Instructor: Dr. Tim Scheett  
Office: Silcox Rm 214  
Phone: (843) 953-6538 (office)  
Email: ScheettT@cofc.edu  
Office hours: Tuesdays 11:00 AM – 1:00 PM  
Wednesday 11:00 AM – 1:00 PM  
Thursdays 11:00 AM – 1:00 PM

If my door is open – KNOCK FIRST – we can talk when I am finished with what I am doing. If you would like to schedule a specific appointment time for any reason – please email me 3 specific days and times that you can meet. I will check my calendar and email you back within 12-24 hours with the day and time that will accommodate both our schedules.

Course meeting: Lecture: T & TH 3:05 – 4:20 PM  
Rooms S111 & J201 (Johnson Exercise Deck)

Prerequisite courses: PEHD 340/Lab or permission of the instructor

Course Description: This course is designed to apply theoretical knowledge in the areas of exercise science toward the development of an optimal resistance training and conditioning program. Emphasis will be placed on achieving peak athletic performance through a long term manipulation of the program design.

Course Texts:

Additional Helpful Resources:
- National Strength and Conditioning Association, [www.nsca-lift.org](http://www.nsca-lift.org)
- NSCA Certification Commission, [www.nsca-cc.org](http://www.nsca-cc.org)
**Student Learning Outcomes:**
Upon successful completion of the course, the student will be able to:

1. Apply scientific knowledge to train athletes and clients for the primary goals of improving athletic performance and fitness.
2. Learn how to conduct sport-specific testing sessions.
3. Learn how to demonstrate and teach proper exercise techniques.
4. Learn how to design and implement safe and effective strength training and conditioning and personal training programs.
5. Learn how to provide guidance regarding nutrition and performance-enhancing substances.
6. Apply exercise prescription principles for training variation, injury prevention, and reconditioning.

**Grade Distribution: 1,000 points total** - There will be multiple assignments with various deadlines throughout the semester. See below for a description of the assignments. Due dates will be determined during the first class meeting of the semester.

**Rules Assignment (25 points)** – Students will complete the rules assignment that is posted on OAKS. This assignment will provide all the information concerning guidelines for assignments and how the instructor requires students to submit materials as well as other class related items.

**Lab participation (175 points)** – Students will earn participation points by actively participating and demonstrating respective exercises for each lab as well as through participation in peer coaching. Peer coaching will consist of actively assisting classmates in correcting errors in technique. Students will also take turns leading an active dynamic warm-up in the beginning of each lab. Proper athletic clothing (shoes, shorts, shirt) is required to be worn for each lab session and points will be deducted for failure to dress accordingly. No excuses will be accepted for failure to dress appropriately. Students that have a physical impairment that precludes participation in an exercise will still be required to perform peer coaching for these exercises.

**Exams (300 points)** – Students will take two written exams. Students will be exempt from the final exam if they schedule and TAKE the National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialists (CSCS) certification exam PRIOR TO April 26, 2012. Refer to the NSCA Certification Commission website for paper and pencil exam locations. Computer exam testing is available in Columbia, SC, Georgetown, SC, Spartanburg, SC, Savannah, GA, and Charlotte, NC as well as in numerous other cities in other states. Consult the NSCA Certification Commission website for specific days and times as well as to register for the certification exam: [www.nsca-cc.org](http://www.nsca-cc.org)

