The University of Texas at Tyler
Department of Health & Kinesiology

Training Methods
Course Syllabus – Fall 2015

Course: KINE 5317-060
Class time: This class meets asynchronously on-line and is available on Blackboard

Instructor: Michael P. Wiggs, Ph.D.
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Office hours: Tuesdays 10:00am to 12:00pm; Wednesdays 11:00am to 12:00pm
If you are unable to meet during these times, please contact me by email to set up an
appointment to meet in person or through videoconference.
It is a requirement that each student visits with me in my office at least once during the
semester. This can be done during office hours or by appointment. If it is not feasible
(i.e., you are not local campus), please email me for other options.

COURSE DESCRIPTION:
This course provides the student with a comprehensive understanding for the application of exercise
physiology in sports and performance. Within the course structure, you as the student
will learn (a) basic
concepts of training theory, (b) physiological concepts involving the development of muscular strength,
muscular endurance, and power, (c) the concepts involving training nutrition and supplementation, (d)
concepts concerning environmental factors that affect performance, and (f) concepts of training of special
populations. This course will build on the concepts of exercise physiology and place those concepts in the
context of enhancing physiological performance.

COURSE PRE-REQUISITES:
There is no prerequisite for this course.
Successful completion of a course in Exercise Physiology is recommended because it will be assumed that
every student will have had anatomy and physiology.

COURSE OBJECTIVES:
The course has several general objectives, listed below. More specific
objectives are listed with each lesson of the course.

Upon successful completion of this course the student shall be able to:
1. Apply the current knowledge of physiological training, based on the published research, to the
   competent development and practice of physical education and sport performance programs.
2. Develop environments for sport and physical education that will maximize learning and performance.
3. Develop environments for sport and physical education that will maximize the health of, and protect, the
   student or athlete under your care.
4. Develop physiological training strategies to meet the needs of both a diverse population of students and
   a specific population of athletes.
5. Adjust your training strategies to incorporate factual information concerning physiological training.
Additionally, objectives of the Kinesiology Online Master’s Degree Program are that graduates will be able to:

1. critically read and discuss research relevant to kinesiology;
2. discuss in writing issues related to kinesiology, identifying, analyzing, and defending different viewpoints;
3. apply theoretical concepts from the kinesiology research literature to professional practice; and use computer technology to manage data, access information, and communicate effectively.

This course addresses these objectives through the following:

1. Study of basic facts, concepts, and theories of various training methods
2. Critically reading, presenting, and discussing research related to training methods
3. Discussing in writing questions and viewpoints related to training methods.
4. Using computer technology to manage data, accessing information related to training methods, and communicating effectively about training methods.

COURSE STRUCTURE:
You will find that this class is very similar to a traditional on-campus class in that it will consist of textbook readings, review of research literature, discussions, written assignments, and exams. In contrast to a traditional on-campus class, assignments in this course can be completed asynchronously. In other words, there will be no scheduled meeting times in this class. You may access course content and complete assignments at your convenience, though you still must meet assignment and testing deadlines.

If your ultimate interest is the application of training methods in athletics and physical education, one must first learn the basic concepts, and there are many. The content of this course is organized into five units, each made up of two to four lessons. In general, for each lesson there will be assigned text readings and presentation of content (related to the text readings) in the form of text and graphics on the Web. Think of the web pages (content) as specific points of interest much like presentation content given in the classroom setting. These content pages are intended to emphasize the concepts that I think are most important, organized in a sequence that facilitates learning. The textbook readings and the content pages may overlap, but there is also much information presented in the textbook that I do not present online, and vice versa. Therefore, it is important that you read and study the concepts presented both in the online content pages and in the textbook.

REQUIRED MATERIALS:


One of the important reasons this text was selected is because it is divided into sections that will nicely parallel the exercise physiology courses that are offered in the Online Master’s Degree Program in Kinesiology. Section 1 (i.e., Chapters 1 –13) in this book emphasizes theory and Sections 2 and 3 (Chapters 14 –25) emphasize application. Therefore, textbook readings for this course will focus on material in Chapters 14–25.

The textbook is available for purchase in either hard copy or e-book formats, as well as a rental option. You may purchase the textbook or other supplies by contacting the UT Tyler Bookstore at 903-566-7070 or online at http://uttyler.bncollege.com/.
In addition to the UT Tyler Bookstore, the text is also available from the publisher (http://www.mhhe.com) or other websites (e.g., chegg.com and amazon.com).

