will be explored with the goal of advancing a just system of human resources. Prerequisite: HRM 120.

# HRM 352 Management in the Netherlands (3)

Students will travel to the Netherlands where Messiah has a relationship with a Dutch Christian college and study Dutch culture and management practices. Students will visit business and cultural sites, live with Dutch students, and participate in an HR course with Dutch students. Prerequisites: HRM 120, HRM 301, HRM 311. Meets General Education Cross-Cultural Studies requirement. (Alternate years, offered May Term 2009.)

# HRM 356 Compensation and Benefits Management (3)

Explores the design and evaluation of compensation programs that will attract, retain, and motivate competent employees. Topics include job evaluation, pay dis-

crimination and comparable worth, internal and external equity comparisons, and benefit plans; the study of wage and salary administration in public and private organizations; determinants of general wage and salary levels and structures; total compensation systems, incentive wage systems, supplementary benefits; legal framework and overall compensation strategy. Prerequisite: HRM 120 and passage of the Computer Competency Exam or Instructor's consent.

#### HRM 426 Topics in Human Resource Management (3)

Seminar course with variable topics related to a specific area of human resource management. Possible topics include comparative HRM systems, work and family relationships, motivation, performance management, and self-directed teams. May be taken more than once for credit. Prerequisites: HRM 120, HRM 301, HRM 311.

#### HRM 430 Human Resource Management Senior Seminar (1)

Involves eight class meetings over the course of the spring semester. Three meetings will involve attending the Human Resource Professionals of Central PA meetings. The remaining five classes will involve local HRM professionals as guest speakers, current human resource topics, preparation for entering the workplace, and faith integration. Prerequisites: HRM 301, 311.

# **International Business**

This major is designed to prepare students to work in the global marketplace. Integrating both vocation and ministry, the major provides a wealth of opportunities that combine business and missions. In addition to on-campus courses, students in this major attend the International Business Institute, a ten-week study/travel program in Europe and Russia. This summer program is complemented by a required experience in a developing country.

# International Business Major (76-77 credits)

ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) BIS 230 Computer Applications (3) BUSA 102 Opportunities in Business (1) BUSA 281 Applied Statistics for Management (3) BUSA 350 Financial Management (3) One of the following: BUSA 381 Business Law I (3) BUSA 382 Business Law II (3) BUSA 459 Strategic Management (3) ECON 110 Economics of Social Issues (3) ECON 210 Contemporary Economics (3) HRM 120 Principles of Management (3) MRKT 230 Marketing Principles (3) One of the following: BIS 381 Information Systems and Managers (3) BUSA 356 Decision-Making Tools in Management (3) BUSA 360 Operations Management (3)

ECON 302 Managerial Economics (3) ECON 312 Economic Development (3) IBI 331 Comparative Economic Systems (3) IBI 339 Global Marketing (3) IBI 350 International Trade and Finance (3) IBI 390 Global Business Strategy (3) IBUS 377 Ministry in International Business (3) One of the following: MATH 107 Applied Mathematics for Management (3) MATH 108 Intuitive Calculus with Applications (3) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) POLI 212 International Politics (3) Twelve credits of a foreign language (12) Internship or cross-cultural study tour to a developing country (3) All students must pass the Computer Competency Exam to complete their major.

\*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

#### IBUS 375 International Business and World Economy (3)

Introduction to international economic relations with emphasis on both private and public sectors. Topics include theories of trade, protectionism, balance of payments and the international monetary order, economic integration, the developing world, and global corporations. Focuses on current trends, policies, and institutions. Prerequisite: ECON 110 or 117 and 210.

#### IBUS 377 Ministry in International Business (3)

Examination of the current "tentmaking" movement with emphasis on tentmaking opportunities in international business. Topics include the biblical basis for tentmaking, contextualization of faith in the international work environment, resources and training programs for tentmaking preparation. Guest tentmakers share personal experiences.

# **International Business Institute**

The following four courses are taught in conjunction with the International Business Institute and are generally completed during the summer between the junior and senior year.

# IBI 331 Comparative Economic Systems (3)

A survey of the major economic systems, including the underlying ideological foundations and institutional arrangements. The major theoretical aspects of various types of systems are covered along with their central organizational features. Special attention is given to the changes and developments in the former Soviet Union and Eastern Europe. Review of the European Union as well as the major Asian economies of China and Japan. (Letter grade only.)

# IBI 339 Global Marketing (3)

The theory and practice of contemporary global marketing management. The context or environment of international marketing is covered along with the task of marketing within a variety of national or cultural markets. Major topic areas include the global marketing environment, global market research and market entry, and product planning and strategy in a global context. Several projects involve students in global marketing research and analysis. (Letter grade only.)

# IBI 350 International Trade and Finance (3)

A survey of the analytical and institutional aspects of international trade and finance. The historical and contextual elements are the foundation for the examination of current theoretical and empirical approaches to international economic and financial relations. Major areas of emphasis include international finance, international trade, and international economic integration. (Letter grade only.)

# IBI 390 Global Business Strategy (3)

This course is intended to integrate the field experiences and presentations by guest faculty in the areas of international business with current developments and literature in this field. Students will be expected to prepare analytical reports on the various firms and institutions visited in the program. Major topics included in the reading and discussion in this course are the role of the multinational firm in the world economy, international business strategy, organizational behavior, international human resource management, and financial management for the multinational firm. The discussion of values and ethical issues related to international business is also included. (Letter grade only.)

# Leadership

#### Leadership Minor

The leadership minor has been created to provide a curricular component in the effort to prepare students for leadership roles in church and society. All students are encouraged to consider taking courses in the area of leadership.

#### Leadership Minor (21 credits)

HRM 120 Principles of Management (3)
HRM 311 Organizational Behavior (3)
LEAD 310 Leadership Theory and Development (3)
LEAD/HRM 312 Leading Organizational Change (3)
One of the following:
COMM 301 Persuasion: Theory and Practice (3)
COMM 301 Persuasion: Theory and Practice (3)
COMM 333 Business and Organizational Communication (3)
COMM 353 Crisis Communication and Media Relations (3)
LEAD 401 Issues and Challenges in Leadership (3)
DTE: Attractigate course substitutions may be made with the attractional communication (3)

**NOTE:** Appropriate course substitutions may be made with the approval of the Department of Management and Business. All students must pass the department-administered Computer Competency Exam as part of the minor requirement.

Mathematics, Engineering and Business

## LEAD 310 Leadership Theory And Development (3)

This course focuses on the foundational as well as the latest theories and approaches to leadership and leader development, emphasizing scientific research and empirical support as well as case studies. Leadership skill development and integration of faith will be emphasized. The course explores the leadership process to enhance effectiveness and organizational performance across multiple levels of analysis and highlights the role of leader, follower, and situational factors that contribute to success. Leadership from the focal leader, organizational, and strategic perspectives will be addressed. Prerequisite: HRM 120 or Instructor's consent.

#### LEAD 312 Leading Organizational Change (3)

The current environment in which organizations operate is characterized by unprecedented change powered by rapidly emerging technologies, information overload, globalization, higher customer expectations, and changing values, lifestyles, and attitudes. This requires effective leaders to be proactive toward change or be lost in the tide. This course examines change from an organizational perspective by exploring the change process, representative change interventions, and the role of the leader in working with organizational members to accomplish successful change initiatives. Course concepts are drawn from many disciplines and explore change at individual, group, and organizational levels. Students will have the opportunity to analyze success, failure, and multiple dilemmas of public and private sector organizations in order to better understand the causes, implications, potential leader action, and strategies of organizational change. Cross-listed with HRM 312. Prerequisite HRM 120 or Instructor's consent.

#### LEAD 320 Issues and Challenges in Leadership (3)

Explores current leadership topics such as servant leadership, leadership teams, selfleadership, and gender differences in leadership style. The course will also investigate leadership styles in other cultures. Ethics in leadership and dysfunctional leadership will be discussed, including whether an unethical charismatic leader can still be considered "effective" (e.g., Hitler). Current leadership issues in the news will be integrated into the course. Students will be expected to apply material from previous leadership courses. Prerequisites: HRM 120 or Instructor's consent.

# LEAD 391 Leadership Practicum (3)

Practical experience or applied project with leadership/service component; open to juniors and seniors.

# Marketing

A major in marketing prepares students for careers in management that are directly related to the process of facilitating the flow of goods and services from producers to consumers. This major takes an interdisciplinary approach to training students for a variety of career possibilities including marketing management, marketing research, advertising, customer service, public relations, merchandising, retailing, and sales—customizing the major based on a student's particular interests. Students are encouraged to pursue careers in private industry, non-profit organizations, and the public sector.

#### Marketing Major (58-59 credits)

ACCT 141 Financial Accounting (3) ACCT 142 Managerial Accounting (3) BIS 230 Computer Applications (3)\* BUSA 102 Opportunities in Business (1) BUSA 281 Applied Statistics for Management (3) BUSA 350 Financial Management (3) BUSA 356 Decision-Making Tools in Management (3) One of the following: BUSA 381 Business Law I (3) BUSA 382 Business Law II (3) BUSA 459 Strategic Management (3) ECON 110 Economics of Social Issues (3) ECON 210 Contemporary Economics (3) HRM 120 Principles of Management (3) MRKT 230 Marketing Principles (3) MRKT 333 Consumer Behavior (3) MRKT 337 Advertising (3) MRKT 339 Marketing Research (3) MRKT 438 Marketing Management and Strategy (3) One of the following: MATH 107 Applied Mathematics for Management (3) MATH 108 Intuitive Calculus with Applications (3) MATH 111 Calculus I (4) Two of the following: ART 112 Introduction to Graphic Problem Solving (3) ART 130 Introduction to Graphic Art (3) ART 182 Color and Design (3) ART 211 Computer Art (3) ART 237 Graphic Design I (3) ART 251 Photography I (3) ART 312 Digital Studio (3) ART 337 Graphic Design II (3) ART 347 Publication Portfolio (3) ART 411 Advanced Computer Art (3) ART 435 Computer Graphics and Multimedia (3) ART 437 Graphic Design III (3) COMM 205 Public Relations (3) COMM 211 Media in Everyday Life (3) COMM 218 Mass Media and Society (3) COMM 241 Small Group Communication (3) COMM 247 Writing for Mass Media (3) COMM 301 Persuasion: Theory and Practice (3) COMM 333 Business and Organizational Comm. (3) OR COMM 341 Communication Theory (3)

Mathematics, Engineering and Business COMM 353 Crisis Communication and Media Relations (3) ENGL 112 Newswriting (3) MRKT 357 Personal Selling (3) Six credits of approved ART, COMM, ENGL, or MRKT courses (6)

All students must pass the Computer Competency Exam to complete their major. \*All students must pass the department-administered Computer Competency Exam prior to enrolling in BIS 230. Students who do not pass the Computer Competency Exam may enroll in BIS 130 Introduction to Computers.

## MRKT 230 Marketing Principles (3)

Understanding the role of marketing in the economy and within the firm. Learning to assess and meet the needs of consumers in the firm's target market through development of suitable products which are priced and distributed appropriately with the aid of effective communication.

## MRKT 333 Consumer Behavior (3)

Application of behavioral theory and research to the consumption behavior of individuals in society. Covers individual perception, group and societal norms, and organizational persuasion. Prerequisite: MRKT 230

## MRKT 337 Advertising (3)

Familiarizes students with the nature and scope of advertising and its place in the economic structure, with special emphasis on creative and managerial aspects of advertising, including campaign strategy, the use of mass media, the advertising agency, and social responsibility. Prerequisite: MRKT 230

# MRKT 339 Marketing Research (3)

Study of techniques available for obtaining marketing information, use of research design, questionnaire construction, sampling theory, and data analysis. Prerequisites: MRKT 230 and BUSA 281.

# MRKT 357 Personal Selling (3)

Personal Selling is designed to train students who anticipate a career in sales but also to educate others who may benefit from understanding sales functions such as relationship building and persuasion. Among the topics explored, in a faith context, are: the role of personal selling in business, sales stereotypes, the communication process, personality theory, buying behavior, sales relationships, selling methods, and selfmanagement. Prerequisite: MRKT 230. (Letter grade only.)

# MRKT 438 Marketing Management and Strategy (3)

Integrative study of marketing from a managerial perspective. Emphasis on strategic analysis, planning, and evaluation of marketing systems. Prerequisites: MRKT 230, 333, 337, and 339.

# MATHEMATICAL SCIENCES

# Angela C. Hare, Ph.D.

Chair, Department of Mathematical Sciences

# Faculty

Associate Professors M. Eby, A. Hare, D. Phillippy, E. Rohrbaugh, L. Widmer, S. Wilcock Assistant Professors R. Barrett, A. Kryemadhi, D. Owen, C. Staecker Instructor S. Weaver

# Mission

The mission of the Department of Mathematical Sciences is to educate students in excellent problem-solving skills and the quantitative analysis of mathematics, statistics, physics, and computer science and to challenge students to live out their faith in their vocation as they become servant leaders in society, church, and the world.

# **Majors and Minors**

The Department of Mathematical Sciences offers the following majors: Computer Science (B.A.) Mathematics (B.A.) Mathematics with Teaching Certification (B.A.) Physics (B.S.)

The Department of Mathematical Sciences offers the following minors: Computer Science Mathematics Statistics

# **Computer Science**

Mathematics, Engineerin and Business The Computer Science Major offers a core of computer science courses designed to follow the guidelines of the Association for Computing Machinery. In addition, the major offers courses in other areas of specialization, such as artificial intelligence, graphics, and networks. Students learn both theoretically and practically how to develop and implement computer systems and applications. Internships and directed studies are available for students to obtain further practical experience. Upon graduation students are prepared for graduate school and for employment in many areas, including industry, government, business, computer manufacturing, and organizations that use computers for research or production.

Our campus-wide network, spanning our Grantham and Philadelphia campuses, allows students high-speed wired or wireless access to our fibre optic backbone connected to the Internet. Hundreds of Windows computers are available for general use with a wide variety of software applications. Computer Science majors have access to dedicated computer lab space with machines that dual boot Linux and Windows where they can experience different operating systems, software applications, hardware, and networking devices. From this lab, removable hard drives may be signed out for individual student use to install alternate operating systems or experiment with modifications of hardware and software for course assignments or projects of the student's design. Macintosh computer labs with design software are available with exceptionally large storage and large color printers to permit you to design elaborate media projects. Four departmental servers allow students to set up both "sandbox" testbeds and production quality services. Visit our department web site at http://www.messiah.edu/mathematics for details.

