

# Exercise Physiology (HPED 322) Messiah Online – Summer 2011

May 30<sup>th</sup> – July 22<sup>nd</sup>

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## Faculty Contact Information and Availability

Name: Dr. H. Scott Kieffer  
Text #: 610.427.5419  
Phone: 717.265.4292 (since this is a summer course, I will not be at this number very much)  
email: [kieffer@messiah.edu](mailto:kieffer@messiah.edu)  
Office Hours: M, W, F 11:00am – 12:00pm, Sunday 9pm – 10:00pm

### Contact Policy:

1. Please contact me via e-mail or through Sakai (if you do try to contact me through Sakai, please make sure you check the “send e-mail” box). E-mail will be my primary mode of contact.
2. Please contact me via my TextNow number listed above. I will try to contact you within 24 hours of a text message.
3. Contact me via Skype during my “Office Hours”
4. Attend a Digital Samba study session

## Faculty Expectations

The amount of work required for this course is as follows. To successfully complete the course, the student is expected to participate in approximately 16.5 hours/week of instructional and “homework” time for an online 3 credit hour course. The course will be designed to meet these expectations. The instructional hours (approx. 5.25 hours/week) will consist of reading the text, reading ancillary articles, viewing websites, taking quizzes, and exams. Homework hours (approx 11.25 hours/week) will consist of completing integrative worksheets, writing short essays, designing concept maps, viewing instructional websites, posting on Sakai forums, etc.

Messiah College Online expectation for a **3 credit course** = 42 hours of Instructional Time + approx. 90 hours "Homework" = a 132 hour time commitment / # of weeks in a course

## Course Description

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.

## **Course Objectives** (adopted from Dr. Miller's Syllabus, HPE standards and ATED competencies)

- A. To understand the metabolic responses of the body and the utilization of fuel sources during aerobic, anaerobic, and resistance exercise.
- B. To understand the acute effects of aerobic, anaerobic, and resistance exercise on the muscular, respiratory, and cardiovascular systems of the body.
- C. To understand the adaptations that occur in the muscular, respiratory, and cardiovascular systems in response to regular, intense anaerobic, aerobic, and resistance training.
- D. To understand the effects that temperature and altitude have on exercise performance, and training adaptations.
- E. To understand the short-term performance benefits and possible long-term health risks of popular ergogenic aids.
- F. To understand the acute and chronic effects of exercise and training on children and the elderly.
- G. To explore answers to a research question by locating appropriate, reliable, peer-reviewed studies, interpreting them accurately, and communicating the findings effectively in writing.
- H. To discover the role that genetics play in the adaptive response to exercise, and how modern technology has facilitated our knowledge in this area.
- I. To consider the implications of our individual responsibilities to be stewards of one of God's most amazing gifts...the human body.

## **Course Materials**

### Book:

Physiology of Sport and Exercise (2008). Wilmore, Costill, & Kenny, Human Kinetics Publishers, Champaign; IL. ISBN#: 9780736055833

### Web:

Sakai Learning Management System (2011), Kieffer.

## **Course Requirements**

1. Required Readings: The reading assignments must be completed prior to the online assessment. The information covered in this course is of detailed information and completing the reading **prior** to the assessment will help the student facilitate comprehension of the material being presented independent study times as well as Digital Samba sessions. Other reading assignments will be designated from sources outside the required text that relate to the relevance of the course.
2. Worksheets: The Worksheets correspond with the material in each chapter. Each Worksheet combines a review of the chapter, interpretation of texts/graphs and some additional questions to help

facilitate a better understanding of the class information. The worksheets are designed to be completed prior assessment and Digital Samba sessions and should be used to complement your learning experience from the textbook. Please note that information on these worksheets may be used for material on all quizzes and/or Opportunities. A copy of the worksheet must be turned into the instructor by Sunday at 5:00pm.

