College of Charleston
EXSC 438-01 CRN: 21748
Advanced Topics in Resistance Training and Conditioning
3 Credit Hours
Spring 2015 SYLLABUS

Instructor: John C Sieverdes, PhD
Office location: Silcox Physical Education Center, room 226
Office Hours: Monday 3-4:30, Tues 3-4:30, Thurs 11-12, or by appointment
Phone: 843-953-1039
E-mail: sieverdesjc@cofc.edu

Class Time & Place: T 1:40-2:55 pm; Silcox 215 or other location
R 1:40-2:55 pm; Silcox 206

Prerequisites: BIOL 201, 202; EXSC 340; May not be taken concurrently


Course Description:
A study of the fundamental concepts and application of human physiology and exercise physiology as they apply to programs of physical conditioning, training, and physical fitness. Theories, current research, and laboratory techniques for assessing human physiological responses to exercise, physical training, health-related physical fitness, and sport performance will be studied. This class is designed as a preparation for the National Strength and Conditioning Association’s Certified Personal Trainer (CPT) or Certified Strength and Conditioning Specialist (CSCS) exam.

Course Textbook
2. Other readings as posted on OAKS

Course Objectives:

- Develop an understanding of the key topics and current research in exercise physiology, biochemistry, anatomy, biomechanics, endocrinology, sport nutrition and sport psychology and implement applications for the design of safe and effective strength and conditioning programs.
- Display proficiency in testing and evaluation of the components of physical fitness, including the principles of test selection and administration as well as the scoring and interpretation of results.
• Exhibit knowledge of the techniques for warm-up, stretching (static, dynamic, PNF), and resistance training exercises.
• Display the ability to design strength training and conditioning programs for anaerobic exercise prescription, aerobic endurance exercise prescription, periodization, and rehabilitation.

Course Evaluation:

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1. **Exams (400 pts)**
   Two examinations (100 points each) will be given during the semester. Knowledge will be assessed using multiple choice, matching, fill in the blank and short answer questions taken from lectures, textbook materials and complimentary readings.

   Two practical examination (100 points) covering techniques learned in lab will be administered at the midpoint and end of the semester.

2. **Final Examination (100 pts)**
   The final exam will be cumulative with 50% from material after the second exam and 50% covering the topics from the first two exams.

3. **Quizzes and Assignments (100 pts)** Online for lecture, hardcopy for labs
   Quizzes and Assignments may be administered electronically online via OAKS or in class in hard copy format. These are intended to ensure that students have read/viewed the assignments and comprehend the content. Questions will cover lecture material, lab handouts, assigned reading and material presented by guest speakers. Once online quizzes are assigned, students will have a finite period of time to complete it. Once opened, quizzes will have time constraints. If a student exceeds the allotted time for the quiz, the quiz will NOT be graded. Online quizzes can be taken twice, but the first attempt must score a 60% or greater. After the close date of the quiz, students will be granted a viewing period in which they can review their attempt. If a student wishes to petition a question on a quiz, contact with the professor regarding the concern must be made within 72 hours of the close date of the quiz.

4. **Small Group Project Book Review (100 pts)**
   Students will be assigned to groups of four and asked to prepare a written book review (70%) and 15-minute presentation (30%) on the concepts from a predefined book list related to resistance training, conditioning, athletic performance, or weight loss. The assignment will include a PowerPoint multimedia visual presentation of some aspect of
their training topic and how it can be used in exercise or lifestyle prescription. All group project materials are due the first day of presentations, Tuesday April 7.

For assignments submitted electronically, assignments must be saved as a .doc or .docx or .pptx document and named as “AsgmtName._FirstName_LastName” and uploaded to the OAKS dropbox. For hard copy assignments, students should type and staple their work prior to submission. Failure to comply with these requests will result in a reduction of your assignment grade. The instructor will provide the submission deadline for each assignment.