#### Computer Science Major (64-65 credits)

MATH 111 Calculus I (4) or MATH 109, 110 equivalent MATH 112 Calculus II (4) PHYS 201, 202 or PHYS 211, 212 Introductory or General Physics I, II (4, 4) COSC 181 Computer Programming I (3) COSC 182 Computer Programming II (3) COSC 195 First Year Computer Science Seminar (3) COSC 281 System Internals and Assembly Language (3) COSC 282 Data Structures and Algorithms (3) COSC 317 Computer Hardware Organization (3) COSC 382 Organization of Programming Languages (3) COSC 416 Operating Systems and Computer Architecture (3) COSC 494 Computer Science Senior Seminar (3) Three of the following: COSC 332 Database Concepts (3) COSC 333 Database Applications (3) COSC 335 Software Engineering I (3) COSC 415 Data Communications and Networking (3) COSC 418 Artificial Intelligence (3) COSC 487 Computer Graphics (3) COSC 490 Topics in Computer Science (3) One of the following: MATH 211 Calculus III (4) MATH 261 Linear Algebra (3)

STAT 291 Statistics for Mathematical Sciences I (3)

Plus 3 more courses from the following:

Any courses remaining after satisfying the above two categories or: BIS 333, BIS 343, BIS 381, BIS 401, BIS 411, BIS 412, BIS 491, COSC 391, COSC 491, COSC 497, COSC 498, MATH 301, MATH 341, MATH 342, MATH 362, STAT 292, STAT 346

#### Computer Science Minor (18 credits)

Eighteen credits of COSC courses, excluding COSC 171 Problem Solving with Computers.

#### COSC 171 Problem Solving with Computers (3)

This course is a broad and hands-on exposure to the capabilities and uses of computer software. Course projects introduce students to problems that computers can solve and various tools (programs or applications) used for these solutions. These tools include developing Internet web pages, using graphics, spreadsheets, and database applications. Students participate in a team project to design and launch a website that will benefit web users practically and/or spiritually. Meets General Education Mathematical Science requirement.

## COSC 181 Computer Programming I (3)

Introduction to computer programming and its applications using object-oriented methods and the Java programming language of the World Wide Web. Students do exercises, develop simulations, and graphics applications. Designed for majors in computer science, business information systems, and mathematics. Two lecture periods and two one-hour laboratories per week. Meets General Education Mathematical Science requirement.

#### COSC 182 Computer Programming II (3)

Continues development of discipline in program design, in style and expression, in debugging and testing, especially in intermediate-sized programs using the Java language. An introduction to algorithmic analysis, string processing, recursion, internal search/sort methods, and data structures. Two lecture periods and two one-hour laboratories per week. Prerequisite: COSC 181.

#### COSC 195 First Year Computer Science Seminar (3)

Designed to give the entering computer science major an overview of the field of computer science. Students are introduced to ethical and moral questions in computer science, artificial intelligence, history of computing, Internet resources, uses of software, computer hardware, vocational opportunities, and the future of computer science. Prerequisite: Computer Science major or COSC 181 or permission of instructor. Does not meet any General Education requirements. (Offered January term only.)

# COSC 281 System Internals and Assembly Language (3)

Computer architecture and design, RISC assembly language programming, internal data representation, and digital logic. Prerequisite: COSC 182. (Offered Fall Semester only.)

## COSC 282 Data Structures and Algorithms (3)

Data and procedural abstraction for larger programs. Using the Java language for programming, topics include analysis of algorithms and the implementation of various internal dynamic data structures including strings, linked lists, queues, trees, and networks. These data structures are then used in applications including simulations, parsing, searching and sorting, and others. Prerequisite: COSC 182. (Offered Spring Semester only.)

## COSC 317 Computer Hardware Organization (3)

Digital logic from simple logic elements through microprocessor design, an introduction to the structure of microcomputers, including computer interfacing. Two lecture periods and one three-hour laboratory per week. Prerequisites: COSC 281, PHYS 212 or 202. (Offered Spring Semester only.)

## COSC 332 Database Concepts (3)

Relational databases. Semantic object modeling. SQL in both local and client-server environments, in both embedded and stand-alone applications. Prerequisite: COSC 182 or BIS 333. (Offered Fall Semester only.)

## COSC 333 Database Applications (3)

Data-centered modeling of an actual corporate application. Client-server approaches to reusability and resource sharing. Prototyping and the project life cycle as approaches to software development. Student projects continue skill development in database design. Prerequisite: COSC 332. (Offered Spring Semester only.)

#### COSC 335 Software Engineering I (3)

The course introduces students to the discipline of software engineering through a series of selected readings, class discussions, and practical learning experiences. The course will survey the issues, approaches, and tools for addressing key areas of software engineering. Including software requirements definition, software architectures, software analysis/design, technical software development, alternative software life cycle models, software process and project management, open source software development, software version and configuration management, software quality assurance and testing. Prerequisite: COSC 332. (Alternate years, offered Spring 2009.)

#### COSC 382 Organization of Programming Languages (3)

Study of features of programming languages and of the methods used to specify and translate them. Topics include LISP, virtual machines, syntax and semantics, binding times, scoping rules, implementation choices, procedure calling, and parameter passing. Prerequisite: COSC 282. (Offered Fall Semester only.)

#### COSC 391 Computer Science Practicum (1-3)

Practical experience under professional supervision, open to juniors and seniors with at least four computer science courses completed. Prerequisites: Instructor and Advisor consent required.

## COSC 415 Data Communications and Networking (3)

An introduction to the basics of data communication and networking. Topics include the OSI model, the physical processes used for digital transmission, standardization, local area networks, the network protocols, and network applications. Prerequisite: PHYS 212 or PHYS 202. (Offered Fall Semester only.)

## COSC 416 Operating Systems and Computer Architecture (3)

Overview of the parts of modern operating systems: process scheduling and synchronization, deadlocks, virtual memory management, file systems, protection and security, distributed systems. Systems programming in UNIX. Prerequisite: COSC 317 or ENGR 342/349. (Offered Spring Semester only.)

#### COSC 418 Artificial Intelligence (3)

Intelligent agents. Knowledge-based systems, neutral networks, genetic algorithms, natural language processing, robotics, computer vision, virtual reality, and philosophy of artificial intelligence. LISP programming. Prerequisite: COSC 282. (Alternate years, offered Fall 2008.)

#### COSC 487 Computer Graphics (3)

Graphics hardware and software. Graphics standards. Topics include two- and threedimensional transformations, clipping, projection, hidden line and hidden surface algorithms. A significant graphics project is an important component of the course. Prerequisite: COSC 282. (Alternate years, offered Fall 2007.)

#### COSC 490 Topics in Computer Science (3)

Each offering may deal with a different area of computer science, such as compiler design, natural language processing, theory of computation, computer vision, robotics, analysis of algorithms, real-time and distributive processing, software engineering, digital design, computational complexity, simulation, information theory, queuing analysis, systems analysis, scientific computation, parallel processing, and neural networks. May be taken more than once for credit (with a different topic). Prerequisites: upper-division status, details differ depending upon topic offered.

#### COSC 491 Independent Study (1-3)

Independent study in computer science under the direction of an instructor.

#### COSC 494 Computer Science Senior Seminar (3)

Technical and expository readings, reports, and discussions. Topics include vocational and ethical issues, the relationship between computer science and the Christian faith, human factors and software engineering, the history of computing, and individually selected topics of interest. Open to Seniors only. (Offered Spring Semester only.)

## COSC 497, 498 Major Honors (3, 3)

Independent research program for students who have strong academic records for a minimum of five previous semesters of college study. Overall GPA of 3.5 and depart-

Mathematics, Engineering and Business ment approval required for enrollment (COSC 497 offered Fall Semester, COSC 498 offered Spring Semester).

# Mathematics

Mathematics Majors learn to appreciate the logical beauty of mathematical thought and how to use it to solve many kinds of problems. After they have taken the foundation courses, students can choose from theoretical and applied mathematics courses as they pursue their career objectives. Through the internship program, they may gain practical experience. Graduates are prepared for employment as mathematicians in a variety of settings in industry, business, and government, and graduate study. By taking the sequence of education courses, they can be certified to teach secondary mathematics. Qualified mathematics teachers are in demand, and the quantitative skills of the mathematics major are valued in science, industry, and business.

## Mathematics Major (56 credits)

MATH 111 Calculus I (4) or MATH 109, 110 equivalent MATH 112 Calculus II (4) MATH 195 First Year Mathematics Seminar (3) MATH 211 Calculus III (4) MATH 261 Linear Algebra (3) MATH 362 Algebraic Structures (3) MATH 412 Introduction to Real Analysis (3) MATH 494 Senior Mathematics Seminar (3) COSC 181 Computer Programming I (3) PHYS 211 General Physics I (4) PHYS 212 General Physics II (4) STAT 291 Statistics for Mathematical Sciences I (3) One of the following: COSC 182 Computer Programming II (3) STAT 292 Statistics for Mathematical Sciences II (3) Twelve additional credits of approved MATH/STAT 3xx/4xx courses

#### Mathematics with Teaching Certification Major (7-12) (83 credits)

MATH 111 Calculus I (4) MATH 112 Calculus II (4) MATH 195 First Year Mathematics Seminar (3) MATH 211 Calculus III (4) MATH 261 Linear Algebra (3) MATH 261 Linear Algebra (3) MATH 362 Algebraic Structures (3) MATH 362 Algebraic Structures (3) MATH 382 Geometry (3) MATH 412 Introduction to Real Analysis (3) MATH 412 Introduction to Real Analysis (3) MATH 494 Senior Mathematics Seminar (3) COSC 181 Computer Programming I (3) PHYS 211 General Physics I (4) PHYS 212 General Physics II (4) STAT 291 Statistics for Mathematical Sciences I (3) One of the following: COSC 182 Computer Programming II (3) STAT 292 Statistics for Mathematical Sciences II (3) Six additional credits of approved MATH/STAT 3xx/4xxx courses (6) ENGL xxx American or British Literature (3) EDUC 120 The Teaching Profession (with Field Experience) (3) EDUC 201 Education and American Society (3) EDUC 203 Educational Psychology (3) EDUC 318 Secondary Learning Environments (with Field Experience) (1) EDUC 331 Instructional Design and Assessment for Secondary Education (3) **Professional Semester** MATH 407 Secondary Mathematics Curriculum and Instruction (2) PSYC 311 Adolescent Development (3) EDUC 420 Professional Issues in Education (2) EDUC 435 Student Teaching: Secondary (9)

## Mathematics Minor Requirements (18 credits)

MATH 111 Calculus I (4) MATH 112 Calculus II (4) Ten credits of 200- and 300-level MATH and/or STAT courses approved for the mathematics major

## MATH 101 Introduction to Mathematical Sciences (3)

This course is designed to introduce students to systematic, mathematical thinking as it applies to classical problems in the history of mathematics and as it connects to modern society. Meets the General Education Mathematical Sciences requirement.

## MATH 102 The Mathematics of Growth (3)

This course is designed to present essential concepts in mathematical modeling, data analysis, and problem solving through contemporary applications which explore the effectiveness of replacing a real-world situation with a mathematical model. Course content includes arithmetic, quadratic, geometric, and logistic growth, as well as, topics in statistics such as the graphical interpretation of data and statistical techniques for analyzing a particular model. Prerequisite: Two years of high school algebra. Meets General Education Mathematical Sciences requirement.

## MATH 107 Applied Mathematics for Management (3)

Functions and graphs, sequences and series, mathematics of finance, matrices, simultaneous systems, linear programming, other topics in applied algebra. Meets the General Education Mathematical Sciences requirement.

## MATH 108 Intuitive Calculus with Applications (3)

A one-semester survey of the basic topics of the calculus of functions of one variable, demonstrating their applications in a wide variety of fields. Recommended for students who will take only one semester of calculus. Prerequisite: Two years of High School algebra. Meets General Education Mathematical Sciences requirement.

## MATH 109 Calculus I, Part I (4)

Introduction to the differential calculus of algebraic, exponential, and logarithmic functions with the associated analytical geometry. Completion of both MATH 109 and MATH 110 will be equivalent of the completion of MATH 111. Prerequisite:

Two years of high school algebra. Meets General Education Mathematical Sciences requirement. (Offered Fall Semester only.)

## MATH 110 Calculus I, Part II (3)

Introduction to integral calculus of algebraic, exponential, and logarithmic functions, with associated analytical geometry. An emphasis on exponential, logarithmic, and inverse trig functions. Completion of both MATH 109 and MATH 110 will be equivalent of the completion of MATH 111. Prerequisite: MATH 109. (Offered January Term only.)

## MATH 111 Calculus I (4)

Introduction to differential and integral calculus with associated analytic geometry. Prerequisite: Two years of high school algebra. Meets General Education Mathematical Sciences requirement.

## MATH 112 Calculus II (4)

Further topics in differential and integral calculus, including sequences and series, Taylor polynomials, polar coordinates, methods of integration, and applications of the integral. Prerequisite: MATH 110 or MATH 111.

## MATH 195 First Year Mathematics Seminar (2)

An introduction to and overview of the discipline of mathematics and the mathematical community. Readings, discussion, and written work focuses on building mature mathematical reasoning skills and understanding the mathematical community, both past and present. Careers in mathematics and related fields are considered, and attention is given to the idea of Christian vocation and how faith and mathematical thought inform each other.

## MATH 211 Calculus III (4)

Vectors, multivariable functions, partial derivatives, multiple integration, and theorems of Green and Stokes. Prerequisite: MATH 112.

## MATH 261 Linear Algebra (3)

Systems of linear equations, vector spaces, linear dependence, bases, dimension, linear transformations, matrices, determinants, eigenvalues, and geometric applications. Prerequisite: MATH 112 or Instructor's consent.

## MATH 301 Numerical Analysis (3)

Error analysis; numerical methods for interpolation, approximation, integration, and solution of non-linear equations and differential equations. Computer programs written and analyzed. Prerequisites: COSC 181 and MATH 211. (Alternate years, offered 2007–2008.

## MATH 308 Differential Equations (3)

First and second order linear differential equations. Laplace transforms, systems of differential equations with applications. Prerequisite: MATH 211. MATH 211 can be taken concurrently with MATH 308.

## MATH 341 Mathematical Modeling (3)

Discrete deterministic models. Applications of graph theory, linear programming, game theory, election theory, and finite difference equations. Computer simulation. Case studies in areas of student's choice. Prerequisites: COSC 181 and MATH 211. (Alternate years, offered 2007–2008.)

## MATH 342 Applied Combinatorics (3)

Counting methods for arrangements and selections, generating functions, recurrence relations, inclusion-exclusion principle, elementary graph theory, trees and searching, network algorithms. Prerequisite: MATH 211. (Alternate years, offered Fall 2008.)

