Health Education 220, Introduction to the Biological Aspects of Fitness to Health

3 credits, 16 weeks, 4 hours per week (3 hours lecture, 1 hours lab)

Official course description:
A biological analysis of the contributions of physical activity and exercise to fitness and long term health. Emphasis is on the introduction of training principles, health related components of physical fitness, exercise and physical activity guidelines, and the application of these concepts for determination of physical fitness, individual long term outcomes, and preventable disease.

Prerequisites and/or co-requisites: None

Instructor
Michael Scarlett
Office location: S213E
Phone number: (780) 791-4824
michael.scarlett@keyano.ca

Office Hours
Monday 13:00 -14:50
Thursday 09:00 -10:50
Friday 13:00 -14:50

Hours of Instruction

<table>
<thead>
<tr>
<th>Day</th>
<th>Location</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>Tuesday</td>
<td>SSWC 2323</td>
<td>09:00 – 10:50</td>
</tr>
<tr>
<td>Wednesday</td>
<td>SSWC 2323</td>
<td>13:00 – 13:50 Laboratory</td>
</tr>
<tr>
<td>Thursday</td>
<td>SSWC 2323</td>
<td>10:00 – 10:50</td>
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Required Resources

CSEP-PATH: Physical Activity Training for Health, Canadian Society for Exercise physiology.

Recommended Readings (supplied excerpts)


Course Outcomes

1. To distinguish between behaviours and activities associated with health and fitness as it applies to wellbeing, physical activity and exercise.
2. To match appropriate health and fitness goals to persons based on their unique profile and to explain the rationale behind the design of a lifestyle program tailored to their safety and needs.
3. To understand the essential behaviours and physiology of common preventable diseases, Why these diseases occur, How they affect the function of the body at rest and during exercise and Which special recommendations should be considered when they are present.
Evaluation

Lab and Case Studies:
Assignments 10% (10 x 1%)
Case Studies 10% (2 x 5%) (Last 2 weeks)
Absences -5%

Lecture:
Midterm Exam 1 20% (Sept 1st)
Midterm Exam 2 20% (Nov 5th)
Final Exam 40% (Exam week)

Total 100%

A grade of C- is required for progression or transfer.

Grading System

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Alpha Grade</th>
<th>4.0 Scale</th>
<th>Percent</th>
<th>Rubric for Letter Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>A+</td>
<td>4.0</td>
<td>&gt; 92.9</td>
<td>Work shows in-depth and critical analysis, well developed ideas, creativity, excellent</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>4.0</td>
<td>85 – 92.9</td>
<td>writing, clarity and proper format.</td>
</tr>
<tr>
<td></td>
<td>A-</td>
<td>3.7</td>
<td>80 – 84.9</td>
<td>Work is generally of high quality, well developed, well written, has clarity, and uses</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>proper format.</td>
</tr>
<tr>
<td>Good</td>
<td>B+</td>
<td>3.3</td>
<td>77 – 79.9</td>
<td>Work has some developed ideas but needs more attention to clarity, style and formatting.</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>3.0</td>
<td>74 – 76.9</td>
<td>Work is completed in a general way with minimal support, or is poorly written or did</td>
</tr>
<tr>
<td></td>
<td>B-</td>
<td>2.7</td>
<td>70 – 73.9</td>
<td>not use proper format.</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>C+</td>
<td>2.3</td>
<td>67 – 69.9</td>
<td>Work shows in-depth and critical analysis, well developed ideas, creativity, excellent</td>
</tr>
<tr>
<td>Progression</td>
<td>C</td>
<td>2.0</td>
<td>64 – 66.9</td>
<td>writing, clarity and proper format.</td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td>1.7</td>
<td>60 – 63.9</td>
<td>Work is generally of high quality, well developed, well written, has clarity, and uses</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>proper format.</td>
</tr>
<tr>
<td>Poor</td>
<td>D+</td>
<td>1.3</td>
<td>55 – 59.9</td>
<td>Work is completed in a general way with minimal support, or is poorly written or did</td>
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<tr>
<td>Minimum Pass</td>
<td>D</td>
<td>1.0</td>
<td>50 – 54.9</td>
<td>not use proper format.</td>
</tr>
<tr>
<td>Failure</td>
<td>F</td>
<td>0.0</td>
<td>&lt; 50</td>
<td>Responses fail to demonstrate appropriate understanding or are fundamentally incomplete.</td>
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Important Dates:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>September 8th, 2015</td>
<td>Last day to add for fall semester. Fees due</td>
</tr>
<tr>
<td>September 15th, 2015</td>
<td>Courses dropped by this date will be designated “W” and you will receive a</td>
</tr>
<tr>
<td>October 9th, 2015</td>
<td>full refund. <em>(a withdrawal “W” is not reflected in your GPA)</em></td>
</tr>
<tr>
<td>November 11th to 13th, 2015</td>
<td>College closed for Remembrance Day and Reading days</td>
</tr>
<tr>
<td>November 25th, 2015</td>
<td>Courses dropped by this date will be designated “W”</td>
</tr>
<tr>
<td>December 4th, 2015</td>
<td>Last day of Class</td>
</tr>
<tr>
<td>December 7th to 11th, 2015</td>
<td>Final Exams</td>
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## Proposed Schedule of Topics

