Exercise Physiology Program

HESC1511

Exercise Programs and Behaviour

Semester 2, 2015
Course Outline

CRICOS Provider Code 00098G
Please read this outline in conjunction with the following pages on the Medical Sciences website:

- Advice for Students
- Learning Resources

(or see “STUDENTS” tab at medicalsciences.med.unsw.edu.au)
Course Staff

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Lectures  Wednesday 12-1pm  
          Thursday 9-10am  
          Wallace Wurth LG03

Course Details

Credit Points: 6 UoC

Course Prerequisites / Assumed Knowledge
HESC1501 Introductory Exercise Science  
PSYC1001 Psychology 1A

Course Description
Exercise Programs and Behaviour (HESC1511) is a 1st year Health and Exercise Science course worth six Units of Credit (6 UOC). The course is required as part of study for the degree of Bachelor of Exercise Physiology. The course will build on the information you have gained in Introductory Exercise Science (HESC1501) and Psychology 1A (PSYC1001). Practical training in this course will encompass: fitness assessments, basic pre-screening and interview techniques, and exercise technique and prescription. Psychological aspects of exercise, in particular motivation, adherence and addiction, will also be addressed. These skills will be put into clinical practice with students developing and delivering a supervised exercise program for a healthy adult.

Aims of the Course

Building on basic skills learned in HESC1501, the aims of this course are to:

1. Expose students to the principles underlying motivational interviewing;
2. Develop an understanding of the principles of screening and safe exercise testing;
3. Develop an understanding of the principles of exercise programming;
4. Develop an understanding of the psychosocial factors contributing to exercise engagement and adherence
Student Learning Outcomes
HESC1511 will develop the following skills, qualities, understanding and attitudes that promote lifelong learning that students should acquire during their university experience.

On completion of this subject students should be able to:
1. Develop basic skills in motivational interviewing;
2. Apply basic fitness and health assessments and screening tools;
3. Design and implement an exercise program for a healthy adult;
4. Design and implement a group exercise session;

HESC1511 will develop the following graduate attributes. These include skills, qualities, understanding and attitudes that promote lifelong learning that students should acquire during their university experience.

Graduate Attributes
Students will develop their skills:
1. As collaborative team workers;
2. To be able to apply their knowledge and skills to problem solve;
3. To communicate effectively with patients, colleagues and other health professionals;
4. To display a respect for diversity and a high standard of ethical practice;

Rationale for the Inclusion of Content and Teaching Approach

How the course relates to the Exercise Physiology profession – This course provides students with the basic principles of exercise programming and an understanding of motivation and adherence. These principles underpin your professional requirements for programming physical activity for your clientele.

How the course relates to other courses in the Exercise Physiology program – The course builds on the information gained in Introductory Exercise Science (HESC1501) and Psychology (PSYC1001).

Teaching Strategies

Lectures – Lectures will provide you with the concepts and theory essential for understanding the principals underpinning programming exercise for apparently healthy individuals.

Laboratories – To assist in the development of practical skills and exercise technique practical classes will be held. These classes allow students to engage in a more interactive form of learning than is possible in the lectures. The skills you will learn in practical classes are relevant to your development as professional Exercise Physiologists.

Clinicals – Each student will spend a total of six hours over the semester developing their clinical skills and working towards their major assignment. Six hours (3 x 2 hour sessions) will be spent in the CSEP rooms for their 1) client initial assessment, 2) client training session 3) client post assessment. All 3 sessions are compulsory and are required to complete your assignment.

Tutorials - This format provides a more informal learning environment than a lecture. Small group sessions will be structured to encourage your participation in activities, develop confidence for working with your client, and discussions are designed to enhance your learning. Tutorial information will be uploaded into Moodle. Please come prepared for your tutorial.
Assessment

These tasks have been chosen as tools to enhance and guide your learning as well as a way of measuring performance, and are therefore a central teaching strategy in this course.