## MATH 362 Algebraic Structures (3)

Groups, rings, fields, homomorphisms, and quotient structures. Prerequisite: MATH 261. (Offered Fall Semester only.)

## MATH 382 Geometry (3)

Topics in synthetic Euclidian geometry, transformation geometry and symmetry, and axiomatic development of perspective geometry. Prerequisite: MATH 261. (Alternate years, offered 2008–2009.)

## MATH 391 Mathematics Practicum (1–3)

Practical experience under professional supervision. Department approval required.

## MATH 392 History of Mathematics (3)

Development of mathematical thought from beginning to present. Contributions from ancient Egypt, Babylonia, and Greece; from China, India, and the Arab world; as well as from medieval and modern Western civilization. Prerequisite: MATH 211. (Alternate years, offered Spring 2009.)

## MATH 405 Introduction to Mathematical Research (3)

Critical review of papers in current undergraduate mathematical journals. Introduction to and development of the techniques involved in researching and preparing a paper on a mathematical topic. May be repeated for credit. Prerequisites: MATH 211 and 261. (Alternate years, offered January Term 2009.)

## MATH 407 Secondary Mathematics Curriculum and Instruction (2)

A seminar emphasizing disciplinary content issues that are specific to mathematics teaching. Areas of focus include curricular and instructional decision-making processes; classroom management strategies; assessment techniques; adaptations for exceptional learners; instructional technology applications; and professional development. Concurrent enrollment with EDUC 420, EDUC 435, and PSYC/HDFS 311. Prerequisite: admission to the Professional Semester. (Offered Fall Semester only.)

## MATH 412 Introduction to Real Analysis (3)

Real numbers, topology of Euclidian space, integration, continuity, differentiability, sequences, and series of functions. Prerequisite: MATH 211. (Offered Spring

Semester only.)

## MATH 490 Topics in Mathematics (3)

Advanced mathematical topics typically included in courses not currently offered. Possible offerings include complex variables, topology, advanced calculus, number theory, intermediate mathematical statistics. May be repeated for credit. Prerequisites: MATH 211 and 261, additional MATH courses depending on the topic. (Offered most January Terms.)

## MATH 491 Independent Study (1–3)

Reading course in which students are allowed to pursue their interests in a particular area such as history of mathematics, topology, number theory, combinatorics, logic, etc. (Offered on demand.)

## MATH 494 Senior Mathematics Seminar (3)

Senior capstone course emphasizing independent research, professional development, contributions of mathematics to culture, and discipline specific issues of Christian faith and vocation. (Offered Spring Semester only.)

## MATH 497, 498 Major Honors (3, 3)

Independent research program for students who have strong academic records for a minimum of five previous semesters of college study. Overall GPA of 3.5 and departmental approval required for enrollment (MATH 497 offered Fall or Spring Semester; MATH 498 offered Spring Semester). (See Index for reference to Honors Program.)

## Physics

The Physics Major offers students a preparation for employment in industry or graduate school in physics or related areas. Introductory courses for the major are offered on the Grantham Campus and the upper-division courses must be taken at the Philadelphia Campus in conjunction with Temple University.

## Physics Major (65 credits)

MATH 111 Calculus I (4) or MATH 109, 110 equivalent MATH 112 Calculus II (4) MATH 211 Calculus III (4) PHYS 211, 212 General Physics I, II (4, 4) The following courses are taken at the Philadelphia Campus in conjunction with Temple University: MATH 3041 Differential Equations (3) PHYS 2101 Classical Mechanics (3) PHYS 2501 Computing for Scientists (3)\* PHYS 2502 Mathematical Physics (4) PHYS 2701 Introduction to Modern Physics (4) PHYS 3101 Analytical Mechanics (3)

PHYS 3302 Classical Electromagnetism (3)

PHYS 3701 Introduction to Quantum Mechanics (3)

PHYS 4101 Thermodynamics and Kinetic Theory (3)

PHYS 4302 Optics (3)

PHYS 4703 Experimental Physics (3)

Six additional credits from the following:

PHYS 4301 Electronics (3)

PHYS 4701 Introduction to Solid State Physics (3)

PHYS 4702 Introduction of Atomic, Nuclear, and Particle Physics (3)

\*Recommended, but not specifically required. To meet Temple requirements, students must choose two science/mathematics/electrical engineering courses beyond those specifically required. MATH 261 will satisfy Temple's requirement for the second course. COSC 181 is a good background for Temple course 2501.

## PHYS 201 Introductory Physics I (4)

Survey of classical mechanics, stressing basic concepts and problem solving. Topics include vectors, motion in one and two dimensions, gravitation, Newton's Laws, the conservation of energy and momentum, harmonic motion, and waves. Three lecture periods and three hours laboratory per week. Recommended for biology, chemistry, and health science majors. Meets General Education Laboratory Science requirement. Prerequisite (or corequisite): MATH 108, 109, 110, or 111. (Offered Fall Semester only.)

## PHYS 202 Introductory Physics II (4)

Survey of electricity and optics, stressing basic concepts and problem solving, culminating in an historical and conceptual treatment of relativity and modern physics. Three lecture periods and three hours of laboratory per week. Recommended for biology, chemistry, and health science majors. Prerequisite: PHYS 201 or Instructor's consent. (Offered Spring Semester only.)

## PHYS 211 General Physics I (4)

First of a two-semester calculus-based general physics sequence. Models static and dynamic mechanical phenomena by classical methods for basic analysis, prediction, and problem solving. Experiments provide practice in measurement, data analysis, and illustrations of physical principles. Vector analysis and standard SI units are utilized. Topics include kinematics, Newton's Laws, work and energy, momentum and impulse, and rotational kinematics and dynamics. Three lectures and three hours of laboratory per week. Required for engineering, mathematics, and physics majors. Recommended for computer science majors. Meets General Education Laboratory Sciences requirement. Prerequisite: MATH 110 or 111. (Offered Spring Semester only.)

## PHYS 212 General Physics II (4)

Second of a two-semester calculus-based general physics sequence. Builds on basics of classical mechanics and other methods introduced in PHYS 211. Emphasis on concepts, calculations, measurements, problem solving, and applications. Topics include mechanical oscillations and waves, electrostatics, electricity, and magnetism and light. Three lectures and three hours of laboratory per week. Required for engineering, mathematics, and physics majors. Recommended for computer science majors. Prerequisite: PHYS 211. (Offered Fall Semester only.)

## PHYS 291 Independent Study (1-3)

Independent study in physics under the direction of an instructor.

## Statistics

Students completing a minor in statistics meet the stated requirements for entrylevel statistical positions in business, government, and industry. Statistics Minors are also well prepared to pursue study in a quality graduate program in statistics.

## Statistics Minor (18 credits)

STAT 291 Statistics for Mathematical Sciences I (3) STAT 292 Statistics for Mathematical Sciences II (3) Twelve additional credits of STAT courses (12) (excluding STAT 269)

## STAT 269 Introductory Statistics (3)

Descriptive measures, normal distributions, one-sample and two-sample hypothesis testing and estimation, correlation, and analysis of variance. Meets General Education Mathematical Sciences requirement.

## STAT 291 Statistics for Mathematical Sciences I (3)

Topics in probability and statistics: descriptive methods, cconditional and unconditional probability, discrete and continuuous distributions, one-sample estimation and hypothesis testing. Meets General Education Mathematical Sciences requirement. Prerequisite: MATH 110, 111 or equivalent. (Offered Fall Semester only.)

## STAT 292 Statistics for Mathematical Sciences II (3)

Further topics in probability and statistics: two-sample estimation and hypothesis testing, analysis of variance, categorical data, simple and multiple regression, and nonparametric techniques. Prerequisite: STAT 291. (Offered Spring Semester only.)

## STAT 324 Advanced Statistical Methods (3)

Analysis of covariance: multivariate analysis of variance, discriminant analysis, stepwise regression, logistic regression, factor analysis, and an introduction to SAS<sup>®</sup>. Prerequisite: STAT 292. (Alternate years, offered Spring 2008.)

## STAT 325 Experimental Design (3)

Experimental designs and analyses for a variety of problems: completely randomized, randomized complete block, Latin square, completely randomized with factorial treatments, unbalanced and/or incomplete, random effects, mixed effects, nested; multiple comparisons; introduction to SAS<sup>®</sup>. Prerequisite: STAT 292. (Alternate years, offered Spring Semester 2009.)

## STAT 346 Statistical Methods in Operations Research (3)

Linear programming, simplex method, project management with PERT/CPM, deterministic dynamic programming, probabilistic dynamic programming, integer programming, queuing theory, introduction to SAS<sup>®</sup>. Prerequisites: MATH 261, STAT 291 or equivalent. (Alternate years, offered Fall Semester 2008.)

## STAT 407 Introductory Mathematical Statistics (3)

Mathematical theory underlying probability, statistical estimation, and hypothesis testing: random variables and their distributions, distributions of functions of random variables, sampling distributions, limiting distributions, and the Central Limit Theorem. Prerequisites: MATH 211 and STAT 291. (Alternate years, offered Fall Semester 2009.)

## STAT 491 Independent Study (1-3)

Investigation and application of advanced statistical concepts. (Offered on demand.)

# ADMINISTRATIVE AND PROFESSIONAL STAFF

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### The Boyer Center

Richard T. Hughes, Distinguished Professor of Religion/Senior Boyer Fellow Donald A. Murk, Boyer Fellow Cynthia A. Wells, Boyer Fellow

**College Counsel** Richard J. Morrison, College Counsel Keith W. Drahn, Director of Disability Services

### Human Resources

 Amanda Coffey, Director of Human Resources
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 Kathleen M. Castonguay, Human Resources Project Manager
 Susan Pottiger, Manager of Benefits

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### School Deans

Raeann R. Hamon, Interim Dean, School of Education and Social Sciences Gerald D. Hess, Interim Dean, School of Health and Natural Sciences Joseph P. Huffman, Dean, School of the Humanities W. Ray Norman, Dean, School of Mathematics, Engineering, and Business Richard E. Roberson, Dean, School of the Arts

### Academic Administration

John Addleman, Director of Academic Advising TBD, Curriculum Administrator D. Wayne Cassel, Educational Space Coordinator Dean C. Curry, Director of College Honors Program D. Thomas Hale, Associate Registrar Rhonda H. Jacobsen, Director of Faculty Development James J. Sotherden, Registrar John E. Stanley, Director of the Core Course John R. Yeatts, Associate Dean of General Education and Common Learning

### Academic Support

James M. Bennett, Natural Sciences Laboratory Program Manager Suzanne L. Fennell, Director of Teacher Education Stephen M. Frank, Electrical and Computer Engineering Technician Eileen K. Gardner, Learning Lab Coordinator, Department of Nursing John J. Meyer, Engineering Technician/Lab Assistant Jason A. Nedrow, Production Manager and Technical Director Kathleen D. Quimby, Director, Supplemental Instruction Ann S. Rohrbaugh, Director of the Learning Center Matthew S. Roth, Director of the Writing Program Martha S. Smith, Coordinator of Pre-Health Professions Advising Deborah E. Tepley, Manager of the Collaboratory for Strategic Partnerships and Applied Research Kevin B. Zook, Teacher Certification Officer TBD, Natural Sciences Laboratory Program Manager

### College Centers

J.E. McDermond, Director of the E. Morris and Leone Sider Institute of Anabaptist, Pietist and Wesleyan Studies Sharon L. Baker, Coordinator of The Peace and Conflict Studies Program Glen A. Pierce, Director of the Brethren in Christ Historical Library and Archives

### Early Learning Center

Beverly A. Goodling, Director of the Early Learning Center Sara E. Achuff, Master Teacher Denise T. Fogelsanger, Master Teacher Carol L. Hall, Assistant Director of the Early Learning Center/Teacher

### External Programs

Mary Ann Hollinger, Dean of External Programs

### Agapé Center

Chad Frey, Director of the Agapé Center Matthew Hunter, National and International Service and Mission Director Rebecca Owen, Local Community Service Director

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Christina R. Hanson, Assistant Director of Career Development/Coordinator of Graduate School Services

Dwayne R. Keiffer, Assistant Director of Career Development/Coordinator of Recruitment Services

### EpiCenter

Wendy S. Lippert, Director of EpiCenter/Associate Director of International Programs

### Harrisburg Institute

David A. Hietala, Director of the Harrisburg Institute Craig Dalen, Director of Harrisburg Housing Jill A. Osielski, Harrisburg Institute Grant Project Coordinator

### Internship Center

Michael D. True, Director of the Internship Center N. Michael Blount, Coordinator of the Internship Center and Alumni Career Services Elisabeth T. Clark, Assistant Director of the Internship Program

### Philadelphia Campus

Timothy Peterson, Program Director, Philadelphia Campus David S. Ayres, Campus Administrator, Philadelphia Campus Katherine M. Nicely, Recruitment Coordinator, Philadelphia Campus Deborah A. Peterson, Contextual Learning Coordinator, Philadelphia Campus N. Ryan Wilson, Director of Community Life, Philadelphia Campus

### Institutional Research

William J. Waltman, Assistant Director of Institutional Research and Analysis

### Murray Library

Jonathan D. Lauer, Director of the Murray Library Cherie Fieser, Library Special Projects Administrator/Curator of Engle Memorial Collection Elizabeth Y. Kielley, Associate Librarian/Technical Services Coordinator Beth L. Mark, Librarian/Instruction Coordinator Lawrie H. Merz, Librarian/Public Service Coordinator Michael D. Rice, Associate Librarian/Electronic Resources Coordinator Beth M. Transue, Collection Development Coordinator

### Museums and Galleries

Kenneth D. Mark, Director of The Oakes Museum Sherron R. Biddle, Director of the Aughinbaugh Art Gallery Robin Boldosser, Education Program Coordinator of The Oakes Museum

### Student Affairs

Kristin M. Hansen-Kieffer, Vice Provost/Dean of Students Douglas M. Wood, Associate Dean of Students

### Athletics

Jerry A. Chaplin, Director of Athletics Troy L. Boone, Head Golf Coach David H. Brandt, Men's Head Soccer Coach Bryan E. Brunk, Head Wrestling Coach Bryan T. Engle, Head Baseball Coach/Assistant Men's Basketball Coach Dale E. Fogelsanger, Head Cross Country Coach; Head Track and Field Coach Scott R. Frey, Sports Information Director/Head Women's Soccer Coach Heather Greer, Head Women's Lacrosse Coach; Director of Recreational Sports Bradley S. McCarty, Assistant Athletic Director for Facilities and Equipment/Assistant Men's Soccer Coach Michael R. Miller, Head Women's Basketball Coach Justin B. Rodkey, Interim Aquatics Director Judi K. Tobias, Head Volleyball Coach Janice M. Trapp, Head Field Hockey Coach Patrick W. Van Pelt, Head Men's Basketball Coach Amy C. Weaver, Associate Director for Athletics Operations/ Senior Women's Administrator/ Head Softball Coach TBD, Head Men's and Women's Tennis Coach TBD, Assistant Athletics Director of Public/Media Relations and Marketing