3. Quizzes: Five (5) minute quizzes will be posted each week and correspond with the completion of a chapter or session. The material for the quiz will be posted so the student has a clear understanding of what to study. The quizzes will be posted on Sakai and a 5 minute time limit will be given to complete these short quizzes. Auto-graded quizzes will go directly to the Gradebook in Sakai and be averaged into your overall grade. NOTE: The quizzes will be posted on Monday morning of each week and the students must complete all the quizzes by Friday at 5:00pm of that week. After Sunday the quiz will be turned off and a grade of 0 will be recorded in the Gradebook for that assignment.
4. Opportunities (tests): Opportunities will be posted on the Friday morning of the assigned day. Each test will consist of a section of multiple choice, fill-in, and essay questions. The opportunities instructions will appear on Sakai. The tests will be timed (1.hour) and submitted via Sakai.
5. Review Articles: Students will be required to submit 8 review/research articles throughout the semester on specific topics covered in the class. Links to the articles will be posted on Sakai. It should be noted that the ever changing field of exercise science and medicine requires a substantial review of the current literature. Students will be asked to post and respond to not only their article but the articles from other classmates in the Forum section of the course. For detailed review of the Forums, see Forums listed in Course Requirements.
6. Forums: There will be a series of eight discussion questions posted within Sakai in the Forums tool. Each week students will post a response to the course readings and PowerPoint presentations in the Sakai Forums. Students will be given open-ended prompts to which they should respond along with commenting on each other's earlier posts in order to socially construct knowledge of the course content. Original responses are to be between 300-350 words and are to include references to the readings for the week AND a comment regarding your outside article. Students will be expected to post an **original response** to the question by 11:55 pm on Wednesday of the week and a **follow up response** to at least two other students by 11:55 pm on Friday of that week. Students will need to respond to at least two students, respond to follow up questions, incorporate course and outside readings into the responses, and demonstrate a clear comprehension of the material. You should expect to spend at least one and a half hours per week on the Forum post—reading and responding to others' posts along with crafting your own responses to the guiding questions. These forums will work as the discussion component of our course.

Forum Tips:

- a. State your position and response clearly
- b. If you are using outside material to support your point, do NOT cut and paste from that source (summarize and quote appropriately).
- c. Any website cited must be a reputable website. Very few .com sites will be considered as
- d. Do not use TXT language (e.g. ikr)
- e. Focus on the topic at hand. Go deeper into that topic, do not stray and post superficial information about unrelated material.

## Grading

Title	Points per assignment	Number of assignments	Total Points	Description
Worksheets	25	8	200	1 per week
Quizzes	5	40	200	5 short quizzes/week
Tests	4	100	400	
Forums	8	10	80	
Articles	10	8	80	

Total 960

## Grading Scale

Grade	Graded Assignments
A	93-100
A-	89-92
B+	86-88
B	82-85
B-	79-81
C+	75-78
C	72-74
C-	68-71
D+	64-67
D	60-63
F	59 or below

Extra Credit – No extra credit will be offered.

Late Assignments – Assignments are due on the dates listed. If you know that you will need to submit an assignment late, contact me in advance to make appropriate arrangements. If arrangements are not made in advance, the assignment will receive a 10% penalty for each day it is late.

Returned Assignments – I will return assignments with written or verbal feedback within one week of receiving them. I will use an analytic scoring rubric to explain my grading.

## Course Outline/Schedule

A content outline (schedule) of the material covered and the course objectives achieved; Online courses must separate Instructional Time activities from Non-Instructional Time activities

Please note, the course should not deviate too much from this format!