**Evaluation Scale:**

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

**Class Policies**

**Exam policy**
You will be notified at least one week in advance if there is a change in an exam date. Exams must be taken on the day assigned unless arrangements are made prior to the test date. All make up exams must be made up within one week of the original exam date. It is the students’ responsibility to make the necessary arrangements. If a student is absent on the day of an exam, he/she will receive a zero if the professor is not notified before class time. In case of taking a make-up exam, the professor reserves the right to give you a different exam.

**Exceptional circumstances**
Documented illness, deaths in the immediate family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. Accommodations for these excused absences will be made and will do so in a way that does not penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness. The professor requires written documentation of such events and reserves the right to use his judgment on whether the absence is warranted.

**Quiz policy**
Students are expected to follow specific directions outlined for each quiz and to complete all quizzes by the provided due dates. There are no opportunities to make up a quiz! If a student experiences technical difficulties before or during an online quiz attempt, contact the professor ASAP. Email contact must be initiated BEFORE the quiz closes in order for the professor to take corrective actions (as long as the due date has not already passed).

**Attendance**
Attendance is critical. If a student is absent during an in-class assignment or quiz, a grade of zero (“0”) will be given with no make-up allowed. See me prior to the start of this course if you participate in an activity that may cause a problem with attendance. Refer to the current Student Handbook for information on student responsibility regarding absences. Excessive unexcused absences beyond 4 will result in a lowering
of a letter grade category and will continue to each additional absence (i.e. B+ to B at 5 absences if you started with a B+; B to B- at 6 absences). Two tardies later than 5 minutes after class starts will be counted as an absence unless arrangements with the professor has been made.

**Policy for Response to Questions**
While we strive to be as responsive as possible 24/7 to all student questions/issues, there may be a delay after regular business hours M-F and on weekends. Please ask any major questions related to assignments or exams during office hours, by e-mail or in-person **prior to 5:00 pm on the day before an assignment is due or an exam is to be administered.** We encourage you to engage in open class discussion and ask questions anytime.

**Electronic Device Policy**
All cell phones, pagers, tablets, etc. are to be turned to “SILENT”. No electronic notifications or communications are allowed unless special arrangements have been made ahead of time. Please keep your phone in your bag or pocket and not on the desk during the class session. Laptop computers and tablets may be used for note taking purposes, though not for wireless communication (i.e. instant messaging, social media or email unless it is part of the class activity). Anyone found to be using a mobile phone for voice, text, or email during class will be asked to leave and will be marked absent for that class and forfeit the class participation/quiz grade for that day.

Calculators: Cellphones, tablets, and notebooks are not allowed as calculators at any time. Bring a calculator to class everyday including exams.

Note: If we do use our phone for a class activity, I will announce it, but afterward you must return to the electronic device policy for the duration of the class.

**Provisions for Students with Special Needs**
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 after class or during my office hours during the first week of class: 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. **It is your responsibility to have your documentation to me 1 week prior to any test to allow proper time for preparation.**

The 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.

**College of Charleston’s Honor Code and Academic Integrity**
Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved. Incidents where the instructor determines the student’s actions are related more to a misunderstanding will handled
by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the X to be expunged. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration—working together without permission—is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others’ exams, fabricating data, looking up answers on material through internet searches when instructed not to, and giving unauthorized assistance to others. Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook.

Center for Student Learning
I encourage you to utilize the Center for Student Learning’s (CSL) academic support services for assistance in study strategies, speaking & writing skills, and course content. They offer tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at http://csl.cofc.edu or call (843)953-5635.

Copyright and Plagiarism
Please note that all materials used in this course are copyrighted. This includes, but is not limited to, handouts (i.e., PowerPoint presentations, syllabus, in-class materials, quizzes, exams, and other forms). Therefore, no student has the right to copy the handouts, unless permission is expressly granted by the Instructor. As commonly defined, plagiarism consists of passing off as one’s own the ideas, words, writings, of another person. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own even if you have the permission of that person. Or, to paraphrase, quoting one source is plagiarism, but quoting many legitimate sources is research. This includes copy and pasting from information cites such as Wikipedia and other sites.

