Fall Quarter, 2005
CORE 2428 - Role and Impact of Science-Tools for Today's Living CRN 4158
(How Today's Olympic Athletes Obtain the Cutting Edge)
Tues, Thurs 6-7:50PM Olin Hall 203
Instructors: Professor William Groves
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203 Olin Hall
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Course Description:
The objectives are to create an analytical student-thinker who has the requisite tools to judge both the scientific, moral, and political-emotional aspects of the Olympic movement in respect to athletic performance. For decades peak athletic performance has inspired individuals as well as governments to invest heavily into scientific research, in the pursuit for gold. For athletes this pursuit in most cases would yield vast economic rewards and for governments immediate political support and power. In modern day athletics performance enhancements are at an all time high. As regulating agencies such as USADA (United Stated Anti-Doping Agency) and WADA (World Anti-Doping Agency) tighten the restrictions on allowed substances, athletes are turning more to sophisticated ways to obtain gold. From designer steroids to non-steroidal anti-inflammatory agents, the question becomes can USADA and WADA keep up with the demand for Gold? Students will come away with a critical understanding of the usage and “abuses” of chemicals in modern athletics. They will walk away with the tools to evaluate the moral and ethical impacts of performance enhancers and their overall impact on society. In conjunction the students will become informed, analytical, publicly expressed citizens on the future of science on the Olympic Games.

Important University Dates
12 Sept  Fall Quarter Start/Late registration fee begins
16 Sept  Last day to register for credit
21 Oct  Last day for automatic W (6th Week)
18 Nov  Last day of classes
19 - 22 Nov  Final Examination Period

Important Class Dates
22 September 2005  -- Guest Speaker
06 October 2005  -- No Class due to Field Trip to OTC
13 October 2005  -- Guest Speaker
11 October 2005  -- (1) Class Talk 1
15 October 2005  -- Field Trip to OTC
20 October 2005  -- Project 1 due by 5PM by email
27 October 2005  -- (3) Class Talks 2
03 November 2005  -- (3) Class Talks 3
08 November 2005  -- (3) Class Talks 4
10 November 2005  -- Project 2 due 5PM by email
22 November 2005  -- Final Project due in Class

Course Dates and Topics
13 Sept 2005  -- Class Introduction/Bulding the perfect athlete.
15 Sept 2005  -- The Game is Mental.
20 Sept 2005  -- Metabolic Demands on Elite level athletes.
22 Sept 2005  -- Guest Speaker.
27 Sept 2005  -- The Real Olympics.
29 Sept 2005  -- The Real Olympics can't / Training High: The effects positive and negative.
04 Oct 2005  -- Building the right team to succeed (Team Ole G)
06 Oct 2005  -- Class Cancelled (field Trip)
13 Oct 2005  -- Guest Speaker.
15 Oct 2005  -- Field Trip
01 Nov 2005  -- What is meant by recovery?
15 Nov 2005  -- Supplements and do you really need them?
17 Nov 2005  -- The 2004 Olympics and Beyond: Doping concerns

Grading for Course
1. Attendance is mandatory. Your final grade will be evaluated based on attendance. If you can't make class please send an e-mail the day before - i.e. prepare. If you miss a class, you are responsible to get the assignment turned the following class period. Also, not all absences will be excused.

Breakdown of points:
1. Absence with valid excuse (Medical - personal or family member, Sports Events - DU policy): No Deduction
2. Absence with excuse (family member graduation, car trouble etc.): 1 point deduction/day
3. Absence without excuse: 2 pt deduction/day
2. Class participation is encouraged: Each group will give a 10 - 15 min oral presentation on one of the Class Talk dates give above. Topic should cover science and sport performance. I will give any group a topic if asked, otherwise the groups are expected to generate their own topic.
3. The class assignments are set up as project based activities and should reflect the collective knowledge of each member of the group. If a situation arises within a group please contact me asap so that an immediately solution is possible.
3. Final Examination: Will be comprehensive on 02 June 2005 in Olin Hall 203.
4. Field Trip to OTC -- Prepare to attend contact ahead of time other classes or employers. If there is a problem tell me ahead of time.
5. Remember the grades are weighted, if you do not understand what this is see me asap.
6. I will use Blackboard extensively i.e. posting lectures, attendance grades, etc. You should start seeing material on blackboard as soon as the end of
the first week of classes.

Projects 1, 2 and 3
Each group will be assigned a project on the first day of class. The project is of the following nature: You will be assigned a particular individual or team with specific goals and objective. It is the groups job to incorporate topics covered in class to construct and plan to help the individual or team achieve their goals. The overall project will be broken down into three parts all due at different times throughout the quarter. You will be given additional information about your individual/team weekly in class. Depending on the nature of the information it will be given to the entire group or just one person (I will explain this further in class). Furthermore, everyone in the group will be assigned a title, AT/SP Scientist, Coach, or Sports Pysc.

Grading Summary

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<td>Oral Presentation</td>
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