Topic	Objectives Met/Tasks	Hours (8 weeks)		Completion Dates
		IT	N-IT	
<b>Week 1 – Movement</b>	<b>Chapter 1 (review) Chapters 2-4 (content)</b>	IT	N-IT	
Instructional Time	<ol style="list-style-type: none"> <li>1. Read text/associated PowerPoints</li> <li>2. Take Quizzes associated with each section (4 quizzes)</li> </ol>	5	-	Quizzes – June 3 <sup>rd</sup>
Non-Instructional "Homework"	<ol style="list-style-type: none"> <li>1. Complete the worksheets associated with each chapter.</li> <li>2. Read the article posted on Sakai</li> <li>3. Post a review of your article on the Forum site.</li> <li>4. You <u>must</u> respond to <b>at least 2 other posts</b> from classmates and <b>respond to posts and questions</b> posed from your initial response.</li> </ol>	-	10	1 <sup>st</sup> Forum Post – June 3 <sup>rd</sup> Worksheet – June 5 <sup>th</sup> Forums Completed – June 5 <sup>th</sup>

Week 2 – Metabolism I	Chapters 5-6.5 (content)	IT	N-IT	
Instructional Time	<ol style="list-style-type: none"> <li>1. Read text/associated PowerPoints</li> <li>2. Take Quizzes associated with each section (4 quizzes)</li> </ol>	5		Quizzes – June 10 <sup>th</sup>
Non-Instructional "Homework"	<ol style="list-style-type: none"> <li>1. Complete the worksheets associated with each chapter.</li> <li>2. Read the article posted on Sakai</li> <li>3. Post a review of your article on the Forum site.</li> <li>4. You <u>must</u> respond to <b>at least 2 other posts</b> from classmates and <b>respond to posts and questions</b> posed from your initial response.</li> <li>5. Opportunity #1</li> </ol>		10	1 <sup>st</sup> Forum Post – June 10 <sup>th</sup> Worksheet – June 12 <sup>th</sup> Forums Completed – June 12 <sup>th</sup>  <div style="border: 1px solid black; padding: 5px; display: inline-block;">Due June 12<sup>th</sup></div>
Week 3 - Metabolism II	Chapters 6.5-7 (content)	IT	N-IT	
Instructional Time	<ol style="list-style-type: none"> <li>1. Read text/associated PowerPoints</li> <li>2. Take Quizzes associated with each section (4 quizzes)</li> </ol>	6		Quizzes – 17 <sup>th</sup>
Non-Instructional "Homework"	<ol style="list-style-type: none"> <li>1. Complete the worksheets associated with each chapter.</li> <li>2. Read the article posted on Sakai</li> <li>3. Post a review of your article on the Forum site.</li> <li>4. You <u>must</u> respond to <b>at least 2 other posts</b> from classmates and <b>respond to posts and questions</b> posed from your initial response.</li> </ol>		15	1 <sup>st</sup> Forum Post – June 17 <sup>th</sup> Worksheet – June 19 <sup>th</sup> Forums Completed – June 19 <sup>th</sup>

Week 4 Cardiovascular Responses	Chapters 8-10 (content)	IT	N-IT	
Instructional Time	1 Read text/associated PowerPoints 2 Take Quizzes associated with each section (4 quizzes)	5		Quizzes – June 24 <sup>th</sup>
Non-Instructional "Homework"	1. Complete the worksheets associated with each chapter. 2. Read the article posted on Sakai 3. Post a review of your article on the Forum site. 4. You <u>must</u> respond to <b>at least 2 other posts</b> from classmates and <b>respond to posts and questions</b> posed from your initial response.  5. Opportunity #2		10	1 <sup>st</sup> Forum Post – June 24 <sup>th</sup> Worksheet – June 26 <sup>th</sup> Forums Completed – June 26 <sup>th</sup>  <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Due June 26<sup>th</sup></div>
Week 5 Environment	Chapters 11-12 (content)	IT	N-IT	
Instructional Time	1 Read text/associated PowerPoints 2 Take Quizzes associated with each section (4 quizzes)	5		Quizzes – July 1 <sup>st</sup>
Non-Instructional "Homework"	1. Complete the worksheets associated with each chapter. 2. Read the article posted on Sakai 3. Post a review of your article on the Forum site. 4. You <u>must</u> respond to <b>at least 2 other posts</b> from classmates and <b>respond to posts and questions</b> posed from your initial response.		10	1 <sup>st</sup> Forum Post – July 1 <sup>st</sup> Worksheet – July 3 <sup>th</sup> Forums Completed – July 3 <sup>rd</sup>