### **College Ministries**

Eldon E. Fry, College Pastor Douglas M. Curry, Minister of Worship Brian A. Smith, Teaching Pastor Geneve R. Telfer, Associate College Pastor

### **Counseling and Health Center**

Philip J. Lawlis, Director of Counseling and Health Services Eleanor M. Addleman, Counselor/Coordinator of Engle Center Programming and Outreach Christine Anderson-Barnes, Counselor N. Michael Blount, Counselor David L. Brown, Counselor Debra I. Danielson, Counselor Teresa S. Diez, Nurse Practioner Judith M. Groop, Coordinator of Health Services Debra M. Rebman, Counselor

### Multicultural Student Development

Lawrence A. Burnley, Associate Dean of Multicultural Programs/Special Assistant to the Provost for Diversity Affairs Rhonda S. Brubacher, Director of International Programs Hierald E. Osorto, Coordinator of Multicultural Programs TBD, Friendship, Family and Volunteer Coordinator

### Residence Life

Amy Sue VanDerWerf, Director of Residence Life Spencer Carter, Residence Director, Naugle Hall Abigail Davis, Residence Director, Mountain View Hall Rhonda L. Good, Director of Housing Corrie Gustafson, Residence Director, Sollenberger Hall/Kelly Apartments Andrew Hall, Residence Director, Hess Hall Elizabeth Kiszonas, Residence Director, Grantham Hall/Smith Apartments Amber M. Ruffo, Residence Director, Witmer Hall Michael Warari, Residence Director, Miller Hall/Fry Apartments Stephanie Williams, Residence Director, Bittner Hall/Mellinger Apartments

### Student Programs

Robert C. Pepper, Director of Student Programs Jeffrey M. Rioux, Director of the Larsen Union and Campus Activities David J. Tanis, Director of Adventure Programs Wendell Witter, Director of Issachar's Loft

## Office of Advancement

Barry G. Goodling, Vice President for Advancement Kerri-Jayne C. Leedy, Executive Assistant to the Vice President for Advancement Carla E. Gross, Director of Marketing and Public Relations

### Alumni and Parent Relations TBD, Director of Alumni and Parent Relations Michelle R. Blackford, Interim Assistant Director of Alumni and Parent Relations

### Development

Kenneth C. Hall, Director of Development Robert O. Brown, Jr., Director of Planned and Leadership Gifts Barbara Dearing, Manager of Gift Processing and Donor Recognition D. Reneé Gray, Development Officer Susan M. Jaycox, Director of Prospect Management Monica J. M. Jones, Grants Coordinator Rachel A. Moury, Assistant Director of Annual Giving Rachel L. Pease, Director of Annual Giving Lucinda K. Petersheim, Senior Development Officer M. Frank Sneeringer, Senior Development Officer Bradley D. Statnick, Senior Development Officer Jon C. Stuckey, Director of Foundation Relations and Sponsored Programs Anthony Thomas, Assistant Director of Annual Giving

### Enrollment Management

TBD, Dean of Enrollment Management

### Admissions

Paul C. Morgan, Associate Director of Admissions for Visitation Cynthia M. Blount, Coordinator of International Student Recruitment Bryana R. Boone, Assistant Director of Admissions for Transfer Student Recruitment Dana J. Britton, Assistant Director of Admissions for Telemarketing Timothy S. Dawson, Director of Admissions Mary Megan Jones, Admissions Counselor Daniel Kriel, Admissions Counselor David Lesko, Admissions Counselor Ellen PF Shaffer, Visit Coordinator Lucas Sheaffer, Senior Admissions Counselor Alfred A. Z. Siha, Coordinator of Multicultural Student Recruitment Kristin Siha, Admissions Coordinator Shaun E. Turner, Assistant Director of Admissions

### Financial Aid

Gregory L. Gearhart, Director of Financial Aid Ryan R. Hannigan, Financial Aid Counselor Joshua D. Pangborn, Financial Aid Technical Assistant Catherine Poiesz, Financial Aid Loan Processing Officer Michael R. Strite, Assistant Director of Financial Aid

### Volunteer and Church Relations

Randall L. Ness, Director of Volunteer and Church Relations

### Marketing and Public Relations

Carla E. Gross, Director of Marketing and Public Relations Debra J. Sauders, Assistant Director of Marketing

### Print and Web Communications

Debra J. Sauders, Director of Print and Web Communications Rebecca E. Kasparek, Editor Stephanie K. Perry, Graphic Designer Justin Sentz, Manager of Web Services Scott Trobaugh, Graphic Designer II Christina J. Weber, Art Director TBD, Promotional Writer

### Public Relations

Eunice L. Hager, Performing Arts Coordinator Beth L. Lorow, Assistant Director of Public Relations Sherri Minich, Projects and Events Coordinator Yonette C. Schneider, Special Projects and Events Coordinator

## Office of Finance

Lois J. Voigt, Vice President for Finance Irene M. Fabry, Assistant to the Vice President for Finance

### **Business Office**

Wendy S. Starner, Controller/Director of Financial Operations Marilyn Donelson, Bursar John W. Packer, Director of Institutional Finance Glen A. Raser, Senior Advisor, Institutional Finance

### Purchasing and Support Systems

John E. Cooker, Director of Purchasing

### Information Technology Services

Richard A. Dent, Director of Information Technology Services Adam L. Richard, ITS Operations Support Specialist Susan M. Smith, Manager of ITS Operations

### Academic Computing

Neil L. Weaver, Manager of Desktop Support Jonathan E. Anderson, Macintosh Support Specialist Craig D. Gephart, Desktop Support Specialist Ryan D. Mark, Desktop Support Specialist Vaughn E. Miller, Desktop Support Specialist Scott Scaramuzzino, Hardware Services Manager Bertha L. Thompson, Manager of Student Computer Services

### Administrative Computing

John P. Luft, Assistant Director of Administrative Computing Gregory A. Daub, Administrative Programmer/Analyst Robert Q. Felix, Administrative Programmer/Analyst Robert S. Getty III, Administrative Programmer Analyst Elizabeth A. Hoover, Administrative Programmer/Analyst Doreen M. Minich, Administrative Programmer/Analyst Jonathan P. Wheat, Administrative Programmer/Analyst

### Media Services

Robert J. Weaver, III, Assistant Director of Media Services

### Network Services

Tony L. Wyland, Assistant Director of Network Services Alex M. Lemmon, Network Server Support Specialist Jason A. Long, Network Systems Manager Brian J. Sheaffer, Network Support Specialist

### **Telecommunications Support**

Christopher P. Culbert, Assistant Director of Telecommunications Support

## **Office of Operations**

Kathrynne G. Shafer, Vice President for Operations Lisa P. Snyder, Executive Assistant to the Vice President for Operations

### Bookstore/Annex

Marvin D. Zercher, Bookstore Manager Aleisha R. Wildon, Assistant Bookstore Manager

### College Press

Dwayne A. Magee, Director of Printing and Mailing Services William D. Althoff, Manager of Bulk Mail and Postal Services

### Conference and Event Services

Michael D. Baker, Conference and Events Manager Charlotte K. Knudsen, Conference and Events Coordinator Heather R. Negley, Conference and Events Coordinator

### **Dining Services**

Mark H. Wirtz, Director of Dining Services Wade D. Burns, Food Service Manager Belinda A. Conrad, Cash Operations Manager Larry L. Dove, Purchasing Manager Kathy I. Eberly, Pastry Chef/Head Baker Jodie L. Etter, Catering Manager Percell D. Green, Executive Chef Warren W. Nast, Cash Operations Manager

Facility Services Bradley A. Markley, Director of Facility Services

Campus Events R. Scott Zeigler, Campus Events Manager

### Environmental Health

Hilary A. Surak, Environmental Health and Safety Manager

### Facility Maintenance

Russell J. Ehrich, Project Manager Daniel P. Smith, Service Manager

### **Grounds Services**

Daniel W. Valencia, Grounds Services Manager

### Safety

Cindy L. Burger, Safety Manager Norman E. Benson, IV, Supervisor, Safety Training and Dispatch Services

# COMMUNITY OF EDUCATORS

Dates indicate year of membership in Community of Educators.

## **Ex-Officio**

 Randall G. Basinger
 1983–

 Provost; Professor of Philosophy
 1983–

 B.A., Trinity College, 1972; M.A., Trinity Evangelical Divinity School, 1974; Ph.D., Northwestern University, 1979.
 1998–

 Kim S. Phipps
 1998–

President; Professor of Communication B.A., Kentucky Christian College, 1978; M.A., Morehead State University, 1979; Ph.D., Kent State University, 1985.

## **Curricular Administrators**

<b>Sara E. Achuff</b> M <i>aster Teacher</i> B.S.N., University of Delaware, 1978; M.S.E.D., Bloomsburg University, 1994	2007-
N. Michael Blount Coordinator, Internship Center and Alumni Career Services B.S., Northwestern College, 1991; M.A., Bethel College (Minnesota), 1996.	1997–
<b>Elisabeth T. Clark</b> Assistant Director, Internship Center B.S., Baptist Bible College, 1993; M.S., Shippensburg University, 1996.	1999–
Dean C. Curry Director of the College Honors Program; Professor of Politics B.A., Houghton College, 1974; M.A., University of Pennsylvania, 1975; Ph.D., Claremont Graduate University, 1981.	1980-
Richard A. Dent Chief Information Officer; Assistant Professor of Computer Science B.A., Gordon College, 1973; M.S., University of Wisconsin, 1977.	1982–
Keith W. Drahn Director of Disability Services B.A., George Fox College, 1966; M.S., Oregon College of Education, 1970: Ph.D., University of Oregon, 1989.	1996–
<b>Denise T. Fogelsanger</b> Master Teacher	2007-

B.A., Millersville University, 1987; M.A., Towson University, 1994.	
<b>Chad W. Frey</b> Director of Agapé Center for Service and Learning B.A., Messiah College, 1996; M.A., Geneva College, 2003.	2004–
<b>Beverly Goodling</b> Director of Early Learning Center; Adjunct Instructor in Early Childhood Education B.S., Messiah College, 1981; M.Ed., Shippensburg University, 2005.	2005-
<ul> <li>Raeann R. Hamon</li> <li>Interim Dean, School of Education and Social Sciences/Professor of Family Science and Gerontolog Distinguished Professor, 2005-2010</li> <li>B.A., Messiah College, 1983: M.S., Ph.D., Virginia Polytechnic Institute and State Universi 1985, 1988; Graduate Certificate in Gerontology, 1986; Certified Family Life Educator, 1997, Scholarship Chair 2003-2005.</li> </ul>	ty,
Christina R. Hanson Assistant Director of Career Development/Coordinator of Graduate School Services B.A., Messiah College, 2003; M.S., Shippensburg University, 2005.	2005-
Gerald D. Hess Interim Dean, School of Health and Natural Sciences/Professor of Biology B.A., Messiah College, 1965; M.S., Ph.D., Michign State University, 1968, 1970.	1970–
David Hietala Director, Harrisburg Institute for Community Research and Collaborative Partnerships; Assistant Professor of Urban Studies B.S., Minnesota State University, 1978; Ph.D., Union Institute and University, 2002.	2005–
Mary Ann Hollinger Dean of External Programs; Assistant Professor of Family Science B.A., Goshen College, 1972; M.A., Montclair State University, 1977; Ed.M., Ed.D., Columl University, 1979, 1983; Alliance Francaise; Université de Strasbourg; Trinity Divinity Schoo University of North Carolina; Oxford University.	
Joseph P. Huffman Dean, School of the Humanities; Professor of European History B.A., Seattle Pacific University, 1982; M.A., Western Michigan University, 1984; M.A., Ph University of California, Los Angeles, 1985, 1991; Messiah College Scholarship Chair, 2001	
<b>Richard Hughes</b> Distinguished Professor of Religion: Senior Boyer Fellow B.A., Harding University, 1965; M.A., Abilene Christian University, 1967; Ph.D., University of Iowa, 1972.	2006-
Matthew Hunter National and International Service and Mission Director B.A., Messiah College, 1997; M.Div. Graduate Work, 2002; Ph.D. Candidate, Temple University.	2007-
Dwayne R. Keiffer Assistant Director of Career Development/Coordinator of Recruitment Services B.S., Nyack College, 1989; M.S., Shippensburg University, 1997.	1997–
Jonathan D. Lauer Director of the Murray Library B.A., Wheaton College (Illinois), 1974; M.A., University of Chicago, 1978; M.A., Wheaton College Graduate School, 1984.	1989-
Wendy S. Lippert Director of the EpiCenter/Associate Director of International Programs B.A., Messiah College, 1993; M.S., Shippensburg University, 2004.	2005-

<b>Kenneth D. Mark</b> Director of The Oakes Museum B.A., Messiah College, 1972; M.A., Shippensburg University, 1975.	2001-
W. Ray Norman Dean, School of Mathematics, Engineering, and Business; Associate Professor of Engineering B.S., Auburn University, 1980; M.S., Cornell University, 1984; Ph.D., Cornell University, 1	<b>2002–</b> 988.
<b>Deborah A. Peterson</b> Contextual Learning Coordinator, Philadelphia Campus B.A., Lewis and Clark College, 1976; M.S., Central Michigan University, 2000.	2004–
Richard E. Roberson Dean, School of the Arts; Professor of Music B.Mus., Indiana University, 1975; M.Mus., D.M.A., University of North Texas, 1977, 1979.	1983–
<b>James J. Sotherden</b> <i>Registrar</i> B.S., Lemoyne College, 1980; M.S., Syracuse University, 1987.	1999–
William G. Strausbaugh Assistant Provost/Dean of Curriculum; Assistant Professor of Computer Science B.A., Messiah College, 1979; M.S., Villanova University, 1981; Ph.D. course work, Temple University; D.Ed., Pennsylvania State University, 2003.	1981–
Jon C. Stuckey Director of Foundation Relations and Sponsored Programs/Assistant Professor of Sociology B.A., Malone College, 1986; M.A., Ph.D., Case Western Reserve University, 1989, 1992.	2003-
<b>Deborah E. Tepley</b> Manager of the Collaboratory for Strategic Partnerships and Applied Research B.A., St. Cloud State University, 2000; M.A., Fuller Theological Seminary, 2007.	2007-
<b>Michael D. True</b> Director, Internship Center B.S., Lancaster Bible College, 1979; M.Div., Trinity Evangelical Divinity School, 1984.	1991–
Cynthia A. Wells Boyer Fellow/Assistant Professor of Interdisciplinary Studies A.B., Occidental College, 1988; M.S., Wright State University, 1992; Ph.D., Ohio State Un 2003.	1998– niversity,
John R. Yeatts Associate Dean of General Education and Common Learning; Professor of the Psychology of Relig B.A., Messiah College, 1969; M.Div., Princeton Seminary, 1972; Ph.D., Purdue University,	

## **Term-Tenure Track Faculty**

### John A. Addleman

Professor of Psychology; Chair, Department of Psychology; Director of Academic Advising B.A., Wheaton College, 1979; M.Div., Trinity Evangelical Divinity School, 1983; M.S., Shippensburg University, 1987; Ph.D., University of Maryland, 1990.