College of Charleston Student Handbook
This is a guide to your responsibilities and rights as a student. If you are not familiar with this document, please take the time to review the information contained within the handbook. http://studentaffairs.cofc.edu/honor-system/studenthandbook/.

Changes to Syllabus
The schedule, policies, and procedures listed in this syllabus are subject to change, at the discretion of the Instructor(s). Updates will be provided to students.
# Class Outline

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<th>Week of...</th>
<th>Tuesday (215-Gym) LAB</th>
<th>Chap</th>
<th>Thursday (Room 206) Lecture</th>
<th>Chap</th>
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<tr>
<td>1/13</td>
<td>Syllabus &amp; Floor organization - Warm-Up and Stretching</td>
<td>13</td>
<td>Musc, Neuro, CV and Resp Systems</td>
<td>1</td>
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<tr>
<td>1/20</td>
<td>Dynamic Warm-Up and Stretching/ Foam rolling/pressure point therapy – soft tissue work</td>
<td>13</td>
<td>Musc, Neuro, CV and Resp Cont. &amp; Bioenergetics of Ex and Train</td>
<td>1 &amp; 2</td>
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<tr>
<td>1/27</td>
<td>Test Selection and Admin, Scoring and Interpret of Tests</td>
<td>11 &amp; 12</td>
<td>Bioenergetics Cont. &amp; Endocrine Response to RT</td>
<td>2 &amp; 3</td>
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<tr>
<td>2/3</td>
<td>Test Selection and Admin, Scoring and Interpret of Tests</td>
<td>11 &amp; 12</td>
<td>Endocrine Response Cont. &amp; Biomechanics of RT</td>
<td>3 &amp; 4</td>
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<tr>
<td>2/10</td>
<td>RT and Spotting Techniques</td>
<td>14</td>
<td>Exam 1 (1,2,3,4)</td>
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<tr>
<td>2/17</td>
<td>RT and Spotting Techniques (Power Techniques)</td>
<td>14</td>
<td>Adaptations to Anaerobic Training &amp; Age and Gender Differences RT</td>
<td>5 &amp; 7</td>
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<tr>
<td>2/24</td>
<td>Practical 1 (11,12,13,14, handouts)</td>
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<td>Periodization</td>
<td>19</td>
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<tr>
<td>3/3</td>
<td>BREAK</td>
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<td>SPRING</td>
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<tr>
<td>3/10</td>
<td>Rehabilitation and Reconditioning</td>
<td>20</td>
<td>Adv Resistance Training Program Design</td>
<td>15</td>
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<tr>
<td></td>
<td>Quiz 3 close 5&amp;7 11:59pm</td>
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<td>Maymester and Summer Registration starts</td>
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<tr>
<td>3/24</td>
<td>Advanced Conditioning field trip</td>
<td>14</td>
<td>Exam 2 (5,7,15,19)</td>
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<tr>
<td></td>
<td>Quiz 4 close 15&amp;19 11:59pm</td>
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<td>March 25th last day to drop with “W”</td>
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<tr>
<td>3/31</td>
<td>Speed, Agility and Quickness</td>
<td>17</td>
<td>Adaptations to Aerobic Endurance Training</td>
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<tr>
<td></td>
<td>Quiz 5 open 6,18 5am</td>
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<td>Quiz 5 open 6,18 5am</td>
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<tr>
<td>4/7</td>
<td>Student Presentations</td>
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<td>Aerobic Endurance Exercise Training</td>
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<tr>
<td>4/14</td>
<td>Student Presentations</td>
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<td>Nutritional Factors &amp; Review</td>
<td>9 &amp; 10</td>
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<td></td>
<td>Quiz 5 close 6,18 11:59pm</td>
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<td>4/21</td>
<td>Practical 2 (16,17,20)</td>
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<td>Review for Exam</td>
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<td>4/28</td>
<td>Reading Day – No Class/ optional makeup day</td>
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<td>4/30</td>
<td>Final Exam 12-3pm (6, 18, 9, 10)</td>
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