Week 6 – Sport Performance	Chapters 13-15 (content)	IT	N-IT	
Instructional Time	<ol style="list-style-type: none"> <li>1 Read text/associated PowerPoints</li> <li>2 Take Quizzes associated with each section (4 quizzes)</li> </ol>	5		Quizzes – July 8 <sup>th</sup>
Non-Instructional "Homework"	<ol style="list-style-type: none"> <li>1. Complete the worksheets associated with each chapter.</li> <li>2. Read the article posted on Sakai</li> <li>3. Post a review of your article on the Forum site.</li> <li>4. You <u>must</u> respond to <b>at least 2 other posts</b> from classmates and <b>respond to posts and questions</b> posed from your initial response.</li> <li>5. Opportunity #3</li> </ol>		10	<p style="text-align: center;">1<sup>st</sup> Forum Post – July 8<sup>th</sup> Worksheet – July 10<sup>th</sup> Forums Completed – July 10<sup>th</sup></p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> <p><b>Due July 10<sup>th</sup></b></p> </div>
Week 7 Nutrition	Chapters 15-16 Content	IT	N-IT	
Instructional Time	<ol style="list-style-type: none"> <li>1. Read text/associated PowerPoints</li> <li>2. Take Quizzes associated with each section (4 quizzes)</li> </ol>	6		Quizzes – July 15
Non-Instructional "Homework"	<ol style="list-style-type: none"> <li>1. Complete the worksheets associated with each chapter.</li> <li>2. Read the article posted on Sakai</li> <li>3. Post a review of your article on the Forum site.</li> <li>4. You <u>must</u> respond to <b>at least 2 other posts</b> from classmates and <b>respond to posts and questions</b> posed from your initial response.</li> </ol>		15	<p style="text-align: center;">1<sup>st</sup> Forum Post – July 15<sup>th</sup> Worksheet – July 17<sup>th</sup> Forums Completed – July 17<sup>th</sup></p>

Week 8 Special Populations	Chapters 17, 18, 19, 21	IT	N-IT	
Instructional Time	<ol style="list-style-type: none"> <li>1. Read text/associated PowerPoints</li> <li>2. Take Quizzes associated with each section (4 quizzes)</li> </ol>	5		Quizzes – July 22
Non-Instructional "Homework"	<ol style="list-style-type: none"> <li>1. Complete the worksheets associated with each chapter.</li> <li>2. Read the article posted on Sakai</li> <li>3. Post a review of your article on the Forum site.</li> <li>4. You <u>must</u> respond to <b>at least 2 other posts</b> from classmates and <b>respond to posts and questions</b> posed from your initial response.</li> <li>5. Opportunity #4</li> </ol>		10	1 <sup>st</sup> Forum Post – July 22 <sup>th</sup> Worksheet – July 22 <sup>th</sup> Forums Completed – July 22 <sup>th</sup>  <div style="border: 1px solid black; padding: 5px; display: inline-block;">Due July 10<sup>th</sup></div>
Total Hours		42	90	132 Total Hours

## Academic Integrity

Personal integrity is a behavioral expectation for all members of the Messiah community: administration, faculty, staff, and students. Violations of academic integrity are not consistent with the community standards of Messiah College. These violations include:

**Plagiarism.** Submitting as one's own work part or all of any assignment (oral or written) which is copied, paraphrased, or purchased from another source, including on-line sources, without the proper acknowledgment of that source. Examples: failing to cite a reference, failing to use quotation marks where appropriate, misrepresenting another's work as your own, etc.