<table>
<thead>
<tr>
<th>Week 01</th>
<th>No Class, No Lab</th>
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</table>
| Week 02 | - Health and Well-being  
- Physical Health (Definitions)  
- Physical Activity Demographics  
- Barriers to Exercise  
- Stages of Change |
| Week 03 | - Training Principles  
- Dose response – PA programming concepts |
| Week 04 | - Health Screening, Readiness to Participate  
- Client Profile  
- Health Screening Practice  
- Introduction to case studies |
| Week 05 | - Energy Systems: Cardiovascular  
- Function  
- Fitness  
- Guidelines  
**Midterm #1 Thursday October 1st** |
| Week 06 | - Cardiovascular programming and case studies  
- Flexibility and Musculoskeletal Health |
| Week 07 | - Muscular Strength and Endurance  
- Definitions  
- Guidelines  
- Programming and case studies |
| Week 08 | - Body Composition  
- Normative Measures  
- Individual Management |
| Week 09 | - Review week |
| Week 10 | - Obesity: Prevention and Risk  
- Science of Training Stress  
- Load and Tolerance  
- Maximum Adaptation  
- Sport performance and Athlete Case studies  
**Midterm #2 Thursday, November 5th** |
| Week 11 | - Metabolic Syndrome  
- Etiology  
- Guidelines  
- Case Studies  
- Preventable Diseases (Introduction) |
| Week 12 | - **Case Study 1#**  
- Preventable Diseases  
- Coronary and Vascular  
- Pulmonary |
Please Note:

Date and time allotted to each topic is subject to change. It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the Keyano College Credit Calendar.

Performance Requirements

Lab Policy

Attendance is taken at each lab period. It is MANDATORY that you attend every lab throughout the term. There will be 5% deduction from the final lab mark for every missed lab. Students are able to miss one lab with a written reason (i.e. death in the family, extreme sickness). Athletics is NOT a reason to miss labs.

Students should come dressed in gym strip to all designated lab activities and students are encouraged to actively participate in every lab session in learning the methods, performing techniques, answering questions directed by the lab instructor, discussing the procedures, working with peers and helping with cleaning the lab area after each lab.

Laboratory Safety

In the science laboratories, safety is important.

Students must complete the WHMIS for Students online training course on Moodle before entering the science laboratories.

Students must comply with the mandatory laboratory safety rules for this course as provided in the laboratory manual. Failure to do so will result in progressive discipline such as a verbal warning, refused entry into the laboratory, or suspension from the College.

Student Attendance

Class attendance is useful for two reasons. First, class attendance maximizes a student's learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and / or notes that may be due.

Academic Misconduct

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person's work as one's own
• The use of unauthorized aids in assignments or examinations (cheating)
• Collusion or the unauthorized collaboration with others in preparing work
• The deliberate misrepresentation of qualifications
• The willful distortion of results or data
• Substitution in an examination by another person
• Handing in the same unchanged work as submitted for another assignment
• Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Student Code of Conduct section of the Keyano College 2015-2016 credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Student Code of Conduct Policies.

Specialized Supports

Counselling and Disability Services
Counselling Services provides a wide range of specialized counselling services to prospective and registered students, including personal, career and academic counselling.

SKILL Centre
The SKILL Centre is a learning space in the Clearwater Campus at Keyano College where students can gather to share ideas, collaborate on projects and get new perspectives on learning from our tutorial staff.

The SKILL Centre, through a variety of delivery methods, provides assistance in skill development to Keyano students. Assistance is provided by instructors, staff and student tutors. Individuals wishing to improve their mathematics, writing, grammar, study, or other skills, can take advantage of this unique service.
Authorization
This course outline has been reviewed and approved by the Program Chair.

Michael, Scarlett, Instructor

-Louis Dingley, Chair, University Studies   Date Authorized

Guy Harmer, Dean, University Studies   Date Authorized

Vincella Thompson, Dean, School of Health, Wellness and Human Services   Date Authorized

Signed copies to be delivered to:
Instructor
Registrar’s Office