

400-Level Module Options for 2024

- **All modules require Coordinator's approval – email the coordinator directly.**
- **2 modules are required for each 400 level (20 pt) paper.**

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SPEX 440 ADVANCED TOPICS IN PHYSICAL EDUCATION, ACTIVITY AND HEALTH (S1)	3
– Advanced Sport Coaching (Prof. Chris Button) chris.button@otago.ac.nz	3
– Gerontology (Dr Lara Vlietstra) lara.vlietstra@otago.ac.nz	3
– Exercise: its role in energy balance and substrate metabolism (A/Prof Nancy Rehrer) nancy.rehrer@otago.ac.nz	3
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SPEX 441 ADVANCED TOPICS IN PHYSICAL EDUCATION, ACTIVITY AND HEALTH (S2)	7
– The Psychology of Physical Activity Behaviour Change (A/Prof. Elaine Hargreaves) elaine.hargreaves@otago.ac.nz	7
– Sport Media and Communication Skills (Dr Sebastian Potgieter) sebastian.potgieter@otago.ac.nz	7

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SPEX 451 ADVANCED TOPICS IN EXERCISE AND SPORT SCIENCE (S2) 8

- Neuromechanics of Human Movement (A/Prof. Melanie Bussey)
melanie.bussey@otago.ac.nz 8
- The Psychology of Physical Activity Behaviour Change (A/Prof. Elaine Hargreaves)
elaine.hargreaves@otago.ac.nz 8
- Sport Media and Communication Skills (Dr Sebastian Potgieter)
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- Extreme Environments for Health and Performance (Prof. Jim Cotter)
jim.cotter@otago.ac.nz 9
- Quantitative Data Analysis (Dr Peter Lamb) peter.lamb@otago.ac.nz 10
- Advanced Physical Preparation for Sports Performance (Mark Drury)
mark.drury@otago.ac.nz - **FULL YEAR** 10pt course 10

SPEX 461 ADVANCED TOPICS IN SPORT MANAGEMENT & POLICY (S2) 10

- Sport Media and Communication Skills (Dr Sebastian Potgieter)
sebastian.potgieter@otago.ac.nz..... 10
- Critical Aspects of Sport Management (Prof. Sally Shaw) sally.shaw@otago.ac.nz 11
- Quantitative Data Analysis (Dr Peter Lamb) peter.lamb@otago.ac.nz 11
- Theorising Sport and Physical Culture (A/Prof. Mark Falcous)
mark.falcous@otago.ac.nz 11

Semester 1

SPEX 440 ADVANCED TOPICS IN PHYSICAL EDUCATION, ACTIVITY AND HEALTH (S1)

Module options

Advanced Sport Coaching (Prof. Chris Button) chris.button@otago.ac.nz

In this module students will consider how individual learners solve movement problems through practice to become skilled performers. Discover how sport coaches from around the world are applying an innovative pedagogy which treats the coach-learner dyad and learning process as nonlinear dynamical systems.

Pre-requisite knowledge: Ideally students will have previously taken SPEX202 Motor Behaviour (S1) or other prior educational or practical coaching experience may also be taken into account.

Offered in first half of semester 1

Gerontology (Dr Lara Vlietstra) lara.vlietstra@otago.ac.nz

Gerontology is the study of ageing processes and individuals across the life course. Why is this important? The globally ageing population has specific needs, from societal to medical requirements. In this module students will be provided with a holistic view of ageing with an emphasis on using physical activity as a strategy to age well. Topics that will be discussed will include principles of biology and physiology of ageing, musculoskeletal and cardiorespiratory assessments for older adults, positive ageing, mental wellbeing, social gerontology, quality of life in older adults, and pathophysiology of age-related diseases.

Pre-requisite knowledge: SPEX205 and/or SPEX310, or approval by module coordinator understanding that the student may be required to complete extra readings and/or lectures.

Offered in first half of semester 1

Exercise: its role in energy balance and substrate metabolism (A/Prof Nancy Rehrer) nancy.rehrer@otago.ac.nz

A critical evaluation of the role of exercise on energy and substrate utilisation and compensatory mechanisms, including varying paradigms drawing from historical and recent experimental evidence. The impact of energy balance and substrate availability on training adaptations will also be examined. Students will explore varying techniques to measure energy and substrate utilisation and gain practical insight.