<table>
<thead>
<tr>
<th>Summary of Assessments</th>
<th>Weight</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Diet analysis</td>
<td>10%</td>
<td>Week 6 31st Aug</td>
</tr>
<tr>
<td>2: Exercise Programming Assignment</td>
<td>15%</td>
<td>Week 8 14th Sep</td>
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<tr>
<td>Part 1:</td>
<td></td>
<td></td>
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<tr>
<td>Part 2:</td>
<td>25%</td>
<td>Week 13 26th Oct</td>
</tr>
<tr>
<td>3: Group Exercise Assignment</td>
<td>10%</td>
<td>Week 12 19th Oct</td>
</tr>
<tr>
<td>5. Online Tasks</td>
<td>5%</td>
<td>Week 13 26th Oct</td>
</tr>
<tr>
<td>6. Final Exam</td>
<td>35%</td>
<td>Exam period</td>
</tr>
</tbody>
</table>

Assessment Task 1 – Dietary Analysis (10%)
Details:
1. Choose someone to be your client who is willing to undergo a diet analysis. This person can be a friend or family member. It does not have to be someone from the HESC1511 course.
2. Ask your client to record their diet over three days (two weekdays and one weekend day) and have them return this to you.
3. Use a nutritional analysis program (ideally FOODWORKS) to analyse the macronutrient and micronutrient content of the diet.
4. Write a thorough one - two page (maximum) double spaced recommendation for improving their diet.
5. In an appendix include 2-3 relevant Figures from the analysis.

Due Date: 9am Monday 31st August (Week 6) via Turn-It-In on Moodle

Assessment Task 2 – Exercise Programming Assignment (40%)
Part 1 (15%) Due Date: 9am Monday 14th September (Week 8) via Turn-It-In on Moodle

In preparation for your assignment, choose a partner from your clinical group. This person will be your client for this entire assignment. You will need to use your Clinical sessions to perform the screening, interview, training, fitness assessments and evaluation to gather the data for your written report.

In Part 1 of your written report you need to include:
1. Copy of client's completed
   i. ESSA Pre exercise screening questionnaire (Stage 1)
   ii. Pre-Screening questionnaire which you designed yourself
2. Summary of findings of your initial interview with your client
3. Your client's SMART short term goals (x3) and long term goal (x1)
4. Summary of results of the Objective fitness test (performed in Clinical 1)
5. Copy of COMPLETED training session you designed for your client to undertake in Clinical 2

Part 2 (25%) Due Date: 9am Monday 26th October (Week 13) via Turn-It-In on Moodle

Your final report is due at the beginning of week 13 and will include:
1. Title Page
2. *Screening Forms & Interview Summary
3. Summary of Needs Assessment & *Goals
4. *6 week Exercise Program (including 1 completed exercise session program card* from Clinical 2)
5. 1-2 page justification of exercise program including references/appropriate guidelines, and plan for progression
6. Full report of pre/post fitness measures (including anthropometry)
7. Client’s evaluation of exercise program (max 1 page)
8. Simulated report on client outcome/progress to GP/Other Health Professional
9. 1-2 page critical evaluation of your exercise program (what went well? What might you change for next time?)

*You would have originally submitted these segments in Part 1, you may alter your reports of these based on your assignment feedback when you submit them again in Part 2 if you desire.

Assessment Task 3 – Group Exercise for Populations (10%)
The purpose of this activity is to utilise the principles of exercise programming in a group setting.

1. Choose a population of interest to you that would likely undertake a group exercise session.
2. Design a 1hr exercise session specific for this group (including relevant components for your population eg. warm up, aerobic conditioning, resistance exercise, skills practice, flexibility and cool down).
3. Source a journal article relevant to exercise and your specific population and include it with your submission.
4. Include a 1-2pg (max) double spaced summary of the main findings and how this research is relevant to exercise programming for your chosen population. Include how this information could be relevant in a clinical setting (or a sporting setting).

Due Date: 9am Monday 19th October (Week 12) via Turn-It-In on Moodle

Assessment Task 4 – Online Tasks 5%
There will be 3 online assessments available throughout the course. Specifically, there is an interactive tutorial (2.5%) and 2 short quizzes (1.25% each). They will be available on Moodle from Week 6 and will close on Monday 9am Week 13. Please note grades will be based on performance in the task, not participation.

Complete by: 9am Monday 26th October (Week 12) within Moodle

Assessment Task 5 – Final Exam (Exam Period) 40%
The purpose of the final exam is to test your understanding of the concepts covered in the entire course. Material from lectures, tutorials, laboratories and readings may be assessed. The format will be multiple choice and short answer questions. The exam will be held during the end of session exam period.

Submission of Assessment Tasks
All written assessment tasks must be submitted online via Turn-it-in which can be found on the Moodle website (https://moodle.telt.unsw.edu.au). Penalties apply for late submissions.