I have a single copy of this book in my office if you would like to ready/study with it during regular business hours. Please confirm via email if I will be in my office when you want to use the book.

Additionally, ancillary readings (review articles and research articles) will be listed in respective reading assignments throughout the course.
**Software:** Written assignments are accepted only as PDFs. You can create PDFs with MS Word or Apple Pages. I will not accept any other format. Check with the UT-Tyler Bookstore or your university bookstore for student discounts on MS Word. If you have a Mac, you can download pages for $20 from the App store on your Mac.

**TECHNICAL REQUIREMENTS:**
There are minimum technological requirements that must be met in order to complete this course. You can access these requirements via the link in the START HERE tab in Blackboard. If you have technical problems, please review the UT Tyler Technical Support page.

**GRADING/EVALUATION:**
There are 1,000 possible points in this course. Your final course grade will be based on the total number of points earned as follows:

- **A = 895 – 1,000**
- **B = 795 – 894**
- **C = 695 – 794**
- **D = 595 – 694**
- **F = < 595**

Students will be evaluated by completing the assignments, two exams, and participating in the discussion of each topic.

There will be no extra credit opportunities given in this class. Please do not ask for any. Points for assignments will be allocated as follows:

<table>
<thead>
<tr>
<th>ASSIGNMENT</th>
<th>POINTS</th>
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</thead>
<tbody>
<tr>
<td>Visiting Office Hours</td>
<td>50 pts</td>
</tr>
<tr>
<td>Unit Assignments/Discussions</td>
<td>500 pts</td>
</tr>
<tr>
<td>Mid-term Exam</td>
<td>150 pts</td>
</tr>
<tr>
<td>Critical Critique of a Manuscript</td>
<td>150 pts</td>
</tr>
<tr>
<td>Final Exam (comprehensive)</td>
<td>150 pts</td>
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**TOTAL** 1,000 pts

Deadlines for assignments and dates of the exams can be found in the Course Schedule and in the individual units.

**Exams:** There are two major exams this semester — the mid-term and the final. The exams will consist of material covered in the content areas, textbook readings, supplemental readings, research articles, and discussions. Questions on the exams may be objective (multiple-choice or true-false) and/or subjective (essay).

**Critical critique of a published manuscript:** An important skill in exercise physiology is to critically read published manuscripts and be able to determine if the data and conclusions drawn by the authors are appropriate. This includes using your background in exercise physiology to determine if the study was designed appropriately, the methods were the best available methods, the results were presented accurately and professionally, and if the conclusions reached by the authors are supported by their findings. Surprisingly, many manuscripts published in our field are severely lacking in at least one of these areas despite going through the review process. Therefore, one assignment in this class will be to play the role of journal article reviewer and critically assess each component of a published manuscript.

The critical review and critique of a published manuscript, which is due December 4th, should address a paper published on a topic pertinent to the subjects covered in the lecture sections of this course. Each student
should inform the instructor the paper and which relevant course topic of his/her report by at least October 12th, however students are encouraged to get the topics approved and start the evaluation of the paper before this time. Hint: When selecting a paper to review, my advice would be to look for papers published in lower impact journals (i.e., I would not select a paper published in Nature or Science). The review will follow the style of the American Physiological Society and a template will be provided on Blackboard.

Assignments:
Each Unit has several assignments. These assignments will be uploaded written assignments to Blackboard and some will be Blackboard Discussion Board posts. The details regarding completion and submission of these assignments will be given in each module. The deadlines for each assignment can be found in the Course Schedule.

Please read the formatting and submission guidelines carefully and complete your assignments accordingly. Assignments will be graded with rigor appropriate for graduate course work.

Presentation – The student will have the choice of presenting on one of two topics. The presentation should be given in “powerpoint” style presentation with at minimum voice over recordings. More detailed information will be given on blackboard about the presentation.

Discussion Board Activity:
Due to the online nature of the course, interaction with students and the instructor will occur through the Discussion Board. The Discussion Board will be used to allow you to demonstrate your comprehension of the course material and your ability to communicate that comprehension through writing. Throughout the semester, you will be required to respond to questions about the reading assignments, lectures, homework assignments, or current topics in training methods.

It is expected that you will read others’ posts and think critically and logically about the question before offering your insights or thoughts. Your posts and responses should have a logical flow, be free of grammatical and spelling errors, and should cite your sources properly where needed.