Prerequisite knowledge: A basic understanding of exercise effects on metabolism acutely and chronically.

SPEX 450 **ADVANCED TOPICS IN EXERCISE AND SPORT SCIENCE (S1)**

Module Options

Applied Sport Psychology (Prof. Ken Hodge) ken.hodge@otago.ac.nz

This module will focus primarily upon the philosophy and practice of psychological interventions in sport and physical activity. The theoretical and research basis of sport psychology interventions will also be examined. In addition to examining sport psychology interventions, selected issues in applied sport psychology will also be discussed; these will include ethical considerations and qualifications/accreditation in sport psychology.

Pre-requisite knowledge: SPEX304 or equivalent upper level Sport Psychology paper, or approval by module coordinator understanding that the student may be required to complete extra readings and/or lectures.

Offered in second half of semester (weeks 8-13)

Advanced Sport Coaching (Prof. Chris Button) chris.button@otago.ac.nz

In this module students will consider how individual learners solve movement problems through practice to become skilled performers. Discover how sport coaches from around the world are applying an innovative pedagogy which treats the coach-learner dyad and learning process as nonlinear dynamical systems.

Prerequisite knowledge: Ideally students will have previously taken SPEX202 Motor Behaviour (S1) or other prior educational or practical coaching experience may also be taken into account.

Offered in first half of semester 1

Gerontology (Dr Lara Vlietstra) lara.vlietstra@otago.ac.nz

Gerontology is the study of ageing processes and individuals across the life course. Why is this important? The globally ageing population has specific needs, from societal to medical requirements. In this module students will be provided with a holistic view of ageing with an emphasis on using physical activity as a strategy to age well. Topics that will be discussed will include principles of biology and physiology of ageing, musculoskeletal and cardiorespiratory assessments for older adults, positive ageing, mental wellbeing, social gerontology, quality of life in older adults, and pathophysiology of age-related diseases.

Pre-requisite knowledge: SPEX205 and/or SPEX310, or approval by module coordinator understanding that the student may be required to complete extra readings and/or lectures.

Offered first half of semester 1

Advanced Physical Preparation for Sports Performance (Mark Drury)
mark.drury@otago.ac.nz - FULL YEAR 10pt course (SPEX451)

The course content will be delivered across an intensive four days, split into two days in semester one and two days in semester two, as well as a couple of 1 to 1 zoom connect-ups. Content will be a mix of lectures, discussion groups and practical sessions. You will be required to read and view key resources prior to the intensive course days to add to the depth of discussion. The content and assessments in this course are aligned with Sports and Exercise Science New Zealand (SESNZ) Level 2 Strength and Conditioning accreditation requirements. Following successful completion of this course you will be able to apply for the SESNZ accreditation.

Due to residential workshops throughout the year, anyone enrolling in this module as part of SPEX451 should be aware of this.

Prerequisite knowledge: Completion of SPEX305

<i>Teaching Block Semester 1:</i>
<ul style="list-style-type: none">• Saturday 6th April 2024• Sunday 7th April 2024
<i>Teaching Block Semester 2:</i>
<ul style="list-style-type: none">• Thursday 5th September 2024• Friday 6th September 2024

Exercise: its role in energy balance and substrate metabolism (A/Prof Nancy Rehrer)
nancy.rehrer@otago.ac.nz

A critical evaluation of the role of exercise on energy and substrate utilisation and compensatory mechanisms, including varying paradigms drawing from historical and recent experimental evidence. The impact of energy balance and substrate availability on training adaptations will also be examined. Students will explore varying techniques to measure energy and substrate utilisation and gain practical insight.

Prerequisite knowledge: A basic understanding of exercise effects on metabolism acutely and chronically.

Offered middle of semester 1

SPEX 460 ADVANCED SPORT DEVELOPMENT (S1)

Module Options

Applied Sport Psychology (Prof. Ken Hodge) ken.hodge@otago.ac.nz

This module will focus primarily upon the philosophy and practice of psychological interventions in sport and physical activity. The theoretical and research basis of sport psychology interventions will also be examined. In addition to examining sport psychology

interventions, selected issues in applied sport psychology will also be discussed; these will include ethical considerations and qualifications/accreditation in sport psychology.