### Edward T. Arke

Associate Professor of Communication; Chair, Department of Communication; Radio Station Faculty Manager

B.A., M.S., Shippensburg University, 1984, 1992; Ed.D., Duquesne University, 2005.

### Sharon L. Baker

Assistant Professor of Theology and Religion; Coordinator, Peace and Conflict Studies Initiative Graduate Diploma in Theology, Southwestern Baptist Theological Seminary, 1997; M.Th., Texas

1997-

Christian University, 1999; Ph.D., Southern Methodist University, 2006.

Joseph C. Barnes 1991-Associate Professor of Education B.S., Roberts Wesleyan College, 1969; M.Ed., Seattle Pacific University, 1973; Ph.D., Penn State University, 1978.

1966 -

1987 -

1988-

1968-

2004-

1999\_

2002-

2001-

1985 -

1983-

1999-

1996-

### Robert P. Barrett

Assistant Professor of Mathematical Sciences S.B., Massachusetts Institute of Technology, 1960; M.S.E., University of Washington, 1965; Registered Professional Engineer, Pennsylvania.

### John A. Beaney

Professor of Modern Languages; Chair, Department of Modern Languages B.A., Olivet Nazarene University, 1978; M.A., Ph.D., Purdue University, 1982, 1988; Justus-Liebig-Universität Gießen; Universität Leipzig; Philipps-Universität Marburg; Universidad de Castilla–La Mancha; Université d'Orléans; Universidad Complutense de Madrid, Universität Wien.

### John I. Bechtold

Professor of Psychology B.A., Wheaton College, 1980; M.S., Ph.D., Kansas State University, 1983, 1986, 1990.

### Lois K. Beck

Associate Professor of French and Communication A.B., Gettysburg College, 1961; M.A., Middlebury College, 1967; Université de Grenoble; Université de Paris; M.A., Temple University, 1981.

### Debra L. Berke

1993-Professor of Family Science and Women's Studies; Interim Chair, Department of Human Development and Family Science B.A., M.S., University of Nebraska–Lincoln, 1983, 1986; Ph.D., University of Delaware, 1991.

### Amy E. Binkoski

Assistant Professor of Nutrition and Dietetics B.S., Muhlenberg College, 1997; Ph.D., The Pennsylvania State University, 2004.

### Sheri L. Boyce

Associate Professor of Biology; Chair, Pre-Health Professions Advising Committee/ Allied Health Advising B.S., Messiah College, 1992; Ph.D., The Ohio State University, 1999.

### Erin F. Boyd-Soisson

Assistant Professor of Human Development and Family Science B.S., The University of Pittsburgh, 1995; M.A., Ph.D., The University of Texas at Austin, 1999, 2002.

### Gordon Brubacher

Professor of Old Testament and Archaeology M.C.S., Regent College, 1981; M.A., Wilfrid Laurier University, 1982; Ph.D., Drew University, 1987; Yale University; C.N. Hostetter, Jr. Chair of Religious Studies, 2005-2007.

### Ronald J. Burwell

Professor of Sociology; Chair, Department of Sociology, Social Work, and Criminal Justice A.B., Wheaton College, 1965; M.Div., Trinity Seminary, 1968; M.A., Ph.D., New York University, 1972, 1976.

### Edwin "Sandy" Bush, Jr.

Instructor in Health and Human Performance; Director, Athletic Training Education Program B.S., Lock Haven State College, 1977; M.S., South Dakota State University, 1981.

### Lynda R. Cable

Associate Professor of Psychology B.A., University of Virginia, 1995; M.A., Ph.D., Kent State University, 1997, 1999.

### Susanna Bede Caroselli

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### Professor of Art History, Scholarship Chair, 2007-2009 A.B., Brown University, 1969; M.A., Ph.D., Johns Hopkins University, 1972, 1980.

### Thomas J. Chilcote

Associate Professor of Accounting B.S., Ithaca College, 1976; M.B.A., Cleveland State University, 1979; C.P.A., Ohio, 1984, Pennsylvania, 1990; Chartered Mutual Funds Counselor, 1996.

### Monika Ciesielkiewicz

Assistant Professor of Spanish Linguistics

B.S., University of Silesia, 2000; M.A., University of Silesia, 2002; Ph.D. Coursework, Linguistic University of Moscow, 2004-2005; ABD, Anticipated Completion of Dissertation, Universidad de Granada, 2007.

### Edward R. Cohn

Associate Professor of Theatre B.A., State University of New York College at Plattsburgh, 1987; M.A., New York University, 1993; Ph.D., Bowling Green State University, 2000.

### Jack T. Cole

Assistant Professor of Health and Human Performance; Chair, Department of Health and Human Performance

B.A., Malone College, 1982; M.E., Ashland College, 1984.

### Robin A. Collins

Professor of Philosophy

B.A., B.S., Washington State University, 1984; Ph.D., University of Notre Dame, 1993; Postdoctoral Fellowship in Philosophy of Science, Northwestern University, 1993–1994; Messiah College Scholarship Chair, 1999–2000; Pew Evangelical Scholarship, 2000–2001; Postdoctoral Research Fellowship, University of Notre Dame, 2003; Templeton Foundation Grant, 2004–2007.

### Jean Thompson Corey

Assistant Professor of English; Interim Director of Writing Across the Curriculum B.S., Vanderbilt University, 1979; Teacher Certification, Gordon College, 1985; M.A., Duke University, 1989; D.A., Middle Tennessee State University, 2000.

### Michael R. Cosby

Professor of New Testament; Distinguished Professor, 2007-2012 B.S., University of Montana, 1972; M.A., Western Kentucky University, 1980; Ph.D., Emory University, 1985. C. N. Hostetter, Jr. Chair of Religious Studies, 2001–2003. Messiah College Scholar Chair, 2004–2006.

### Edward B. Davis

Professor of the History of Science; Distinguished Professor, 2007-2012 B.S., Drexel University, 1975; M.A., Ph.D., Indiana University, 1981, 1984; Messiah College Scholarship Chair, 1998–1999; Distinguished Professor, 2002-2007.

### Timothy D. Dixon

Associate Professor of Music; Director of Orchestral Activities; Assistant Chair, Department of Music B.A., B.M., Miami University, 1995, 1998; M.M., Michigan State University, 1997; D.M.A. University of Iowa, 2002.

### Jennifer J. Dose

Associate Professor of Human Resource Management B.A., Wittenberg University, 1989; M.A., Ph.D., The Ohio State University, 1991, 1995; The Harry R. Hitchcock Chair of Business and Management, 2003–2005.

### Crystal L. Downing

Professor of English and Film Studies B.A., Westmont College; M.A., Ph.D., University of California at Santa Barbara, 1982, 1986; Messiah College Scholarship Chair, 2001–2003.

2006-

1987 -

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### 2002– sic

1985 -

### 2000-

David Dzaka 2001–2004, 2 Assistant Professor of English B.A., Dip.Ed., University of Cape Coast, Ghana, 1989; M. Phil., University of Ghana, 1994; I University of Hawaii, 2001.	
	1989–
John W. Eby Professor of Sociology B.A., Eastern Mennonite College, 1962, M.S., Ph.D., Cornell University, 1970, 1972; Agapé Center Fellow for Service Learning, 2005-2007.	1994–
L. Marlin Eby Associate Professor of Mathematics and Statistics B.A., Millersville University, 1973; M.Stat., Ph.D., University of Florida, 1975, 1978.	1985–
Gary Emberger Professor of Biology; Interim Chair, Department of Biological Sciences B.S., M.S., Pennsylvania State University, 1975, 1977; Ph.D., North Carolina State Universit 1981.	1981– _y,
Carl A. Erikson, Jr. Assistant Professor of Engineering; Chair, Department of Engineering B.S.E.E., Rutgers University, 1969; M.S.E.E., Purdue University, 1971.	1989–
Jeffrey S. Erikson Assistant Professor of Biology and Environmental Science B.S., The Pennsylvania State University, 1990; M.S., Shippensburg University, 1996; M.E.P.C The Pennsylvania State University, 2002.	1 <b>997–</b> 2.,
John Fea 22 Associate Professor of American History B.S., Philadelphia Biblical University, 1988; M.Div., Trinity Evangelical Divinity School, 199 M.A., Trinity International University, 1992; Ph.D., State University of New York at Stony B 1999; Messiah College Scholarship Chair, 2005-2007.	
Suzanne L. Fennell Assistant Professor of Education; Director of Teacher Education B.S., Indiana University of Pennsylvania, 1970; M.S., University of Delaware, 1980; Indiana University of Pennsylvania; Penn State University; Temple University.	1980–
Daniel M. Finch Associate Professor of Art B.F.A., Augusta State University, 1995; M.F.A., The University of Georgia, 2001.	2002–
Lareta H. Finger Assistant Professor of New Testament B.S., Eastern Mennonite University; M.Ed., Boston University, 1967; M.A.T.S., Northern Bar Theological Seminary, 1987; M.T.S., Garrett Evangelical Theological Seminary, 1989; Ph.D., Northwestern University, 1997; Scholarship Chair, 2003–2005.	1 <b>995–</b> ptist
Jennifer L. Fisler Assistant Professor of Education B.A., Messiah College, 1994; M.Ed., D.Ed., Rutgers University, 1997, 2002.	2003-
Christine A. Forsythe Professor of Art; Chair, Department of Visual Arts B.A., Indiana University of Pennsylvania, 1977; M.F.A., Rochester Institute of Technology, 19	1 <b>982–</b> 982.

Donald J. Forsythe Professor of Art; Distinguished Professor, 2003–2008 B.S., Indiana University of Pennsylvania, 1977; M.F.A., Rochester Institute of Technology, 19	1 <b>982-</b> 979.
David K. Foster       1         Associate Professor of Biology and Environmental Science       1         B.S., Eastern College, 1990; M.S., Ph.D., University of Wisconsin–Madison, 1993, 1998.	1997–
Milton C. Gaither 2 Associate Professor of Education B.A., Wheaton College, 1993; M.A.R., Yale Divinity School, 1996; Ph.D., Indiana University 2000.	2000– <sub>y,</sub>
Stephen E. Gallaher       2         Assistant Professor of Christian Ministries       2         B.A., Messiah College, 1978; M.Div., Lancaster Theological Seminary, 1981; D.Min., Perkins       2         School of Theology, 1996.       2	2004–
Bradley J. Genevro       2         Assistant Professor of Music; Director of Bands       2         B.S., M.A., Indiana University of Pennsylvania, 1989, 1996; D.M.A., University of North Texas, 2006.       2	2004–
David A. Gray       2         Assistant Professor of Engineering       2         B.S., Tufts University, 1963; M.S., Ph.D., Stanford University, 1965, 1968.       2	2000–
James D. Gustafson I Associate Professor of Health and Human Performance B.S., Wheaton College, 1969; M.S., Northern Illinois University, 1971; Ed.D., Temple Univer 1986; Eastern Washington University; CTRS, 1996–2001.	1 <b>973–</b> rsity,
David J. Hagenbuch Assistant Professor of Marketing; Hitchcock Chair of Business and Management, 2007-2009 B.S., Messiah College, 1989; M.B.A., Temple University, 1991; D.B.A., Anderson University, 2006.	2000-
Michael A. Harcrow2Assistant Professor of Music2B.M.Ed., West Texas State University, 1983; M.M., University of Miami, 1988; D.M.A.,University of North Texas, ABD.	2007–
Angela C. Hare 1 Associate Professor of Mathematics; Chair, Department of Mathematical Sciences B.A., Wheaton College, 1990; M.S., Drexel University, 1993; Ph.D., American University, 19	1 <b>996–</b> 996.
John C. Harles 1 Professor of Politics; Chair, Department of Politics B.A., Wheaton College, 1979; M.Phil., D.Phil., Oxford University, 1981, 1989. Messiah Colle Political Science Scholarship Chair, 2000–2002.	1 <b>984–</b> ege
John F. Harms       2         Assistant Professor of Biological Sciences       2         A.S., Jamestown Community College, 1994; B.S., State Unversity of New York, College at Fredonia, 1996; Ph.D., Pennsylvania State University, College of Medicine, 2002.       2	2006–
Debra Heath-Thornton 2 Associate Professor of Sociology and Criminal Justice A.A.S., Genessee Community College, 1979; B.S., Rochester Institute of Technology, 1981; M M.S.Ed., SUNY College at Buffalo, 1990, 1993; Ed,D., University of Rochester, 2002.	2004– M.S.,

Kenneth J. Heck1991–Assistant Professor of Health and Human Performance; Assistant Athletic TrainerB.A., Houghton College, 1980; M.S., University of Buffalo, 1988.
Kathy T. Hettinga1988–Professor of Art; Distinguished Professor, 2004–2009B.F.A., Calvin College, 1978; M.F.A., Colorado State University, 1985; Adams State College; Tamarind Institute; Colorado University; Visual Studies Workshop; SIGGRAPH; Institute of Sacred Music, Worship and the Arts; Messiah College Scholarship Chair, 1998–2000.
Mary L. Holloway1982–Assistant Professor of Communication19.000000000000000000000000000000000000
Sandra A. Holmes 1996– Associate Professor of Education and Biological Sciences B.S., B.A., M.A., Eastern Washington University, 1986, 1989, 1990; Ph.D., University of Idaho, 1993.
Shann-Hwa (Abraham) Hwang2001–Associate Professor of Human Development and Family ScienceB.A., Malone College, 1995; M.A., Ashland Theological Seminary, 1998; Ph.D., The University of Tennessee, 2001.
Douglas Jacobsen         1984–           Professor of Church History and Theology; Distinguished Professor, 2006–2011         1           B.A., Wheaton College, 1973; M.A., Ph.D., The University of Chicago, 1977, 1983; Distinguished Professor, 2001–2006.         1
Rhonda Hustedt Jacobsen1984–Professor of Psychology; Director of Faculty Development19.000000000000000000000000000000000000
Charles D. Jantzi 2004– Assistant Professor of Psychology B.A., Cedarville College, 1986; M.A., University of Dayton, 1988; Psy.D., Wright State University, 1994.
Roger D. Johnson1984–Professor of EconomicsB.A., North Park College, 1969; M.A., Northern Illinois University, 1974; Ph.D., Northern IllinoisUniversity, 1980.
David E. Kasparek2000–Associate Professor of Graphic DesignB.A., Seton Hill College, 1995; M.G.D., North Carolina State University School of Design, 1998.
H. Scott Kieffer 1999– Associate Professor of Exercise Physiology B.S./B.A., Davis and Elkins College, 1985; M.S., Kearney State College, 1987; Ed.D., University of South Dakota, 1998.
Robert A. Kilmer1998–Associate Professor of Business Information Systems and ManagementB.S., Indiana University of Pennsylvania, 1976; M.S., Naval Postgraduate School, 1986; Ph.D., University of Pittsburgh, 1994.
Carolyn L. Kreamer 1986– Professor of Nursing; Chair, Department of Nursing Diploma, York Hospital School of Nursing, 1969; B.S., Pennsylvania State University, 1975; M.S., University of Maryland, 1980; Ph.D., University of Texas at Austin, 1989.