Penalties for Late Submission of Work
Any extension must be applied for in advance of the due date.
In cases where an extension has not been granted, the following penalties will apply:
- For assignments submitted after the designated time on the due date, a penalty of 50% of the maximum marks available for that assignment will be incurred.
- Assignments received two (2) or more days after the due date will not be allocated a mark, however, these assignments must still be submitted to pass the unit.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture 1</th>
<th>Lecture 2</th>
<th>Laboratory (As Timetabled)</th>
<th>Clinical (As Timetabled)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3 Aug – 9 Aug</td>
<td>Objective Assessments NVD</td>
<td>Contraindications to Exercise / Conducting a Fitness Assessment NVD</td>
<td>2. Objective Assessments 1</td>
<td>Needs Assessment and Goal Setting NVD, AK, AS, BC</td>
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<tr>
<td>3</td>
<td>10 Aug-16 Aug</td>
<td>Nutrition JT</td>
<td>Nutrition JT</td>
<td>3. Objective Assessments 2</td>
<td>Performing a Diet Analysis NVD, AK, AS, BC</td>
</tr>
<tr>
<td>6</td>
<td>31 Aug-6 Sep</td>
<td>Resistance training 1 AK</td>
<td>Resistance training 2 AK</td>
<td>6. Resistance Training 1</td>
<td>Stream 2: CSEP Rooms</td>
</tr>
<tr>
<td>8</td>
<td>14 Sep-20 Sep</td>
<td>Cardiovascular/Aerobic Training 1 AK</td>
<td>Cardiovascular/Aerobic Training 2 AK</td>
<td>8. Core Training</td>
<td>Stream 2: CSEP Rooms</td>
</tr>
<tr>
<td>9</td>
<td>21 Sep-25 Sep</td>
<td>Cardiovascular/Aerobic Training 3 AK</td>
<td>Cardiovascular/Aerobic Training 4 AK</td>
<td>9. Aerobic Exercise Prescription and Monitoring</td>
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<tr>
<td>MSB</td>
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<td>Mid Semester Break 26th September to 5th October</td>
</tr>
<tr>
<td>10</td>
<td>6 Oct-11 Oct</td>
<td>Flexibility Training AK</td>
<td>Occupational Health and Safety issues TBA</td>
<td>No Lab this week</td>
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<tr>
<td>13</td>
<td>26 Oct-1 Nov</td>
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**Course Schedule (Semester 2, 2015)**

- **Diet Analysis (10%) Due 9am Monday 31st August via TurnItIn**
- **Exercise Programming Assignment Pt1 (15%) Due 9am Monday 14th Sep via TurnItIn**
- **Exercise Programming Assignment Pt2: (25%) Due 9am Monday 26th October via TurnItIn**

AK: Dr Andrew Keech (AEP)  
NVD: Nancy van Doorn (AEP)  
BP: Belinda Parmenter  
JT: Jeanette Thom (AEP)  
BC: Brianna Clifford (AEP)  
AS: Andrew Saliba (AEP)  
NB: Nick Burrows (AEP)  
JC: Jessica Chow  
MC: Muneeba Chaudry
Learning Resources

See also Learning Resources on the SoMS website.

Resources for Students / Recommended Text


Suggested References


Attendance Requirements

Attendance at all practical classes is compulsory, and must be recorded in the class roll on the day of the class. It is your responsibility to ensure that the demonstrator records your attendance and no discussions will be entered into after the completion of the class. Satisfactory completion of the work set for each class is essential. It should be noted that nonattendance for other than documented medical or other serious reasons, or unsatisfactory performance, may result in an additional practical assessment, exam or ineligibility to pass the course.

Behaviour in Practical Classes

The practical class is an opportunity for students to demonstrate graduate attribute C by behaving in an ethical, socially responsible and professional manner within the practical class.

- Punctual arrival is expected.
- Turn-off mobile phones before entering the class (mobile phones must not be used or answered during the class)
- Enclosed shoes are compulsory.

Students will be informed at the start of every practical of any potentially hazardous material or activities and control measures to minimise the risk. Students must follow all control measures outlined by the demonstrator. Students must wear all required personal protective equipment required in the practical and make sure the area and all equipment is left clean and functional. Those who do not adhere to these basic laboratory rules will be marked absent.