Pre-requisite knowledge: SPEX304 or equivalent upper level Sport Psychology paper, or approval by module coordinator understanding that the student may be required to complete extra readings and/or lectures.

Offered in second half of Semester (weeks 8-13)

Globalisation and Sport Media (Prof. Steve Jackson) steve.jackson@otago.ac.nz

This module examines sport media in both the global and the local context. The focus will be on contemporary issues in sport as they relate to the media, politics and identity.

Advanced Sport Coaching (Prof. Chris Button) chris.button@otago.ac.nz

In this module students will consider how individual learners solve movement problems through practice to become skilled performers. Discover how sport coaches from around the world are applying an innovative pedagogy which treats the coach-learner dyad and learning process as nonlinear dynamical systems.

Prerequisite knowledge: Ideally students will have previously taken SPEX202 Motor Behaviour (S1) or other prior educational or practical coaching experience may also be taken into account.

Offered in first half of semester 1

The Politics of Sport Governance (A/Prof. Mike Sam) mike.sam@otago.ac.nz

An analysis of the dilemmas, paradoxes and reverse-effects of policies and programmes aimed at reforming sport. Examines the exercise of public authority around sport at international, national and local levels.

Semester 2

SPEX 441 ADVANCED TOPICS IN PHYSICAL EDUCATION, ACTIVITY AND HEALTH (S2)

Module Options

The Psychology of Physical Activity Behaviour Change (A/Prof. Elaine Hargreaves)
elaine.hargreaves@otago.ac.nz

Examines the theoretical underpinning and application of behaviour change techniques used in research interventions to motivate physical activity behaviour change. We will critique research methodologies and the process of translating theory into practice to examine the efficacy of these techniques. Students will emerge with an understanding of how to create effective interventions from both a research and physical activity promotion perspective.

Pre-requisite knowledge: SPEX 308 Psychology of Physical Activity or equivalent, or approval by module coordinator understanding that the student may be required to complete extra readings and/or lectures.

Offered in first half of semester 2

Sport Media and Communication Skills (Dr Sebastian Potgieter)
sebastian.potgieter@otago.ac.nz

This course aims to develop students' ability to communicate effectively through written word. It will provide students with the necessary tools to communicate their ideas in a clear, concise, and confident manner, ensuring they are able to convey their message through writing. Students will be instructed on a practical guide to craft different formats of written communication, which may include: writing reports and memorandums; crafting media releases and developing a journalistic style; effectively communicating technical information to non-technical audiences; crafting written communication which resonates with a specific target audience; recognizing the diversity of audiences and their respective needs; assisting in the development of students' own creative and unique writing style; tightening up writing skills and the ability to write in a short format; and advancing students' self-expression through writing. This paper is suitable for all students as effective communication ability is a vital component in any workplace environment. In particular, students keen on entering into leadership positions, public relations roles, or have an interest in freelance journalism are encouraged to attend the course.

Not suitable for students who have completed the Graduate Communication Skills during SPEX316.

Offered in the first half of Semester 2

Extreme Environments for Health and Performance (Prof. Jim Cotter)
jim.cotter@otago.ac.nz

Critique the opportunities and physiological bases by which environmental and exercise stressors (e.g., heat, hypoxia, vibration, pollution, gravity) acutely impair and chronically enhance (or impair) human health, performance and cross adaptation to other stressors. For example, how, why and to what extent is repeated heat exposure beneficial not only in adapting people to work or compete in hot or humid environments, but also before surgery (prehabilitation), recovery (rehabilitation), or as an adjunct to exercise for athletes or people with restricted access (e.g., peripheral arterial disease or spinal cord injury). Why is pollution problematic for exercise, and is adaptation possible? Etc. In this module, students will participate actively in weekly seminars and lab sessions and learn relevant techniques within each.

Pre-requisite knowledge: SPEX303 or equivalent upper-level Exercise Physiology paper, or approval by module coordinator understanding that the student may be required to complete extra readings and/or lectures.

Offered in the first three weeks of S2 and then the second half of S2. Ideally 8-10 or 11am Tuesdays.