James A. Krimmel 1986– Associate Professor of Accounting
B.S., Messiah College, 1981; C.P.A., 1984; M.B.A., Shippensburg University, 1990; Certified Fraud Examiner (CFE), 2002.
Abaz Kryemadhi2006–Assistant Professor of Mathematical SciencesB.S., University of Tirana, 1996; Diplom Physik, University of Siegen, Germany, 1998;M.S., Indiana University, 2000; Ph.D., Indiana University, 2004.
Vincent A. LaFrance       1988–         Professor of Economics; Chair, Department of Management and Business       1988–         B.S., University of Delaware, 1972; Ph.D., Pennsylvania State University, 1985.       1988–
James B. LaGrand 1997– Associate Professor of American History B.A., Calvin College, 1990; M.A., Ph.D., Indiana University, 1992, 1997. Messiah College History Scholarship Chair, 2000–2002.
Larry M. Lake 1984– Associate Professor of Writing B.A., Wheaton College, 1974; M.A., West Chester State College, 1982; Ph.D., University of Pennsylvania, 1989.
Robin M. Lauermann2002–Associate Professor of PoliticsB.A., M.A., Ph.D., SUNY Buffalo, 1993, 1995, 2001.
Heidi Oberholtzer Lee2006–Assistant Professor of EnglishB.A., Houghton College, 1996; M.A., Pennsylvania State University, 1999; Ph.D.,University of Notre Dame, 2005.
Erik D. Lindquist 2003– Associate Professor of Biology and Environmental Science B.S., Southern Illinois University, 1991; M.S., Ph.D., The Ohio State University, 1995, 1997.
James V. Makowski 1981– Professor of Biology B.A., Messiah College, 1976; M.A., West Chester State University, 1980; Ph.D., University of
Delaware, 1991.
Yvonne E. Martin       1981–         Assistant Professor of Business Administration       B.S., Indiana University of Pennsylvania, 1977; M.B.A., Pennsylvania State University, 1979.
J. E. McDermond 1987– Professor of Christian Ministry and Spirituality; Director of Sider Institute for Anabaptist, Pietist, and Wesleyan Studies; Hostetter Chair of Religious Studies, 2007-2009 B.A., Messiah College, 1976; M.Div., Mennonite Biblical Seminary, 1979; M.Litt., University of Durham, 1987; University of Tübingen; Pittsburgh Theological Seminary; Gettysburg Lutheran Seminary; D.Min., Pittsburgh Theological Seminary, 1998; The University of Glasgow.
Jon D. Melton1989-Associate Professor of ChemistryB.A., Cornell College, 1980; Ph.D., Iowa State University, 1986.
Obed Mfum-Mensah2005–Assistant Professor of EducationB.A., Andrews University, 1995; M.Ed., University of Western Ontario, 1999; Ph.D., University of Toronto, 2003.

Bernardo A. Michael Associate Professor of History; Scholarship Chair, 2007-2009; Director, Center for Public Human B.A., M.A., St. Stephen's College, University of Delhi, India, 1984, 1986; Ph.D., University Hawaii, 2001.	
Caleb D. Miller Professor of Philosophy; Chair, Department of Philosophy B.A., Drake University, 1980; M.A.T.S., Gordon-Conwell Theological Seminary, 1983; Ph. University of Notre Dame, 1991.	<b>1993–</b> D.,
Douglas K. Miller Professor of Sport and Exercise Science; Wellness Director B.A., Manchester College, 1976; M.A., University of Northern Colorado, 1979; Ph.D., Uni of Maryland, 1992.	1979– versity
Donald A. Murk Professor of Early Childhood Education; Boyer Fellow B.S., Messiah College, 1979; M.A., Pennsylvania State University–The Capital Campus, 19 Ph.D., University of Maryland, 1992.	<b>1981–</b> 984;
<b>Retta K. Murray</b> Assistant Professor of Health and Physical Education; Assistant Athletic Trainer B.S., M.Ed., A.T.C., Pennsylvania State University, 1981, 1987.	1987–
Lawrence M. Mylin Associate Professor of Biology B.A./B.A., Messiah College, 1980; Ph.D., The Pennsylvania State University, 1990.	1999–
<b>Brian A. Nejmeh</b> Associate Professor of Business Information Systems and Entrepreneurship B.S., Allegheny College, 1983; M.S., Purdue University, 1985.	2002-
Karl M. Oberholser Professor of Chemistry B.A., Messiah College, 1964; Ph.D., Auburn University, 1973.	1976–
David R. Owen Assistant Professor of Computer Science B.S., Messiah College, 1997; M.S., West Virginia University, 2002; Ph.D. Coursework.	2007-
Gary J. Page Associate Professor of Management and Business B.S., Bob Jones University, 1975; CPA, State of Maine, 1977; M.B.A., University of Souther Maine, 1988; D.B.A., Nova Southeastern University, 2005.	2006– ern
<b>Jenell Williams Paris</b> Professor of Sociology and Anthropology B.A., Bethel University, 1994; Ph.D., American University, 1998.	2007-
Nancy J. Patrick Assistant Professor of Special Education B.A., Texas A & I University, 1977; M.Ed., University of North Florida, 1981; Ph.D., The Pennsylvania State University, 1992.	2002-
Katrina A. Peddell Associate Professor of Music B.A., Queensland Conservatorium of Music, Griffith University, 1987; Graduate Diploma Teaching, Queensland University of Technology, 1988; M.A., University of Minnesota, 200 Ph,.D., University of Minnesota, 2005.	2002– 1;

B.S., Michigan State University, 1982; M.S., Oakland Universi Institute of Theology, 1995; Graduate Certificate in Art and TI Theology, Northwestern University, 2002; M.F.A., Northwester	heology, Center for Art and
Timothy J. Peterson Professor of Urban Studies; Program Director, Philadelphia Campus B.A., Lewis & Clark College, 1975; M.A., Western Seminary, I University, 1990.	
David K. Pettegrew Assistant Professor of History B.A., Wright State University, 1998; M.A., Ohio State Univer American School of Classical Studies at Athens, 2004-2006; Pl	•
<b>Douglas C. Phillippy</b> Associate Professor of Mathematics B.A., Shippensburg University, 1983; M.S., Ph.D., Lehigh Univ	<b>1993–</b> versity, 1986, 1991.
George F. Pickens Associate Professor of Biblical and Religious Studies B.A., Kentucky Christian College, 1980; M.A., The Ohio Univ of Birmingham, England, 1997.	2005– versity, 1984; Ph.D., The University
Peter K. Powers Professor of English; Chair, Department of English; Director of Wri B.A., Wheaton College, 1982; M.F.A., University of Montana, University, 1987, 1991; Scholarship Chair, 2002–2004.	0
<b>Donald G. Pratt</b> Professor of Engineering B.S., Case Western Reserve University, 1978; M.E., Ph.D., Cor Bible Institute, The Clarence W. Hottel Chair of Engineering,	
<b>Theodore L. Prescott</b> Professor of Art; Distinguished Professor, 2006–2011 B.A., Colorado College, 1967; M.F.A., Rinehart School of Scul College of Art, 1970; Distinguished Professor, 2001–2006.	1980– Ipture, The Maryland Institute
Anne M. Reeve Associate Professor of Chemistry B.S., Clemson University and The Johns Hopkins University, 1 University, 1992.	2007– 1983; Ph.D., The Johns Hopkins
<b>Paul M. Rego</b> Assistant Professor of Politics B.A., Millersville University, 2001; M.A., Ph.D., University of	2007– Massachusetts-Amherst, 2005, 2006.
<b>Barbara G. Ressler</b> Assistant Professor of Engineering B.S., Northwestern University, 1993; S.M., Massachusetts Insti Massachusetts Institute of Technology, 1999.	2006– tute of Technology, 1995; Ph.D.,
<b>Sheila K. Rodriguez</b> Assistant Professor of Spanish B.A., Earlham College, 1992; M.A., Ph.D, Temple University, J	<b>2003-2004, 2006</b> - 2000, 2005.
<b>Eugene G. Rohrbaugh</b> Associate Professor of Computer Science B.A. Millerwille, University of PA, 1987, B.S. Millerwille, Un	2002-2005; 2007-

J. Reid Perkins-Buzo

Assistant Professor of Communication

University of Texas, 1993; Ph.D., University of Texas, 1995; Graduate work, California State University.	2
Matthew S. Roth Assistant Professor of English; Director of the Writing Program B.A., Houghton College, 1992; M.F.A., Wichita State University, 1996; Ph.D., University of Texas, 2002.	2002– f North
<b>Roseann K. Sachs</b> Professor of Chemistry; Chair, Department of Chemistry and Biochemistry B.A., Bethel University, 1986; Ph.D., University of Minnesota; 1993.	2003-
Richard W. Schaeffer Associate Professor of Chemistry B.A., Messiah College, 1983, Ph.D., Temple University, 1992.	2004–
David J. Schenk Assistant Professor of Philosophy B.A., Antioch College, 1991; Ph.D., University of Iowa, 2003.	2006–
Timothy W. Schoettle Assistant Professor of Philosophy B.A., Yale, 1990; M.A., University of Michigan, 1997; Ph.D., University of California, 2003.	2004–
Winston Seegobin Professor of Psychology; Counselor for Students of Color and International Students B.Th., Jamaica Theological Seminary, 1979; B.A., Bethel College (Indiana), 1981; M.A., W College Graduate School, 1987; M.A., Central Michigan University, 1994; Psy.D., Central Michigan University, 1996.	1 <b>996–</b> heaton
Eric A. Seibert Associate Professor of Old Testament B.A., Messiah College, 1992; M.A., M.Div., Asbury Theological Seminary, 1996; M.Phil., Pl Drew University, 1999, 2002; C. N. Hostetter, Jr. Chair of Religious Studies, 2003–2005.	<b>2000–</b> n.D.,
Charles R. Seitz, Jr. Assistant Professor of Social Work; Acting Director of Social Work; Coordinator of Field Placemen B.A., M.S.W., University of Maryland, 1983, 1986; Ph.D., Regent University, 2006.	2000– ts
Norman E. Shank Professor of Chemistry B.S., Eastern Mennonite College, 1965; Ph.D., Ohio State University, 1969.	1975–
Michael J. Shin Assistant Professor of Biology B.A., Yale University, 1994; M.S., Ph.D., New York University, 1997, 2004.	2004–
Kate D. Simcox Assistant Professor of Communication B.A., Bluffton University, 2001; M.A., Ph.D., Bowling Green State University, 2002, 2005.	2005-
Christopher E. Simmons Assistant Professor of Communication and Film B.A., University of North Carolina at Chapel Hill, 1985; M.Div., Westminster Theological Seminary, 1993; MCS, New York University, 1996; Doctoral Candidate, University of Chica	<b>2001–</b>
Samuel O. Smith Professor of English B.S., Philadelphia College of Bible, 1982; M.A., Shippensburg University, 1983; Ph.D., Univ of Delaware, 1989; Folger Institute for Renaissance and Eighteenth-Century Studies; Folger Institute for the History of British Political Thought; University of Chicago.	1989– versity

.N., St. Joseph College, 1973; M.S.N., University of Virginia, 1983; Certified Pediatric N I.,B.C., 1989.	Jurse,
Christopher Staecker istant Professor of Mathematical Sciences ., Bates College, 2000; Ph.D., University of California at Los Angeles, 2005.	2005-
n E. Stanley fessor of New Testament; Director of the Core Course	1997–
A., Anderson College, 1965; Chicago Theological Seminary/University of Chicago, 1967 Div., Anderson School of Theology (Indiana), 1969; M.S.T., Lutheran Theological Semi 7; Ph.D., Iliff School of Theology/University of Denver, 1986.	
sie C. Stanley	1995–
fessor of Historical Theology A., Towson State University, 1977; M.A.R, Iliff School of Theology, 1982; Ph.D., Iliff Sch eology/University of Denver, 1987. Messiah College C. N. Hostetter Jr. Chair of Religiou dies, 1999–2001.	
ne Marie Stoner-Eby	2003-
istant Professor of History A., Eastern Mennonite University, 1989; M.A., Temple University, 1996; Ph.D., Universi Insylvania, 2003.	ty of
Iliam J. Stowman	1996-
fessor of Music; Chair, Department of Music; Director of Instrumental Studies 5. Indiana University of Pennsylvania, 1985; M.M.E., M.A., Eastern Kentucky University 14; D.M.A., University of North Texas, Denton, 1998.	y, 1993,
r <b>en E. Swivel</b> istant Professor of Health and Human Performance A, Slippery Rock State University, 1976; M.Ed., McDaniel College, 1979.	1988-
right W. Thomas	2003-
ociate Professor of Music Aus.Ed., Messiah College, 1970; M.S., Indiana University, 1979; Ph.D., University of Mic 15.	chigan,
rold R. Underwood	1992–
ociate Professor of Engineering A., Wheaton College, 1984; B.S., M.S., Ph.D., University of Illinois, 1984, 1986, 1990.	
vid T. Vader	1993-
fessor of Engineering; Director, Collaboratory for Strategic Partnerships and Applied Research M.E., Texas A & M University, 1982; M.S.M.E., Ph.D., Purdue University, 1985, 1988. llege Hottel Chair of Engineering, 1999–2001.	Messiah
ne R. VanDyke	2006-
ociate Professor of Visual Art 5., Penn State University, College of Education, 1966; M.S., Miami University of Ohio, 1 D., Temple University, 1987.	967;
nothy J. Van Dyke	2001-
ociate Professor of Engineering ., Calvin College, 1983; B.S., M.S., M.S., Ph.D., University of Michigan, 1983, 1984, 19	89,

## B.S., Taylor University, 1990; M.A., Miami University (Ohio), 1996; Ph.D., Tufts University, 2005.

Valerie R. Smith

Martha O. Solomon

Associate Professor of Theatre; Co-Chair, Department of Theatre

Assistant Professor of Nursing NON II 637 . . . . . . B.S.N R.N.