Finally, all posts and responses should further the discussion or add clarity to the discussion. Your posts should be made in a timely manner, so that others may respond and continue the discussion. Your responses will be graded on the basis of the quantity and quality of your participation.

When posting to the Discussion Board, please follow these additional guidelines:

- You are expected to complete the reading assignments prior to participation in discussions, unless the assignment states otherwise.
- Please do not repeat others’ posts or respond with one-phrase “I agree” or “thanks” posts on the Discussion Board. Since download speeds vary among students in the class, these types of messages can be time wasting and frustrating. Please use the e-mail feature in the Communications tab if you wish to convey these messages.
- Use the Module forums for discussion of questions or issues related to that Module. Use the General Questions forum for other questions related to the course (navigation, location of particular items, etc.) or other sports nutrition topics, in general.
- Students should post and respond to discussions in a respectful, professional manner. Please do not ridicule others on the Discussion Board. The instructor reserves the right to remove any posts that are offensive or that do not pertain to the subject being discussed. “Netiquette” is an emerging concept of social conventions for communicating on-line. Check out http://www.albion.com/netiquette or the do's and don'ts of on-line communication.
- Please type your comments directly into the discussion thread window. Do not attach your responses as documents. This makes following a discussion much more difficult. Please save the attachment option for truly lengthy items (as PDF only), reference material, or items (e.g., JPEG images) that cannot be pasted into the discussion post itself. Please only attach appropriate materials.
The instructor reserves the right to remove any posts that are offensive or that do not pertain to the subject being discussed.

**Policy regarding late submission of an assignment:** No assignments or discussion posts will be accepted past their deadlines. Since completion of some assignments in this course depends on the completion of previous assignments (e.g., discussion posts), it is imperative that you submit your assignments on time.

**Make-up work:** Make-up exams and assignments will be given only according to University policy. On rare occasions (and for a valid reason), make-up exams can be scheduled by pre-arrangement with the instructor before the date of the exam. If any exam is missed due to illness, injury, or family emergency, the instructor should be notified prior to or within 24 hours of the missed exam.

**Feedback on exams/assignments:** I will strive to give timely feedback on all assignments. You should expect feedback on discussion board posts within a couple of days and feedback on papers and exams within 1 week (I will notify you if I expect feedback to take a little longer for a particular assessment).

**Getting help:** If you find yourself struggling in the class (especially if you fail an exam), you should meet with me as soon as possible so that we can determine what steps you need to take to succeed in the class. I’m available during my office hours or by appointment. I also have an open door policy.

If you have trouble with writing assignments, please contact the Writing Center on campus at 903-565-5995. They have tutors and other resources available to assist you with your written assignments.

**TIME REQUIREMENTS:**
Successful on-line learning is highly student-initiated. Because of the format of the course, the student will be required to exercise initiative and diligence in completing the course. In general, you should expect to spend a similar amount of time completing the requirements of this online course as you would spend on the same course taught in the traditional classroom format. An advantage of the online format is that the lecture material is there for you to review whenever you want. In an online course, more time must be devoted to participation in discussions than is traditionally spent in classroom discussions. Time for completion of assignments, readings and other materials, reviewing for comprehension, and preparing for exams should be similar in this online course as in any other course. As a rough guide, you should plan to spend approximately 10–15 hours per week on this course. The actual amount of time required will, of course, vary from one person to another. It is absolutely essential that you not fall behind. Although this is an asynchronous course, this is not an individually paced course. Access to course materials, assigned discussions, assignments, exams, and the like will follow a schedule spread out over the semester (similar to a class in the traditional format). There will be set dates for exams and deadlines by which you must complete all unit assignments. You may access the Course Schedule for deadlines.

**MISSING TIME DURING THE COURSE:** Distance learning courses generally require more time than students typically experience in a traditional face-to-face lecture course. It is recognized that many of the students in this class have responsibilities outside of class that require time, as well. If you encounter any unforeseen circumstances (family emergency, jury duty, etc.) that greatly compromise your coursework, contact the instructor immediately. Alternatives for missed time may be arranged at the discretion of the instructor.

Note: Vacation time does not count as an excused “absence”. Please plan your vacations around assignment due dates or submit your assignments early.

**COURSE COMMUNICATION:**

**Announcements:** I will post Announcements frequently during the semester. You will be able to see these announcements on your course portal page. Please check these frequently so you do not miss any important information.

