

Eastern Illinois University
Department of Kinesiology and Sports Studies

PED 4900 – Exercise in Extreme Conditions – 1 credit hour

Syllabus for Fall 2016

Instructor: Jake Emmett, Ph.D.

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Office Hours: M, W, F 10:00-11:00 and T, R 9:00-10:00, or by appointment

Course Description:

This course provides an overview of the acute and chronic adaptations of the human body during exercise under extreme conditions or circumstances.

Objectives:

1. Understand the additional stresses from environmental factors (heat, cold, hyperbaric, and hypobaric) which occur during exercise.
2. Understand the acute and chronic physiological changes which occur during exercise in extreme conditions
3. Understand the limitations of the human body to perform in extreme conditions and the health risk which may be involved.

Course Content:

1. Exercise in the Hot and Cold Environments
 1. Body Temperature Regulation
 2. Physiological Responses to Exercise in the Heat
 3. Health Risks During Exercise in the Heat
 4. Acclimation to Exercise in the Heat
 5. Exercise in the Cold
 6. Physiological Responses to Exercise in the Cold
 7. Health Risks During Exercise in the Cold
2. Exercise at Altitude
 1. Environmental Conditions at Altitude
 2. Physiological Responses to Acute Altitude Exposure
 3. Exercise and Sport Performance at Altitude
 4. Acclimation: Chronic Exposure to Altitude
 5. Altitude: Optimizing Training and Performance
 6. Health Risks of Acute Exposure to Altitude

Text: None. Supplemental reading material will be provided. Access to a current exercise physiology textbook is recommended.

Assignments:

- Quizzes (5 points each). Quizzes will be given in class (unannounced) and online through D2L. They cannot be made up without an official excuse.
- Assignments (5-10 points). Assignments will be given through D2L and will cover topics and material to be studied on your own in preparation for class discussion. Check D2L for due dates.
- Exams (2 exams, 50 points each). Exams will be given online and will be a random selection of short answer, multiple choice, matching, fill-in-the-blank, and true-false questions. Exams are open note, open book but they are time limited and you will not be able to skip questions. Therefore, the better you know the material before hand and the less time you will spend per question, the better you will do on the exam.

Grading

- A \leq 90% 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

Course Policies:

- **Academic integrity** - 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.