### P. C

### John

## Susi

### Ann

### Willi

### Lore

### Dwig

### Hare

### Davi

### Gen

### Time

Asso B.S., 1995.

### 2000-

Anita N. Voelker Assistant Professor of Education B.S., Frostburg State University, 1973; M.S., Johns Hopkins University, 1976; Ph.D., Universi	1 <b>993</b> –
Maryland, College Park, 2006.	ity of
Helen L. Walker       1         Associate Professor of Writing       1         B.A., Huntington College, 1967; M.A., Eastern Washington State University, 1972; D.A., Illi         State University, 1987.	1 <b>995</b> – nois
D. Scott Weaver 2 Instructor in Computer Science B.A., Messiah College, 1985; M.S., Shippensburg University, 1998.	2002–
David L. Weaver-Zercher 1 Associate Professor of American Religious History; Chair, Department of Biblical and Religious Studi B.A., Messiah College, 1983; M.Div., Eastern Baptist Theological Seminary, 1987; Ph.D., The University of North Carolina at Chapel Hill, 1997.	
Spurgeon R. Wentzell       1         Professor of Health and Human Performance       1         B.S., M.S., Springfield College, 1966, 1967; Ed.D., Boston University, 1986.       1	1989–
Timothy B. Whitmoyer1Associate Professor of Engineering1B.S., M.S., Ph.D., West Virginia University, 1984, 1986, 1991.	1990–
Lamarr C. Widmer1Associate Professor of Mathematics1B.A., M.S., Ph.D., University of Iowa, 1972, 1984, 1988.	1988–
Samuel P. Wilcock 2 Associate Professor of Mathematics and Statistics B.A., Messiah College, 1996, M.S., Ph.D., Virginia Polytechnic Institute and State University 1997, 2001.	2001– <sup>,</sup> ,
Norman J. Wilson 2 Professor of History; Chair, Department of History B.A. in English, B.A. in French, University of Wisconsin-Madison, 1981, 1985; M.A., Ph.D., U.C.L.A, 1987, 1994.;	2003-
	1991–
Associate Professor of Dietetics; Chair, Department of Nutrition and Dietetics B.A., Hope College, 1981; M.S., Purdue University, 1983; Ph.D., Ohio State University, 1989	).
Tymberley A. Wittrig2Assistant Professor of Theatre; Co-Chair, Department of Theatre2B.A. Goshen College, 1993; MFA, Illinois State University, 1998.	2004–
Velma A. Yoder       1         Associate Professor of Education       1         B.S., M.Ed., Ph.D., Pennsylvania State University, 1969, 1970, 1988.	1989–
Kim D. Yúnez       1         Associate Professor of Spanish       1         B.A., Houghton College, 1986; M.A., Ph.D., Temple University, 1990, 1999.	1990-
Louann B. Zinsmeister 1 Associate Professor of Nursing B.S.N., Millersville University, 1984; M.S., University of Delaware, 1985; D.N.Sc., Widener University, 2004.	1994–

## **Clinical Track**

Marti G. Derr Assistant Professor of Nursing (Clinical Track) B.S.N., Eastern Mennonite University, 1981; M.S., University of Kentucky, 1985; M.S., Goldsmith's College, University of London, 1992, M.S.N., University of Maryland, 2004.	1996–
Pamela J. Linstedt Assistant Professor of Nursing (Clinical Track) B.S.N., Alderson-Broaddus College, 1977; M.S.N., Indiana University, 1982.	1997–
<b>Debra L. Loop</b> Assistant Professor of Nursing (Clinical Track) B.S.N., Liberty University, 1986; M.S.N., University of Virginia, 1987.	1995–
Heidi R. Lutz Assistant Professor of Nursing (Clinical Track) Diploma, Lancaster General Hospital School of Nursing, 1994; B.S.N., Pennsylvania State University, 2000; M.S.N., D.N.Sc., Widener University, 2003.	2007-
Christy Stark Smith Assistant Professor of Nursing (Clinical Track) B.S.N., Villa Maria College, 1983; M.S.N., University of Pennsylvania, 1985.	2004–
Wanda E. Thuma-McDermond Assistant Professor of Nursing (Clinical Track) B.A., B.S.N., Goshen College, 1975, 1979; M.S., Indiana Wesleyan University, 1992.	2003-
Senior Lecturers	

Wendy L. Cheesman Senior Lecturer in Health and Human Performance B.A., Messiah College, 1989; M.S., University of Rhode Island, 1995.	1996–
<b>Amy E. Ginck</b> Senior Lecturer in Modern Languages B.A., Messiah College, 1993; M.A., Bowling Green State University, 1995.	1998-99; 2005–
<b>Elaine Henderson</b> Senior Lecturer in Music B.M., B.M.E., Mars Hill College, 1975; M.M., Indiana University, 1977.	2001-
Valerie A. Lemmon Senior Lecturer in Psychology B.A., Gettysburg College, 1985; M.S., Millersville University, 1992; M.S., Psy.D., College of Osteopathic Medicine, 2004.	2007– Philadelphia
<b>Jodi D. Noble</b> Senior Lecturer in Chemistry; Assistant Women's Basketball Coach B.A., Messiah College, 1984; M.S., Pennsylvania State University, 1992.	1994–
Kathleen D. Quimby	1985-

Senior Lecturer in Humanities; Director of Supplemental Instruction B.S., Mansfield State University, 1968; M.A., The Pennsylvania State University, 1986.	
<b>Damian G. Savarino</b> Senior Lecturer in Music B.M., Ithaca College, 1994; M.M., New England Conservatory of Music, 1997.	2004-
Brian A. Smith Senior Lecturer in Bible; Teaching Pastor B.A., Taylor University, 1988; M.Div., Gordon-Conwell Theological Seminary, 1994; M.Ph Ph.D., Hebrew Union College-Jewish Institute of Religion, 1999, 2007.	2001– il.,
Randall S. Zwally Senior Lecturer in Music B.S., M.M., West Chester University, 1976, 1991; M.L.S., Clarion University, 2003.	2002-
Lecturers	
Asuncion Arnedo-Aldrich Lecturer in Modern Languages B.S., M.S., Universidad de Santiago de Compostela, 1977-1985; University of Massachusett Amherst, 1987-1991; Coursework at Universidad de Malaga, 1998-1999; Teaccher Certifica Dickinson College, 2000-2001.	
<b>Jennifer A. H. Billman</b> <i>Lecturer in Biology</i> B.S., Messiah College, 1991; M.S., University of Maryland, 1998.	2007–
Richard D. Crane Lecturer in Theology B.A., Samford University, 1984; M.Div., The Southern Baptist Theological Seminary, 1989 Marquette University, 2000.	<b>2002–</b> , Ph.D.,
Brenton E. Good Lecturer in Art B.A., Messiah College, 2001; M.A., M.F.A., University of Dallas, 2003, 2005.	2007-
<b>Paul A. Johns</b> Lecturer in Human Development and Family Science B.A., Messiah College, 1996; M.A., Bethel Theological Seminary, 2001.	2007-
<b>Katie L. Keith</b> Lecturer in Social Work B.A., Messiah College, 2004; M.S.W., Temple University, 2007.	2007-
Nancy D. McCown Lecturer in Communication B.A., Messiah College, 1985; M.A., Temple University, 1994.	2007-
<b>Justin B. Rodkey</b> Lecturer in Health and Human Performance B.S., The Pennsylvania State University, 2000; M.S., The Ohio University, 2002.	2005-

## Scholars/Artists in Residence

Linda L. Tedford

Artist-in-Residence; Director of Choral Activities B.M., Covenant College, 1969; M.M., Temple University, 1973.

### Rebecca L. Wilt

Artist-in-Residence B.A., Luther College, 1988; M.M., D.M.A. Course work, University of Illinois; 1992.

## **Visiting Professors**

Ronald J. Webb 1980–1998; 2004– Visiting Professor of Management; Managing Director, International Business Institute B.A., Wheaton College, 1964; M.B.A., D.B.A., University of Maryland, 1996, 1973.

## Librarians

Elizabeth Y. Kielley 19 Librarian/Technical Services Coordinator B.A., Gettysburg College, 1989; M.L.S., University of Pittsburgh, 1991.	999_
Beth L. Mark 19 Librarian/Instruction Coordinator B.A., Messiah College, 1972; M.S.L.S., Shippensburg University, 1975; M.L.A., Temple University 1998.	<b>993–</b>
Lawrie H. Merz       19         Librarian/Public Services Coordinator       19         B.Mus., Houghton College, 1979; M.S.L.S., Villanova University, 1983; M.A., Syracuse University       1983; M.A., Syracuse University         1996.       19	9 <b>97</b> –
Michael D. Rice       19         Librarian/Electronic Resources Coordinator       19         B.A., Millersville University, 1978; M.S.L.S., Clarion University of Pennsylvania, 1984.       19	992–
Beth M. Transue20Librarian/Collection Development Coordinator20B.S., Messiah College, 1993; M.S.L.S., Drexel University, 1998.	)06–

## **Cocurricular Educators**

David H. Brandt Head Men's Soccer Coach; Public Relations and National Visibility Representative B.S., Messiah College, 1985; M.Ed., Temple University, 1990.	1991–
<b>David L. Brown</b> Counselor B.B.A., Texas Tech University, 1970; M.S.W., University of Maryland, 1984.	1998–
<b>Bryan E. J. Brunk</b> Head Wrestling Coach; Adjunct Instructor in Health and Human Performance B.A., Western New England College, 1998; M.S., University of Southern Maine, 2003.	2003-
Lawrence A. Q. Burnley	2005-

Associate Dean for Multicultural Programs; Special Assistant to the Provost for Diversity Affairs B.A., University of Cincinnati; M.Div., Christian Theological Seminary; Ph.D., University of Pennsylvania, 2006.	
Spencer T. Carter Residence Director, Naugle Hall B.S., M.S.Ed., Elmira College, 1998, 2001.	2005-
<b>Jerry A. Chaplin</b> <i>Director of Athletics</i> B.A., Malone College, 1973; M.Ed., Ohio University, 1974.	1997–
<b>Douglas Curry</b> Minister of Worship B.A., Messiah College, 1990; M.A., Lancaster Bible College Graduate School, 2002.	2002-
<b>Debra I. Danielson</b> Counselor B.A., Messiah College, 1978; M.A., Ashland Theological Seminary, 1981.	1994–
Abigail Davis Residence Director/Mountain View B.A., M.A., Biola University, 1994, 2001.	2005-
<b>Bryan T. Engle</b> Aquatics Director/Assistant Men's Basketball Coach B.A., Messiah College, 2003; M.S., University of Kentucky, 2005.	2005-
Dale E. Fogelsanger Head Cross Country Coach; Head Track and Field Coach B.S., Messiah College, 1987; M.Ed., Shippensburg University, 1998.	1998–
Scott R. Frey Head Women's Soccer Coach; Sports Information Director B.S., Messiah College, 1984; M.A., Western Maryland College, 1990.	2000-
Eldon E. Fry College Pastor B.A., Bartlesville Wesleyan College, 1968; M.S., Kansas State University, 1984; D.Min., Gr Theological Foundation, 1999.	2005– aduate
Rhonda L. Good Director of Housing B.A., Messiah College, 1992; M.S., Emporia State University, 2000.	2007-
Heather J. Greer Head Women's Lacrosse Coach/Director of Recreational Sports B.A., Messiah College, 2002; M.S., Virginia Commonwealth University, 2005.	2006-
<b>Corrie M. Gustafson</b> Residence Director, Sollenberger Hall and Kelly Apartments B.A., Westmont College, 2002; M.Div., Regent College, 2005.	2006-
Kristin M. Hansen-Kieffer Vice Provost/Dean of Students; Assistant Professor in Exercise Physiology B.S., University of Nebraska, Kearney, 1987; M.S., South Dakota State University, 1991; Ed.D., University of South Dakota, 2000.	1999–
<b>Elizabeth Kiszonas</b> Residence Director, Grantham Hall/Smith Apartments B.A., Rutgers University, 2001; M.Div., Trinity Evangelical Divinity School, 2005.	2007-

Philip J. Lawlis Director of Counseling and Health Services A.A., Vincennes University, 1973; A.B., Indiana University, 1975; M.A., Ph.D., University Kansas, 1978, 1980	1980– of
<b>Bradley S. McCarty</b> Assistant Athletic Director for Facilities and Equipment; Assistant Men's Soccer Coach B.A., Messiah College, 1993; M.E., Wichita State University, 1997.	2001-
Michael R. Miller Head Women's Basketball Coach; Adjunct Instructor in Business B.S., Messiah College, 1983; M.B.A., Shippensburg University, 1985.	1986–
Robert C. Pepper Director of Student Programs B.A., Messiah College, 1992; M.S., Shippensburg University, 1994; Ph.D. candidate, Regent University.	1994–
<b>Jeffrey M. Rioux</b> Director of the Larsen Union and Campus Activities B.A., Messiah College, 1994; M.A., Geneva College, 1998.	1997–
<b>Amber M. Ruffo</b> <i>Residence Director, Witmer Hall</i> B.A., North Central University, 2004; M.S., Grand Canyon University, 2007.	2007-
David J. Tanis Director of Adventure Programs; Adjunct Instructor in Health and Human Performance B.S., Calvin College, 1990; M.A., Geneva College, 1997.	1997–
Geneve (Evie) R. Telfer Associate College Pastor B.A., Vanderbilt University, 1984; M.Div., Asbury Theological Seminary, 1993.	1997–
Judi K. Tobias Head Volleyball Coach; Adjunct Instructor of Physical Education B.A., Messiah College, 1980; M.Ed., Penn State University Capital Campus, 1996.	1996–
<b>Amy Sue VanDerWerf</b> Director of Residence Life B.S., Northwestern College, 1992; M.A., Geneva College, 2003.	2005-
Patrick W. Van Pelt Head Men's Basketball Coach/Adjunct Instructor in Physical Education B.A., Messiah College, 1991; M.A., Penn State University, 1997.	1999–
<b>Michael N. Warari</b> <i>Residence Director, Miller Hall and Fry Apartments</i> B.A., Cornerstone University, 2002; M.Div., Grand Rapids Theological Seminary, 2006.	2006-
Amy C. Weaver Associate Director of Athletics for Operations; Senior Women's Administrator; Head Softball Coac B.S., Messiah College, 1991; M.S., Western Maryland, 1998.	1998– <sup>:h</sup>
<b>Stephanie A. Williams</b> <i>Residence Director, Bittner Hall</i> B.A., Malone College, 2002; M.A., Geneva College, 2006.	2006-
Wendell Witter Director of Issacchar's Loft B.S., Messiah College, 1996; M.A., Wheaton College, 2000.	2007-
Douglas M. Wood Associate Dean of Students	1997–

## **Emeriti Educators**

Dates indicate years of service.