**E-mail communication/feedback from me to you:** Instructors are required to use your Patriots account e-mail address for e-mail correspondence. Therefore, any e-mail message originating from me will be sent to your Patriots account. However, if you send me e-mail from another personal account, I will reply back to that address. You may want to set up your personal e-mail account so that it pushes your Patriots account e-mail to your personal inbox. Due to teaching and research loads and the size of this class, it may take me 1 to 2 business days to respond to e-mail; however, I’ll make every effort to respond to e-mail on the same day.
E-mail communication from you to me. In all e-mail correspondence, please include the course name in the subject line (e.g., "KINE 5317 question" or "KINE 5317 assignment"). E-mails sent with "class question" (or similar) in the subject line will likely be sent back for clarification of which class you are in (I'm teaching many classes this semester and I have found it can be time consuming to try to find out which class you are in). In all e-mail correspondence, please use correct grammar and punctuation. Please sign your e-mail with your name at the end so I can easily identify you.

ACADEMIC DISHONESTY
At The University of Texas at Tyler students and faculty are responsible for maintaining an environment that encourages academic integrity. Students and faculty members are required to report an observed or suspected case of academic dishonesty immediately to the faculty member in charge of an examination, classroom or laboratory research project, or other academic exercise. Since the value of an academic degree depends on the absolute integrity of the work done by the student for the degree, it is imperative that students maintain a high standard of individual honor in scholastic work. Scholastic dishonesty includes but is not limited to cheating, plagiarism, and collusion:

"Cheating" includes:
1. Copying from the paper of another student, engaging in written, oral or any other means of communication with another student, or giving aid to or seeking aid from another student when not permitted by the instructor;
2. Using material during an examination or when completing an assignment that is not authorized by the person giving the examination or making the work assignment;
3. Taking or attempting to take an examination for another student, or allowing another student to take an examination for oneself;
4. Using, obtaining, or attempting to obtain by any means, the whole or any part of, an un-administered examination or work assignment.

"Collusion" includes the unauthorized collaboration with another person in preparing written work that a student offers for credit.

"Plagiarism" includes the unacknowledged incorporation of the work of another person in work that a student offers for credit.

If you have any questions regarding plagiarism, please consult Chapter 8 of the Student Affairs Manual of Policy and Procedures.

This class will be conducted in full compliance with the UT Tyler "no tolerance" policies concerning documented cases of plagiarism and/or academic dishonesty. Any plagiarized work submitted will result in a grade of zero for that assignment and further disciplinary action may be taken. Please make use of the UT Tyler Writing Center if you have concerns about plagiarism.

COPYRIGHT
All handouts used in this course, including those delivered via Blackboard, are copyrighted. The term "handouts" refers to all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, assignment sheets, recorded lectures, outlines, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.
UNIVERSITY POLICIES
(From the Handbook of Operating Procedures and the UT Tyler Website)

STUDENT RIGHTS AND RESPONSIBILITIES
To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link:
http://www2.uttyler.edu/wellness/rightsresponsibilities.php

GRADE REPLACEMENT/FORGIVENESS
Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at http://www.uttyler.edu/registrar. Each semester’s Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar. Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions that students need to be aware of. These include:
- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a “W” grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

STATE-MANDATED COURSE DROP POLICY
Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date). Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

DISABILITY SERVICES
In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, including non-visible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criteria apply to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079. You may also send an email to cstaples@uttyler.edu

STUDENT ABSENCE DUE TO RELIGIOUS OBSERVANCE
Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

STUDENTABSENCE FOR UNIVERSITY-SPONSORED EVENTS AND ACTIVITIES
If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.
SOCIAL SECURITY AND FERPA STATEMENT
It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

EMERGENCY EXITS AND EVACUATION
Everyone is required to exit the building when a fire alarm goes off. Follow your instructor’s directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.
TENTATIVE COURSE SCHEDULE
Fall 2015

* Details for all assignments are given in their respective modules. All assignments are due by 11:59 p.m. (Central Time) unless otherwise stated.

