# **BEHV 3015 MOTOR CONTROL AND SKILL ACQUISITION**

#### Credit Points 10

#### Legacy Code 400886

**Coordinator** Kylie Steel (https://directory.westernsydney.edu.au/ search/name/Kylie Steel/)

**Description** Motor Control and Skill Acquisition is an investigation of the physiological and psychological processes involved in both the control and the learning of movement. As such, it considers the control mechanisms which are innate to the learner, how these mechanisms change by virtue of both maturation and experience, and how the latter type of changes may be facilitated by manipulation of the learning environment.

School Health Sciences

Discipline Psychology

#### Student Contribution Band HECS Band 4 10cp

Check your HECS Band contribution amount via the Fees (https:// www.westernsydney.edu.au/currentstudents/current\_students/fees/) page.

Level Undergraduate Level 3 subject

Equivalent Subjects BEHV 2009 - Motor Control and Learning SPRT 3002 - Aquatic Sports

#### Restrictions

Students must be enrolled in 4656 Bachelor of Health Science, 4658 Bachelor of Health Science (Sport and Exercise Science), 4659 Bachelor of Health Science (PDHPE), 4742 Bachelor of Health Science (Health and Physical Education) Pathway to Teaching (Secondary), 4747 - Bachelor of Health Science (Health and Physical Education), 4791 Bachelor of Health and Physical Education (Pathway to Teaching Secondary), 4792 Bachelor of Health and Physical Education, 6000 Diploma in Health Science/Bachelor of Health Science (Health and Physical Education) or 6001 Diploma in Health Science/ Bachelor of Health Science (Health and Physical Education)

# Learning Outcomes

On successful completion of this subject, students should be able to:

- 1. Explain and apply the different levels of analysis from which movement control and learning is studied.
- 2. Describe the biomechanical factors and neurophysiological basis which contribute to control of movement and learning.
- 3. Describe and evaluate the behavioural changes which accompany learning.
- 4. Analyse how the cognitive processes influence learning.
- 5. Evaluate how age and other individual differences impact on movement behaviour
- Observe and apply classification taxonomies of the neuromuscular and psychological involvement in skills training and development of specific movement skills.
- 7. Critique experimental literature pertaining to Motor Learning and examine the applied principles which have been generated by this research.

8. Explain the reasoning for and perform discipline specific laboratory WH&S procedures and systems.

# **Subject Content**

- The field of Study and levels of analysis.
- The contribution of The Skeletal system to movement control.
- The contribution of The Muscular system to movement control.
- The proprioceptors and The spinal reflexes.
- The vestibular system, posture and balance.
- The Visual system and movement control.
- motor control functions of The brain.
- The closed-loop model.
- The open-loop model.
- The concept of motor learning and its measurement.
- The learning process.
- The principles of practice.
- feedback and motor learning.
- individual differences and motor behaviour.

- motor development.

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Туре	Length	Percent	Threshold	Individual/ Group Task
Applied Project	2500 words	40	Ν	Individual
Intra-session Exam	2 hours	30	Ν	Individual
Intra-session Exam	2 hours	30	Ν	Individual

Prescribed Texts

• Coker, C. A. (2022). Motor learning and control for practitioners. (5th ed) Routledge.

**Teaching Periods** 

# Autumn (2022)

### Campbelltown

### Day

**Subject Contact** Kylie Steel (https://directory.westernsydney.edu.au/ search/name/Kylie Steel/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=BEHV3015\_22-AUT\_CA\_D#subjects)

### Penrith (Kingswood)

### Day

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# Autumn (2023)

### Campbelltown

On-site

Subject Contact Kylie Steel (https://directory.westernsydney.edu.au/ search/name/Kylie Steel/) View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject\_code=BEHV3015\_23-AUT\_CA\_1#subjects)

### Penrith (Kingswood)

### **On-site**

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