**Facilitated Discussion (100 points)** – students will work with a partner and choose a current training method topic from a list provided by the instructor. Student facilitators will lead the class through a discussion of what the specific training method is, how and why it does or doesn’t work using evidence-based research that supports or refutes this type of training as being effective and appropriate. Students not facilitating the discussion will prepare and bring two typed questions to class on each topic that they prepared during their pre-class reading on the various topics. The style of questions should follow Bloom’s Taxonomy of higher ordered thinking and should focus on analysis, evaluation and synthesis of knowledge and cannot be simplistic rudimentary questions. Each student will submit their own questions in class on the day of each presentation. Questions will be evaluated for higher order of thinking and will count for 50% of the student’s overall grade for this assignment. Guidelines for the facilitated discussions will be discussed in class and posted on OAKS.
Oral Symposium Presentations (200 points) – Students will each work with a partner to prepare and present an oral symposium presentation from the topics listed below. No two symposiums will be on the same topic. The symposium should last a minimum of 45 min (this will be approximately 35-55 slides) followed by a 20 min question and answer period. The symposiums must be designed towards teaching a professional peer-group new information. The symposium presentations will include 1) a section outlining and discussing the physiological mechanisms; and 2) a section on the appropriate exercise training strategies including at least four samples of various programs or exercises designed to meet the goal of the topic. The presentation must include discussion concerning progression for the program or exercises included. PowerPoint file of presentation and PDF files of 3-4 key references must be submitted to the OAKS dropbox by the day of the symposium. 10 points will be deducted per day that the PowerPoint and PDF files are not submitted to the OAKS dropbox. Guidelines for the oral symposium presentations will be discussed in class and posted on OAKS.

Students will choose to complete 1 of the 2 following assignments. (The assignment students choose to complete should match their future career goals. Students seeking a career training athletes should choose the first assignment.)

Sport Analysis and Performance Training Assignment (200 points)
Students may choose to either work alone or with a partner for both aspects of the assignment. Sports chosen for this assignment must be approved by Dr. Scheett prior to starting.

Part 1: Students will be required to watch an entire high school, collegiate or professional sport competition of their choice to analyze the specific sport performance components of the sport (analyzing from memory is NOT allowed). Students will breakdown the sport based on the specific metabolic energy systems utilized (i.e. based on work:rest ratios) as well as the muscular (strength, power, speed, etc.) and cardiorespiratory physiological aspects required by the sport of their choice. Students will provide a written analysis reporting these values highlighting the physiological and metabolic aspects. In addition, the student should, if necessary, break the sport down by sub-areas (e.g. basketball: post players and guards; football: linemen and skill positions; baseball: pitchers and position players). Part 1 will be submitted to the dropbox by March 2nd. Specific details will be discussed in class and a grading rubric will be posted on OAKS.

Part 2: Students will make edits to the Sports Analysis assignment based on feedback and the grading rubric. Students will then complete the Performance Training portion of the assignment using an outline format to list the most appropriate assessment tests, resistance training and conditioning training goals and methods that should be used to train and develop the sport-specific metabolic and physiological aspects identified in the part 1 Sport Analysis. The Performance Training goals and methods must be broken down into appropriate training seasons (preseason, in-season, and off-season). These sections will be further subdivided into the following areas to match the stated goals (a) selection of appropriate performance tests, (b) selection of appropriate resistance training methods and (c) selection of appropriate conditioning training methods that could be used to train and develop the various sport-specific metabolic and physiological aspects identified in the part 1 Sport Analysis. This project will aid the student in developing a resource portfolio of training methods and assessment tests that they can refer to in the future if they enter the Sport Performance profession. Part 2 will be submitted to the dropbox by April 12th. Specific details will be discussed in class and a grading rubric will be posted on OAKS.

OR
Multi-media Myth vs. Fact (200 points)
Students may choose to either work alone or with a partner for all aspects of the assignment. Topics chosen for this assignment must be approved by Dr. Scheett prior to starting.

Students will write, edit, direct and produce four 4-5 minute long multi-media presentations using a combination of different media formats (e.g. audio, video, text, PowerPoint, etc.) that either support or bust an exercise training myth or gadget with one topic per video. All topics will be supported or busted by using peer-reviewed published research. Topics could include myths such as needing to lift heavy weight to build muscle mass, incline press targets clavicular pecs, needing to stretch before exercising, not training when sore, 2 min rest periods between all sets, super slow reps, fast reps, lifting heavy weight to increase caloric expenditure, children that lift weights will stunt their growth, women that lift weights will grow big/bulky muscles, resistance training can build long lean muscle, what is “toning” muscle, etc. Topics could include gadgets such as the Perfect Push-up device, Perfect Pull-up device, increased core and/or peripheral muscle activation with instability training, wrist-wraps increasing muscular strength, the Shake Weight, a variety of core machines, etc. The goal for the videos is to educate and provide accurate information that has peer-reviewed science to support the facts. All references must be fully cited and included at the end of each video. PDF files of all references must be submitted with electronic files of videos to be posted on OAKS. Two videos will be due March 2nd and the last two videos will be due April 12th. Guidelines for the multi-media presentation will be discussed in class and posted on OAKS.