Dates indicate years of service.	
Michael R. Brown Librarian Emeritus B.A., Upland College, 1963; M.S.L.S., D.B.A., University of Southern California, 190 University, 1977.	1973–2006 65; M.A., Temple
Marvin L. Brubaker Professor Emeritus of Mathematics A.B., Susquehanna University, 1961; M.A., Bowling Green State University, 1964; Pl University, 1973.	1983–2005 h.D., Lehigh
D. Wayne Cassel Professor Emeritus of Mathematics; Educational Space Coordinator B.S., Greenville College, 1959; M.A., Ph.D., Syracuse University, 1962, 1967.	1962–2000
<b>Peter S. Fraser</b> Associate Professor Emeritus of Chemistry B.A., University of Minnesota, 1959; Ph.D., University of Washington, 1977.	1982–2003
Dorothy J. Gish Academic Dean Emeritus; Professor of Early Childhood and Family Education B.A., Greenville College, 1957; M.Ed., Ph.D., Pennsylvania State University, 1966, 1	<b>1972–1998</b> 971.
<b>Robert Heinemann</b> Professor Emeritus of Communication A.B., Wheaton College, 1965; M.A., Illinois State University, 1968; Ph.D., Ohio State University, 1975.	1979–2005
Robert A. Hess Professor Emeritus of History and African Studies A.B., Elizabethtown College, 1950; M.Div., Bethany Theological Seminary, 1953; Ed. University, 1963; Ph.D., Howard University, 1972.	<b>1971–1993</b> M., Temple
William R. Higgins Professor Emeritus of Music and Computer Education B.S., Lebanon Valley College, 1964; M.M., Boston University, 1967; D.Ed., The Penr University, 1981.	1968–2004 nsylvania State
Kenneth B. Hoover Professor Emeritus of Biology A.B., John Fletcher College, 1934; M.S., Kansas State University, 1941; Ph.D., Penns University, 1952; North Carolina State College; Duke University.	1942–1977 Iylvania State
D. Ray Hostetter 1952–1955 President Emeritus of the College A.B., Greenville College, 1950; M.A., Pennsylvania State University, 1951; Ed.D., C University, 1965.	<b>5; 1960–1994</b> olumbia
George P. Kimber Associate Professor Emeritus of Biblical Literature B.A., Southern California College, 1962; M.Div., M.A., D.Min., Ashland Theologica 1975, 1979; Talbot Theological Seminary; Trinity Evangelical Divinity School; Penns University; Temple University.	
Edward L. Kuhlman	1971–2000

Professor Emeritus of Education B.A., The King's College, 1959; M.Ed., D.Ed., Rutgers University, 1966, 1972.

### Howard L. Landis

Dates r Emeritus of Psychology Days

### Activities

1962-1995

## **Fall Semester**

August 26	Tuesday	Community Day
August 27	Wednesday	Community of Educators Retreat
August 28	Thursday	New and Transfer Students Arrive
August 29-September 5	Friday-Friday	Welcome Week/Orientation
September 2	Tuesday	Classes Begin, 8:00 a.m.
October 9-12	Thursday-Sunday	Mid-Fall Recess
October 13	Monday	Classes Resume, 8:00 a.m.
October 18	Saturday	Homecoming
November 25	Tuesday	Follows Thursday Course Schedule
November 26-30	Wednesday-Sunday	Thanksgiving Recess
December 1	Monday	Classes Resume, 8:00 a.m.
December 12	Friday	Last Day of Classes
December 15-18	Monday-Thursday	Semester Exams
December 19-January 6	Friday-Tuesday	Winter Recess
<b>Spring Semester</b> January Term		

January Term January 5 New and Transfer Students Arrive Monday January 5-6 Monday-Tuesday Winter Orientation January 7 Classes Begin, 8:00 a.m. Wednesday Martin Luther King Jr. Day (No January 19 Monday Classes) January 28 Wednesday Term Ends January 29-February 1 Thursday-Sunday January Term Recess Spring Term New and Transfer Students Arrive February 1 Sunday Monday February 2 Classes Begin, 8:00 a.m./Evening Orientation March 14-22 Saturday-Sunday Spring Recess Classes Resume, 8:00 a.m. March 23 Monday April 10-13 Friday-Monday Easter Break April 14 Tuesday Classes Resume, 8:00 a.m. April 16 Thursday Service Day (No Classes) May 5 Tuesday Last Day of Classes/Follows Thursday Course Schedule May 6 Wednesday Reading Day May 7-12 Thursday-Tuesday Final Exams May 15-16 Friday-Saturday Commencement Weekend May 18-22 Monday-Friday Faculty – May Development Week May Term May 27-June 12 Tuesday-Friday Approved Cross-Cultural courses only

### A.B., Greenville College, 1960; M.Ed., Ed.D., Pennsylvania State University, 1961, 1963.

### Alden M. Long

Professor Emeritus of Biblical Literature and Greek A.B., Houghton College, 1950; M.A., New York University, 1953; B.D., Eastern Baptist Theological Seminary, 1957; S.T.M., Biblical Seminary in New York, 1958.

### Martha M. Long

Assistant Professor Emerita of English B.S., Lock Haven State College, 1950; M.A., Pennsylvania State University, 1964; M.S., Shippensburg University, 1978.

### Mary Ann Mihok

Associate Professor Emerita of Dietetics B.S., Pennsylvania State University, 1961; M.S., University of Pittsburgh, 1965; Ph.D., University of Maryland, 1997.

### Anna Verle Miller

Assistant Professor Emerita of Modern Languages A.B., Upland College, 1949; M.A., Claremont Graduate School, 1953; Pennsylvania State University; Schiller College, Germany; Millersville State University.

### Ronald L. Miller

Professor Emeritus of Music B.S. in Ed., Indiana University of Pennsylvania, 1961; M.Mus., Ph.D., Indiana University (Indiana), 1967, 1974.

### Benjamin W. Myers

Associate Professor Emeritus of Biology A.B., Messiah College, 1962; M.S., Kansas State Teacher's College, 1966; Ph.D., Purdue University, 1970.

### Paul W. Nisly

Professor of English A.A., Hession College, 1963; B.A., Eastern Mennonite College, 1965; M.A., M.Phil., Ph.D., University of Kansas, 1969, 1972, 1974; City University of New York.

### Clyde A. Ross

Professor Emeritus of English B.S., Gordon College, 1954; M.R.E., M.Div., Central Baptist Theological Seminary, 1956, 1957; M.Ed., Worcester State College (Massachusetts), 1963; M.A., Geneseo State University College (New York), 1970; Columbia University; Oxford University.

### Dorothy A. Schrag

Assistant Professor Emerita of Music B.Mus.Ed., Drake University, 1940; M.Mus., Central Conservatory of Chicago, 1952; School of Sacred Music; Union Theological Seminary; New School for Music Study; Madison College.

### E. Morris Sider

Historian and Archivist; Brethren in Christ Historian; Professor Emeritus of History and English Literature A.B., Th.B., Upland College, 1952, 1953; M.A., University of Western Ontario, 1955; Ph.D., State University of New York at Buffalo, 1966; University of Toronto.

### Ronald R. Sider

Professor Emeritus of Music B.Mus., M.Mus., Ph.D., Eastman School of Music, University of Rochester, 1957, 1959, 1967; A.A.G.O., 1962; Oakland University; State University of New York at Binghamton; Westminster Choir College.

### **Richard A. Stevick**

Professor Emeritus of Psychology B.A., Roberts Wesleyan College, 1961; M.S., Syracuse University, 1965; Ed.D., Texas Tech University

### 1972-2006

### 1968-1997

## 1963-2000

1953-1956; 1959-1983

### 1958-1995

### 1980-2005

### 1951-1997

### 1964-1993

1982-2004

# 1968-2003

1961-1990

College of Education, 1979.

Terry L. Stoudnour 1968–1972, 1974–2004 Professor Emeritus of Education B.A., Elizabethtown College, 1963; M.Ed., Shippensburg University, 1965; Temple University; Ed.D., Nova Southeastern University, 1978.

## **Adjunct Faculty**

Terry L. Brensinger

Professor of Biblical Studies B.A., Messiah College, 1977; M.Div., Asbury Theological Seminary, 1980; M.A., M. Phil., Ph.D., Drew University, 1985; Jerusalem University College; Princeton Theological Seminary; The Jewish Theological Seminary of America.

## **Research Fellow**

Philip E. Thuma Senior Research Fellow B.A., Messiah College, 1970; M.D., Temple University, 1974.

## Paraprofessionals

James M. Bennett Natural Sciences Laboratory Program Manager B.S., Messiah College, 2005.

Stephen M. Frank Electrical and Computer Engineering Technician B.S., Messiah College, 2005.

### Eileen K. Gardner

Learning Lab Coordinator, Department of Nursing B.S.N., R.N., Eastern Mennonite College, 1979.

### John J. Meyer

Engineering Technician/Lab Assistant B.S., The Pennsylvania State University, 1985.

# ACADEMIC CAL-ENDAR 2007–2008

Dates Activities Days

## Fall Semester

August 30 Thursday New and transfer students arrive August 31–September 7 Fridav–Fridav Welcome Week/Orientation September 4 Tuesdav Classes begin, 8:00 a.m. October 11–14 Thursday–Sunday Mid-Fall Recess October 15 Monday Classes resume, 8:00 a.m. October 20 Saturday Homecoming November 20 Tuesday Follows Thursday course schedule November 21-25 Wednesday-Sunday Thanksgiving Recess November 26 Monday Classes resume, 8:00 a.m. December 14 Friday Last day of classes December 17-20 Monday–Thursday Semester exams December 21–January 8 Friday–Tuesday Winter Recess

## Spring Semester

January Term January 7 Monday New and transfer students arrive January 7–8 Monday–Tuesday Winter Orientation January 9 Wednesday Classes begin, 8:00 a.m. January 21 Monday Martin Luther King Jr. Day

(no classes) January 30 Wednesday Term Ends January 31–February 3 Thursday–Sunday January Term Recess

Spring TermFebruary 3SundayNew and transfer students arriveFebruary 4MondayClasses begin, 8:00 a.m./

Evening orientation March 14–24 Friday–Monday Spring Recess/Easter Break March 25 Tuesday Classes resume, 8:00 a.m. April 17 Thursday Service Day (no classes) May 6 Tuesday Last day of classes – Follows

Thursday course schedule May 7 Wednesday Reading Day May 18–13 Thursday–Tuesday Final exams May 16–17 Friday–Saturday Commencement Weekend

May Term May 27–June 13 Tuesday–Friday Approved Cross-Cultural courses only

# ACADEMIC CAL-ENDAR 2008–2009

## CONTACTS DIREC-TORY 717-796-1800

Academic Records, Transcripts Ext. 6012
Admissions
Ext. 6000
Alumni and Parent Relations
Ext. 5252
Arts, School of the
Ext. 5045
Boyer Center
Ext. 5077
Education and Social Sciences,
School of
Ext. 5068
External Programs
Ext. 7373
Financial Aid
Ext. 6007
Gifts, Bequests, and Annuities
Ext. 5065
Health and Natural Sciences, School
of
Ext. 5067
Humanities, School of the
Ext. 6013
Institutional Research
Ext. 5375
Internship Center
Ext. 5099
Mathematics, Engineering, and
Business, School of
Ext. 5360
Philadelphia Campus
215-684-7400

Placement Services
Ext. 6016
Publications
Ext. 5381
Public Relations
Ext. 6027
Religious Affairs
Ext. 6017
Student Employment (off campus)
Ext. 6016
Student Employment (on campus)
Ext. 6007
Student Fees and Financing
Ext. 2055
Student Housing
Ext. 5239
Student Programs
Ext. 5240

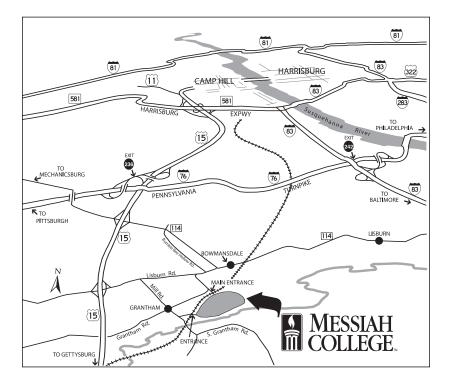
To facilitate prompt response, please address inquiries to Messiah College and to the appropriate office as listed above.

College office hours are from 8:00 a.m. to 5:00 p.m. Monday through Friday. College staff are available at other times by appointment. Appointments should be scheduled in advance by calling the College and asking for the appropriate office.

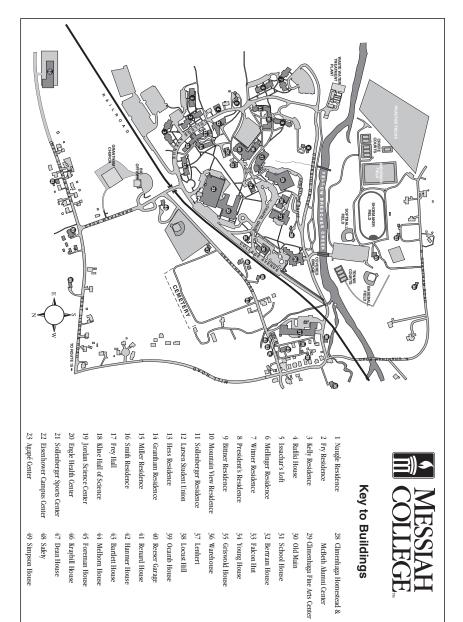
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