

Syllabus

KSS 4900 – Special Topic: Adaptations to Exercise

Spring 2018

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Office Hours: Mon-Thur, 10:00-11:00 or by appointment

Course Description:

This course is designed to discussion in depth the risk and benefits associated with acute and chronic exercise.

Objectives:

Describe the potential stresses and risks to the physiological systems of the human body during acute exercise.

Describe the likely stresses and risks to the physiological systems of the human body during chronic exercise training.

Describe the documented benefits to the physiological systems of the human body from acute exercise.

Describe the documented benefits to the physiological systems of the human body from chronic exercise training

Course Content and Schedule (tentative):

1. Influences
 1. Heredity
 2. Gender
 3. High versus Low Responders
2. Neuromuscular
 1. Motor units

2. Muscle fiber diameter
3. Muscle fiber type
3. Cardiovascular
 1. Heart
 2. Blood vessels
 3. Blood pressure
 4. Red blood cells
 5. Cholesterol
 6. Glucose
4. Metabolism
 1. Anaerobic metabolism
 2. Lactate threshold
 3. Oxygen consumption
 1. Mitochondria
 2. Enzymes
 3. Myoglobin
 4. Fat metabolism
 5. Carbohydrate metabolism
5. Cross-training

Text: No textbook. Electronic versions of course content will be provided through D2L.

Grading:

- A = 90-100% of total points,
- B = 80-89% of total points,
- C = 70-79% of total points,
- D = 60-69% of total points,
- F < 60% of total points

Evaluation:

Participation (10-15 points). Participation points will be awarded periodically based on participation in class discussion. Participation can include but is not limited to asking and

answering questions relevant to class topics. Reviewing assigned material prior to class will aid in earning participation points.

Paper (50 points)

Exams (50 points)

Course Policies:

- Desire 2 Learn is incorporated in this class in the following ways; access to reading assignments,, online assessments and assignments, grade book, announcements, etc. If you have any questions regarding the use of D2L, please contact the ITS Help Desk at 581-4357 or itshelp@eiu.edu
- **Academic integrity** - Unless stated otherwise, all exams, quizzes, and assignments should be completed independently and separately from any other individuals. Students are expected to maintain principles of academic integrity and conduct as defined in EIU's Code of Conduct (<http://www.eiu.edu/judicial/studentconductcode.php>). Violations will be reported to the Office of Student Standards.
- **Students with disabilities** - If you are a student with a documented disability in need of accommodations to fully participate in this class, please contact the Office of Student Disability Services (OSDS). All accommodations must be approved through OSDS. Please stop by Ninth Street Hall, Room 2006, or call 217-581-6583 to make an appointment.
- **The Student Success Center** - Students who are having difficulty achieving their academic goals are encouraged to contact the Student Success Center (www.eiu.edu/~success) for assistance with time management, test taking, note taking, avoiding procrastination, setting goals, and other skills to support academic achievement. The Student Success Center provides individualized consultations. To make an appointment, call 217-581-6696, or go to 9th Street Hall, Room 1302.