All assignments require a reference section. All information must be from peer-reviewed professional journals. All references must be alphabetized by surname of first author and numbered. References are cited in the text by numbers [e.g., (4,9)]. All references listed must be cited in the assignment and referred to by number therein. Below are several examples of references:

**Journal Article**

**Book**

**Chapter in an edited book**

**Proceedings**

**Dissertation/Thesis**
No student will be allowed to use information gathered by another student for their own presentation (current or previous semester). Doing so will be deemed as a violation of the College of Charleston Honor Code.

Grade Scale:

Course letter grades will be determined on the basis of overall performance. Earned points will be divided by total points and the following percentages will be used to determine final grades:

- B+ 85 – 87
- C+ 75 – 77
- D+ 66 – 67
- A 90 – 100
- B 80 – 84
- C 70 – 74
- D 64 – 65
- A- 88 – 89
- B- 78 – 79
- C- 68 – 69
- D- 62 – 63
- F Below 62

Attendance:

While it is recognized that certain unforeseen events may prevent you from attending a certain class, due to the lecture and discussion nature of this class it is vital that you attend and participate. If you miss more than 25% of the class, you will be assigned a grade of WA. If extreme circumstances necessitate an absence, you will be held responsible for the class material covered during your absence. Excused absences will be considered for the following: serious illness, hospitalization, death of a family member or close friend, attendance at an event representing the College of Charleston. Appropriate documentation must be provided from the Undergraduate Dean's Office for an absence to be considered excused. If a student has more than four unexcused absences that student may be removed from the class roster. In addition, promptness is required as being tardy will count as an unexcused absence.

Class Participation: This class was specifically designed to provide you as many applied hands-on experiences as possible. Therefore, you are required to attend each application class (typically on Thursdays) while wearing appropriate clothing (i.e. exercise clothing with athletic shoes). Showing up for an application class without appropriate clothing will count the same as if you did not attend at all. See your instructor prior to the start of this course if you participate in an activity that may cause a problem with attendance (e.g. varsity sports) so proper arrangements can be made. If for personal or medical reasons several classes are missed, the instructor should be informed of the reason. Your full participation is expected and required (medical conditions will be accepted with proper notification).

Multi-media:

The use of any multi-media device during class is strictly prohibited!! It is recommended that you bring a stand alone calculator to regular class meetings as well as exams. If your cell phone rings you will be asked to leave class. If you have a dire family emergency where you are expecting a call during class – you will be expected to take the seat next to the door and quietly exit the class if your phone vibrates. The possession of any multi-media device during examination will automatically result in a zero for that exam.

Final grades will not be given out or posted at the end of the semester. You will have to wait until you can access your grades via Cougar Trail or when the University sends out the official grade records.

Honor System: Review the current Student Handbook: A Guide to Civil and Honorable Conduct, especially the section pertaining to the classroom code of conduct.
You are expected to do your own work in this course. **If you are caught cheating or plagiarizing another individual’s work you will be reported to the appropriate University office and you will receive an “F” for a grade in the course.** You need to do any and all writing on your own and in your own words. Simply re-arranging a paragraph or changing one or two words of another individual’s work is still considered plagiarism. **The 1, 2, or 10 points you cheat for are not worth risking your ENTIRE academic career. DO NOT put me in a situation where I have to act accordingly.**

**General Notes:**

- It is strongly recommended that you read “ahead” of the presentations in order to allow for a group discussion following the presentations. The pace of the lecture presentations is approximately 1 topic every week, however, some are quicker or longer than others. On a regular basis I will try to make you aware of where we are at in the course so that you can prepare accordingly. I **strongly recommend** that you read the text **BEFORE and again after the lectures on that material.**

- The large volume of material presented in this class will necessitate frequent and consistent study. What you do the first week is as important as what you do the last week. Don’t put off studying for quizzes and exams until the last minute. Quite simply – **20 min of studying EVERYDAY** will prepare you to do well on the quizzes and thus the subsequent exams will not be as difficult to prepare for. **Exams and quizzes will be demanding and difficult; you must be thoroughly familiar with the information to the point of being able to interpret and apply it.** This is an upper level class and I fully expect each of you to think about the basic information you already know, interpret it and apply it to various situations.