Introductory Unit: Orientation and Practice (Week 1)

Lesson 1 – Orientation and Practice
• Assignment 1 (5 points): Introduction posted in Discussion Board forum labeled “Introductions”. (Due Wednesday, August 26) and respond to the Introductions of two classmates with similar interests. (Due Friday, August 28)

Unit 1: Concepts of Training Theory (Weeks 2–3)

Lesson 1 – Defining Training and Conditioning (Week 2)
• Assignment 1 (10 points): Discussion on the definition of Training and Conditioning. (Due Tuesday, September 1)
• Assignment 2 (20 points): Discussion on Sport vs. Health Fitness training programs. (Due Friday, September 4)

Lesson 2 – Selye’s Theory of Stress (Week 3)
• Assignment 1 (10 points): Define Stress. (Due Tuesday, September 8)
• Assignment 2 (10 points): Revise definition and discussion on the general concept of Stress. (Due Thursday, September 10)
• Discussion Assignment (30 points): Physiological changes of Eustress and Overstress. (Due Friday, September 11)

Unit 2: Concepts of Muscular Training (Weeks 4-6)

Lesson 1 – Muscular Strength (Week 4)
• Assignment 1 (10 points): How do we define strength and power? (Due Tuesday, September 15)
• Assignment 2 (20 points): Discussion of both types of strength and power training programs. (Due Thursday, September 17)
• Assignment 3 (30 points): Design a personal weight-training program based on physiological adaptations. (Due Monday, September 21)

Lesson 2 – Muscular Power (Week 5)
• Assignment 1 (10 points): Discuss the relationship between strength and power. (Due Tuesday, September 22)
• Assignment 2 (20 points): Power task. (Due Friday, September 25)

Lesson 3 – Muscular Endurance (Week 6)
• Assignment 1 (20 points): Design an endurance-training program. (Due Thursday, October 1)
• Assignment 2 (10 points): Define local muscle endurance. (Due Friday, October 2)
• Discussion Assignment (30 points): How fiber type adaptations affect strength, power, and endurance. (Due Monday, October 5)

Midterm (Week 7)
• Midterm Exam (150 points): The midterm will be available Monday, October 6–Wednesday, October 8.

Critical critique of a manuscript
• Writing Assignment (10 points) – An approved copy of the manuscript you will be reviewing. Due Monday, October 12
Unit 3: Concepts of Training- Nutrition, Supplementation, and Ergogenic Aids –
(Weeks 8–9)

Lesson 1 – Caloric Concerns and Performance (Week 8)
- Assignment 1 (20 points): Energy balance. (Due Wed, October 14)
- Assignment 2 (20 points): Body composition. (Due Friday, October 16)

Lesson 2 – Supplements and Ergogenic Aids (Week 9)
- Presentation - Option 1 (25 points): 15-minute PowerPoint presentation on Supplements. (Due Friday, October 23) - *must complete one of two options; second option is due in November over the female athlete triad.
- Discussion Assignment (30 points): Supplementation. (Due Monday, October 26)

Unit 4: Environment, Physiology and Performance -
(Weeks 10–11)

Lesson 1 – Heat Stress and Performance (Week 10)
- Assignment 1 (20 points): Summer training schedule. (Due Thursday October 29)
- Assignment 2 (20 points): Hydration. (Due Friday, October 30)

Lesson 2–Altitude and Performance (Week 11)
- Assignment 1 (20 points): Altitude adaptation. (Due Friday, November 7 )
- Discussion Assignment (30 points): Altitude (Due Monday, November 9)

Unit 5: The Female Athlete Triad - (Weeks 12 –14)

Lesson 1 – The Female Athlete Triad (Week 12)
- Assignment 1 (10 points): Defining the female athlete triad. (Due Wednesday, November 11)
- Assignment 2 (20 points): Questionnaire. (Due Friday, November 13)

Lesson 2 – Anorexia Nervosa and Bulimia (Week 13)
- Assignment 1 (10 points): Defining and understanding anorexia/bulimia. (Due Wednesday, November 18)

Lesson 3 – Amenorrhea (Week 13)
- No assignments

Lesson 4 – Osteoporosis (Week 13)
- Presentation - Option 2 (25 points) - 15-minute PowerPoint presentation on Supplements over the female athlete triad – (Due Friday, November 20) – *note this is only due if you did not present on supplements.

Lesson 5 – The Team Approach (Week 14)
- Discussion Assignment (30 points): Female Athlete Triad. (Due Friday, December 4)

Critical critique of a manuscript
- Writing Assignment (140 points) – Final copy of manuscript review. (Due Friday December 4)

Final Exam: Comprehensive (Week 15)

• Final Exam (150 points): The Final Exam will be available Tuesday, December 9 thru Thursday December 11