**Cheating.** Attempting to use or using unauthorized material or study aids for personal assistance in examinations or other academic work. Examples: using a cheat sheet, altering a graded exam, looking at a peer's exam, having someone else take the exam for you, using any kind of electronic

mobile or storage devices (such as cell phones, PDAs, Blackberry, iPods, iPhones, Flash drives, DVDs, CDs) for unapproved purposes, communicating via email, IM, or text messaging during an exam, using the internet, sniffers, spyware or other software to retrieve information or other students' answers, etc.

**Fabrication.** Submitting altered or contrived information in any academic exercise. Examples: falsifying sources and/or data, etc.

**Misrepresentation of Academic Records.** Tampering with any portion of a student's record. Example: forging a signature on a registration form or change of grade form on paper or via electronic means.

**Facilitating Academic Dishonesty.** Helping another individual violate this policy. Examples: working together on an assignment where collaboration is not allowed, doing work for another student, allowing one's own work to be copied.

**Computer Offenses.** Altering or damaging computer programs without permission. Examples: software piracy, constructing viruses, introducing viruses into a system, copying copyrighted programs, purposely disconnecting from the internet to cause a lock on an online exam, using the learning management system for purposes for which it was not intended, etc.

**Unfair Advantage.** Attempting to gain advantage over fellow students in an academic exercise. Examples: lying about the need for an extension on a paper, destroying or removing library materials, etc.

## **Minimum System Requirements**

### ***Include other requirements as necessary***

The following list represents configurations that provide the best performance with our learning management system and synchronous software. These are the configurations the College is ready and able to support. Although students may find that other configurations may work as well, those configurations may not be supported by Academic Technology Services.

Internet Connection Required: High speed or broadband cable (for online courses)

Browser: Mozilla Firefox 3.0 or higher

Operating System Version:

- Windows® (XP, Vista, Windows 7)
- MAC (10.4 and higher)

Processor: 2.0 – 4.0 GHz

Memory (RAM): Minimum 2 GB of RAM

Hard Disk Space: Minimum 40 GB of free space

CD-ROM/CD-RW drive: DVD or combo drive helpful

Office Suite: Ex. Microsoft Office 2007 or newer, OpenOffice 3.1, or Google Docs.

Some courses will require additional software and/or hardware as it pertains to the instruction of the course. These additional requirements will be clearly spelled out in course syllabi.

## **Minimum Computer Skills Requirements**

A clear statement regarding technology skills required – ie. Students must possess basic computer skills and have regular access to a computer with the Minimum System Requirements in order to participate fully

## **Technology Support**

### [Student Tech. Support](#)

Help is available between the hours of 8 A M and 11 PM Eastern Time (7days a week).

*Please leave a message providing your name, number, and a brief description of the issue you are experiencing. You will receive a call back as soon as possible.*

**Weekdays** - 8 AM to 5 PM Mon. to Fri.

Phone (717) 796-1800 Ext. 5901 or (717) 796-5039

Instant Messaging SCS5901 through AIM

Email [bthompso@messiah.edu](mailto:bthompso@messiah.edu) or [ResNet@Messiah.edu](mailto:ResNet@Messiah.edu)

**Evenings and Weekends** - 5 PM to 11 PM Mon. to Fri. -AND- 8 AM to 11 PM Sat. and Sun.

Phone 717-796-1800 Ext 3333

## **Statement on Confidentiality**

Students may be asked to post written work and engage in written dialog with other class members within an LMS. The student should be aware that although confidentiality within the course environment is encouraged, it is possible that users in and outside the course may have access to course content.

## **Statement of Copyright Protection**

The materials in this course are only for the use of students enrolled in this course for purposes associated with this course and may not be retained or further disseminated.

## **Americans with Disabilities Act**

Any student whose disability falls within ADA guidelines should inform the instructor at the beginning of the semester of any special accommodations or equipment needs necessary to complete the requirements for this course. Students must register documentation with the Office of Disability Services. Contact [DisabilityServices@messiah.edu](mailto:DisabilityServices@messiah.edu), (717) 796-5382.

## **Assistance (Library Liaison, Writing Center, Learning Center)**

Please contact me if you need any required assistance.