- If you miss a class when handouts are provided it is your responsibility to get a copy of the handouts from another student. You are also responsible for obtaining the missed notes from another student. **DO NOT COME TO THE PROFESSOR AND ASK FOR HANDOUTS AND/OR NOTES FOR THE LECTURE(S) YOU MISSED.**

- **If there is a student in this class who has a documented disability and has been approved to receive accommodations through SNAP Services, please feel free to come and discuss this with me during my office hours.**
  - Any student eligible for and needing academic adjustments or accommodations because of a disability is requested to speak with the professor in a timely manner so that your needs can be addressed.
  - The College will make reasonable accommodations for persons with documented disabilities. Students should apply for services at the Center for Disability Services located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations should notify their professors as quickly as possible.
  - This College abides by section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act that stipulates no student shall be denied access to an education “solely by reason of a handicap.” Disabilities covered by law include, but are not limited to, learning disabilities and hearing, sight or mobility impairments. If you have a documented disability that may have some impact on your work in this class and for which you may require accommodations, please see an administrator at the Center of Disability Services, (843) 953-1431 or me so that such accommodation may be arranged.
Tentative Schedule for class topics and assignments:

Week 1 (Jan 10 & 12)  Introduction, Pick Topics for Assignments
                      Dynamic Warm-up, Stretching, Body Weight Movements

Week 2 (Jan 17 & 19)  Technique for Lower Body Quadriceps Exercises
                      Facilitated Discussions

Week 3 (Jan 24 & 26)  Technique for Lower Body Glut/Ham Exercises
                      Facilitated Discussions

Week 4 (Jan 31 & Feb 2) Technique for Upper Body Extension Exercises (pushes)
                        Facilitated Discussions

Week 5 (Feb 7 & 9)    Technique for Upper Body Flexion Exercises (pulls)
                        SEACSM or Out of class RT Position Stand Assignment

Week 6 (Feb 14 & 16)  Technique for Olympic/Power lifts
                        Facilitated Discussions

Week 7 (Feb 21 & 23)  Technique for Olympic/Power lifts
                        Facilitated Discussions

Week 8 (Feb 28 & Mar 1) Technique for Olympic/Power lifts
                        Oral Symposiums

Exam 1 Due March 12

Week 9 (March 13 & 15) Technique for Agility and Quickness Exercises
                       Oral Symposiums

Week 10 (March 20 & 22) Technique for Plyometric Exercises
                        Oral Symposiums

Week 11 (March 27 & 29) Technique for Speed Development Exercises
                       Oral Symposiums

Week 12 (April 3 & 5)  Technique for Bands, Chains and Instability Devices
                        Oral Symposiums

Week 13 (April 10 & 12) Oral Symposiums
                       Oral Symposiums

Week 14 (April 17 & 19) Oral Symposiums
                       Oral Symposiums

Final Exam: Thursday, April 26th @ 4:00 pm
Assignment Topics:

Facilitated Discussions – choose 1 with a partner (2 topics will be covered per day)

1. Boot Camp and other group exercise classes
2. CrossFit
3. High Intensity Training (1 set to failure) vs. Multiple Set Training
4. Kettle Bells
5. Muscle Confusion
6. P90X
7. Ropes
8. Speed Reps vs. Super Slow Reps
9. TRX
10. Undulating Training or Non-linear Training vs. Linear Periodized Training

Oral Symposia – choose 1 with a partner

1. Development of Aerobic Conditioning (HIE-High Intensity Exercise, HIIT-High Intensity Interval Training, SIT-Sprint Interval Training and CET-Continuous Endurance Training)
2. Development of Agility and Balance
3. Development of Hypertrophy
4. Instability and Unstable Training
5. Overreaching and Overtraining Syndrome
6. Plyometric Training
7. Development of Muscular Power
8. Development of Speed and Quickness
9. Development of Muscular Strength

If there is a topic you would like to cover that is not on the list you may propose the topic to Dr. Scheett for approval.