School of Human Movement and Exercise Science

2007 Unit Outline

Motor Skill Development

HMES 3345

Semester: 1

Campus: Crawley

Unit Coordinator: Melissa Licari

This outline is the currently available version for this unit. Detailed Information on unit content and assessment may undergo modification before the time of delivery of the unit. For the most up to date information students must consult material supplied to enrolled students by the unit co-ordinator.

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Introduction

Welcome to Motor Skill Development (310.345).

One of the main ideas behind this unit is that students are largely in control of what they study. The lecture material broadly covers motor skill development across the lifespan with considerable input from students as to the topic of the major assessment tasks. You will have the opportunity to spend a large portion of the unit researching motor skill development, acquisition or change across a variety of different age groups, from early childhood, middle childhood, adolescence, adulthood, right through to the elderly.

Broad learning outcomes

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Assessment Activity</th>
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<tbody>
<tr>
<td>Students will be able to recall and integrate key knowledge and concepts about:</td>
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<tr>
<td>- different theoretical frameworks that describe and explain motor development</td>
<td>Exam</td>
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<tr>
<td>- physical growth, maturation and aging</td>
<td>Exam</td>
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<tr>
<td>- the development of motor skills across the lifespan</td>
<td>Exam</td>
</tr>
<tr>
<td>- Constraints to motor development</td>
<td>Research Project</td>
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<tr>
<td>Students will acquire skills in:</td>
<td></td>
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<tr>
<td>- The observation and measurement of aspects of motor development</td>
<td>Lab Classes</td>
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<tr>
<td>- Researching and reporting on the motor development literature of a particular skill or topic using library and web based tools.</td>
<td>Research Project</td>
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<tr>
<td>- The design of movement programs to facilitate motor learning</td>
<td>Lab Classes</td>
</tr>
<tr>
<td>- Time-management and organisational skills through the completion of all assignments including the ability to liaise with and organise appropriate participants for testing.</td>
<td>Research Project</td>
</tr>
<tr>
<td>- Condensing relevant scientific information into key concepts and then re-assembling information into clear, jargon-free presentations.</td>
<td>All assessment</td>
</tr>
<tr>
<td>- The application of knowledge regarding oral communication to develop, present and appraise oral presentations.</td>
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Advisable prior study
HMES 2240 – Motor Learning and Control

Technical Requirements
None.
Home internet access will be an advantage but not essential

Software Requirements
Microsoft Office software

Contact details

<table>
<thead>
<tr>
<th>Name of Unit coordinator: Miss Melissa Licari (Room 1.40)</th>
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</thead>
<tbody>
<tr>
<td>e-mail: <a href="mailto:mlicari@cyllene.uwa.edu.au">mlicari@cyllene.uwa.edu.au</a></td>
</tr>
<tr>
<td>Phone: (08) 6488 7282</td>
</tr>
<tr>
<td>Fax: (08) 6488 1039</td>
</tr>
<tr>
<td>Consultation hours: By appointment</td>
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<td>Preferred time – Thursday 9am-10am</td>
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Unit structure summary

Lectures:
Tuesday 2pm-4pm in HMES-LR.

Lecture Topics
The topics presented below are intended as a guide only and are subject to change.

- History of motor development
- Prenatal development
- Early childhood development – reflexes
- Development of locomotion – crawling and walking
- Sensory-perceptual development
- Development of manipulative skills
- Development of ballistic skills
- Abnormal development
- Associated movements
- Skill change with aging

Practical and/or laboratory sessions:
One 2-hour fortnightly laboratory class. Classes run on Wednesdays from 10am-12pm and 12pm-2pm. Sessions will be held in the HMES Skill Acquisition Lab (across from undergraduate computing room).
References, resources and reading materials

Recommended text:


Additional/suggested/alternative text(s)


Journals

Child Development, 1993, 64.
The following journals are recommended as good sources for motor development research.

Child Development
Developmental Medicine and Child Neurology
Human Movement Science
Infant Behavior and Development
Paediatric Exercise Science
Quest
Research Quarterly for Exercise and Sport

Assessment Details

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight - %</th>
<th>Important dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature Review and Methodology for Research Project</td>
<td>25%</td>
<td>Due week 6</td>
</tr>
<tr>
<td>Poster Presentation</td>
<td>Poster Oral</td>
<td>20% 15%</td>
</tr>
<tr>
<td>Exam</td>
<td></td>
<td>40%</td>
</tr>
</tbody>
</table>

Details of Research Project

In this unit you will be required to perform a research project in an area of your choice related to motor skill acquisition and change. It is up to you which motor skill/s you would like to look at and also which age group. Some ideas for your project include:

- Skill learning in children
- Sport specific skill learning
- Skill development during strength training
• Skill development in populations with disorders and/or dysfunction
• Functional rehabilitation
• Skill degradation in the elderly

**Literature Review & Methodology** – Due week 6

Once you have decided on a topic of interest you will need to conduct a literature search and write a literature review highlighting what research has been performed in your area of interest. At the end of the literature review you will need to briefly discuss the aims of your research project and how it relates to research that has been done previously in the area.

You will then need to explain your study design in a methodology section. The methodology section should include information about your research participants and the design of your research project.

This assignment, including signed cover sheet, should be lodged in the HMES office by **Friday 5pm of Week 6**.

When you are happy with the design of your research project you can begin your study. It is up to you how you measure the change in performance. You might like to construct an observation checklist, utilise an observation checklist that already exists, or use a quantitative measure such as time, distance or total number.

**Poster Presentation** – Due week 11-13

Once your study is complete you will need to make a research poster. The poster should condense the major sections of your research project while conveying the major aspects of the research. The poster should include an introduction, method, results and discussion section. You should try to include pictures and graphs where relevant.

During the last 2-3 lectures each person will need to present their poster to the group, discussing what you did in your research project and what you found. Your presentation should be between 6-8 minutes, followed by a short period of questions.
Late submissions
Marks will be deducted for late submission according to the following formula; 10% of the maximum mark will be deducted for the first day with a further 5% deducted for each day thereafter up to a maximum of 10 working days. Submissions received after more than 10 working days will not be assessed and awarded no marks.

Extensions
The due dates for assessment tasks and associated late penalties will be strictly adhered to. Extensions will only be granted in exceptional circumstances and at all times will remain at the discretion of the unit coordinator. Written requests for extension must be submitted at least one-week prior to the due date.

Plagiarism
The University of Western Australia takes very seriously the matter of academic misconduct by students and has policies in place that define misconduct (including plagiarism) and the penalties that apply. The consequences for misconduct can be severe, including exclusion from the university.

All students are expected to make themselves aware of the definitions and policies relating to academic misconduct, found at the websites below, and with any additional requirements or stipulations that may be provided by individual unit co-ordinators.

http://www.secretariat.uwa.edu.au/__data/page/20839/StuMiscondInfo.rtf
http://www.teachingandlearning.uwa.edu.au/tl/academic_conduct

When you obtain authority to log in to the unit website, you will see an online module on academic conduct which you are strongly advised to complete in your own time.