MUSCULO-SKELETAL FITNESS LECTURE
Exercise & Nutritional Sciences 401A
1 Unit
Fall 2012 Wednesday 6pm
West Commons

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ENS 317
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Office: 619-594-1922
Office Hours: Wednesday 1 pm
Course prerequisites
ENS 104,304,306,304L concurrent 401a

Course materials

Purpose of the course/course overview
The purpose of the ENS 401 A & B is to provide each student with advanced concepts, practical opportunities and the implementation of musculo-skeletal operations of the human body. The human body is a magnificent machine that can and should be challenged physically.
The will be a variety of topics presented in the lecture and lab that will enhance or develop cardio-respiratory endurance, strength, power, agility, explosive power and speed to name a few.

Learning goals and objectives

Learning Goal 1. Demonstrate core critical thinking skills and dispositions to ask and answer questions relevant to exercise and nutritional science.

   Objective 1.1: Critically evaluate published research in the discipline.
   Objective 1.3: Critically evaluate current trends and practices using disciplinary knowledge.
   Objective 1.5: Actively seek out discipline-based questions as opportunities to apply core thinking skills

Learning Goal 2. Demonstrate effective oral, written, and other interpersonal skills to help communicate knowledge and promote health and wellbeing in diverse communities.
Objective 2.1 Use effective technical writing skills to communicate information about exercise and nutritional sciences.

Objective 2.2: Use effective oral presentation skills to present skills to present information to peers and other professionals.

Objective 2.3: Use effective interpersonal skills as part of an ongoing and guided dialogue with individuals who may benefit from modifying their health behavior.

Learning Goal 7. Use the principles to evaluate a variety of measurement tools in exercise and nutritional science.

Objective 7.1: Explain the various kinds of validity evidence necessary to determine quality of the objective and subjective measures used in exercise and nutritional science.

Course learning objectives

1. The student will be able to discuss the basic adaptations of the neuromuscular system to training.

2. The student will be able describe the factors contributing to human strength and power.

3. The student will be able to recommend ways to minimize injury risk during resistive training.

4. The student will be able to discuss metabolic specificity of training.

5. The student will be able to discuss the variety of resistance training and body effects.

6. The student will be able to understand the topic of over training and detraining and how periodization programing can prevent that from occurring.

7. The student will be able to discuss selection and training tests.

8. The student will be able to discuss resistive training and responses to gender and age.

9. The student will be able to discuss exercise technique and general fundamentals.

10. The student will be able to discuss exercise order sequencing.

11. The student will be able to apply functional training to any program.
12. The student will be able to describe modalities for performance advancement.

Assessment and Grading

<table>
<thead>
<tr>
<th>Assignment 1</th>
<th>School Objective</th>
<th>Course Objective</th>
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<tbody>
<tr>
<td></td>
<td>1.1,1.3,2.2,7.1</td>
<td>1.2,3,6,7,10</td>
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<td>Assignment 2</td>
<td>2.1,2.2,2.3</td>
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<td>2.1,2.37.1</td>
<td>4.5,6,7,8,10</td>
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<td>Test</td>
<td>1.2,1.4.4.7.1</td>
<td>1.2,3,4,5,6,7,8,9,10</td>
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Course Assignments:

(1) One written exam 100 pts.

(2) Visit an exercise facility. Tell the facility you are doing a visitation for a class. 50 pts.

(3) Write a circuit training program to improve aerobic training capacity. 50 points

(4) Complete the term page. I will give you a group of terms that you can find in the reader or most strength/fitness sites/magazines. Find two pictures that show the activity and write a brief description for each term as to how you would explain to a student. 100 pts.

(5) Complete the assessment project on structural weakness. 60 pts.

(6) Attendance 60 pts.

Total Points 420 pts.

Classroom Behavior:

I believe in mutual respect in the classroom. I will allow you to test out of this course if you believe that your knowledge exceeds that of what is taught in class due to your great interest in musculo-skeletal fitness. Otherwise you are expected to attend class and avoid the distracting behaviors: arriving late for class, talking during lectures, reading newspapers, listening to i-pods, surfing the internet. You are required to turn off all cell phones before entering class. If it is an absolute necessity to talk a class or return a text you should leave the room, not return and loose your attendance points. Computers are...
allowed for taking notes only. If you decide to engage in any of these distracting behaviors, you will be asked to leave the class. If a student's distracting behaviors continues, you will be asked to withdraw from the class. For information on students expectations of conduct you may visit: http://www.sa.edu/srr/conduct1.html

Statement on Cheating and Plagiarism-Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit: such acts include assisting another student to do so. Typically, such acts in relation to examinations. However, it is the intent of this definition that the term 'cheating' not be limited to examinations situations only, but that it include any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means. Plagiarism is a specific form of cheating which consists of the misuse of the published and or unpublished work of others by misrepresenting the material (i.e., their intellectual property) so used as one's own work. Penalties for cheating and plagiarism range from a 0 or F on a particular assignment, through an F for the course, to expulsion from the University. For more information on the University’s policy regarding cheating and plagiarism, refer to Schedule of Courses (“legal Notices on Cheating and Plagiarism”) or the Universities Catalog (“policies and Regulations”).

Student with Disabilities-The University is committed to providing reasonable academic accommodations to students with disabilities. The Student Disability Service Office provides university academic support services and specialized assistance to students with disabilities. Individuals with physical, perceptual, or learning disabilities as addressed by the American with Disabilities Act should contact Student Disability Services office for information regarding accommodations at 619-594-6473 (http://www.sa.sdsu.edu/dss/dss_home.html. Moreover you should notify me so that reasonable efforts can be made to accommodate you.

Course Grading

Grades are assigned as a percentage of total class points.

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<thead>
<tr>
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<th>Percentage</th>
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<tr>
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Topics

Week 1 August 30th  
Introduction

Week 2 Sept. 6  
The past and the present  
Ed Franz

Week 3 Sept. 13  
The Impact body plan  
Todd Durkin  
Deceleration Training  
Parisis school

Week 4 Sept. 20th  
Functional Training  
Santana

Week 5 Sept. 27  
Balance/Stability Training  
David Weck

Week 6 Oct. 4th  
Speed/Agility Training

Week 7 Oct. 11th  
Plyometrics

Week 8 Oct. 18th  
Heavy Ropes  
Michael C  
Steve F  
Rached

Week 9 Oct. 25  
Yoga

Week 10 Oct. 31  
Kettlebell Training

Week 11 Nov. 1st  
Core Training

Week 12 Nov. 8th  
Stretching

Week 13 Nov 15th  
Medicine Ball Training  
Michael C

Week 14 Nov. 22nd  
Work on projects

Week 15 Nov. 29th  
Open topic

Week 16 Dec 6th  
Work on test 1
<table>
<thead>
<tr>
<th>Week</th>
<th>Activity</th>
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<tr>
<td>Oct. 5th</td>
<td>Functional Training</td>
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<tr>
<td>Oct. 12th</td>
<td>Musculo-skeletal Abnormalities</td>
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<tr>
<td>Oct. 19th</td>
<td>Strength and Conditioning with Ben Lablonk</td>
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<td>Oct. 26</td>
<td>Kettlebell Training Michael Castrogiovania</td>
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<td>Nov. 2nd</td>
<td>Yoga Rebecca Johnson</td>
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<td>Nov. 9th</td>
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<td>Core Training</td>
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<td>Nov. 30th</td>
<td>Abdomial Hollowing</td>
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<td>Dec. 7th</td>
<td>Heavy Stability Balls</td>
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