Quantitative Data Analysis (Dr Pete Lamb) peter.lamb@otago.ac.nz

This module provides an introduction to statistical inference and hypothesis testing, broadly applied across the sub-disciplines of sport and exercise science. The open-source application, Jamovi, is used to work through practical examples demonstrating data exploration, visualisation and statistical analysis and interpretation.

Offered in the first half of Semester 2

SPEX 451 ADVANCED TOPICS IN EXERCISE AND SPORT SCIENCE (S2)

Module Options

Neuromechanics of Human Movement (A/Prof. Melanie Bussey)
melanie.bussey@otago.ac.nz

Neuromechanics is a sub-discipline of biomechanics and motor control. Specifically, we are interested in how the nervous and musculoskeletal systems work together to achieve a motor task. In this module we will learn the fundamental Neuromechanical concepts of healthy human movement and explore the relationships between altered control strategies and aberrant movement patterns associated with acute and chronic conditions.

The Psychology of Physical Activity Behaviour Change (A/Prof. Elaine Hargreaves)
elaine.hargreaves@otago.ac.nz

Examines the theoretical underpinning and application of behaviour change techniques used in research interventions to motivate physical activity behaviour change. We will critique research methodologies and the process of translating theory into practice to

examine the efficacy of these techniques. Students will emerge with an understanding of how to create effective interventions from both a research and physical activity promotion perspective.

Pre-requisite knowledge: SPEX 308 Psychology of Physical Activity or equivalent.

Offered in the first half of Semester 2

Sport Media and Communication Skills (Dr Sebastian Potgieter)

sebastian.potgieter@otago.ac.nz

This course aims to develop students' ability to communicate effectively through written word. It will provide students with the necessary tools to communicate their ideas in a clear, concise, and confident manner, ensuring they are able to convey their message through writing. Students will be instructed on a practical guide to craft different formats of written communication, which may include: writing reports and memorandums; crafting media releases and developing a journalistic style; effectively communicating technical information to non-technical audiences; crafting written communication which resonates with a specific target audience; recognizing the diversity of audiences and their respective needs; assisting in the development of students' own creative and unique writing style; tightening up writing skills and the ability to write in a short format; and advancing students' self-expression through writing. This paper is suitable for all students as effective communication ability is a vital component in any workplace environment. In particular, students keen on entering into leadership positions, public relations roles, or have an interest in freelance journalism are encouraged to attend the course.

(Not suitable for students who have completed the Graduate Communication Skills during SPEX316.)

Offered in first half of Semester

Extreme Environments for Health and Performance (Prof. Jim Cotter)

jim.cotter@otago.ac.nz

Critique the opportunities and physiological bases by which environmental and exercise stressors (e.g., heat, hypoxia, vibration, pollution, gravity) acutely impair and chronically enhance (or impair) human health, performance and cross adaptation to other stressors. For example, how, why and to what extent is repeated heat exposure beneficial not only in adapting people to work or compete in hot or humid environments, but also before surgery (prehabilitation), recovery (rehabilitation), or as an adjunct to exercise for athletes or people with restricted access (e.g., peripheral arterial disease or spinal cord injury). Why is pollution problematic for exercise, and is adaptation possible? Etc. In this module, students will participate actively in weekly seminars and lab sessions and learn relevant techniques within each.

Pre-requisite knowledge: SPEX303 or equivalent upper-level Exercise Physiology paper, or approval by module coordinator understanding that the student may be required to complete extra readings and/or lectures.

Offered in the first three weeks of S2 and then the second half of S2. Ideally 8-10 or 11am Tuesdays.

Quantitative Data Analysis (Dr Pete Lamb) peter.lamb@otago.ac.nz

This module provides an introduction to statistical inference and hypothesis testing, broadly applied across the sub-disciplines of sport and exercise science. The open-source application, Jamovi, is used to work through practical examples demonstrating data exploration, visualisation and statistical analysis and interpretation.

(Pre-requisite knowledge: Prerequisite is any University level statistics paper or coordinator approval.)

Offered in the first half of Semester 2

Advanced Physical Preparation for Sports Performance (Mark Drury)
mark.drury@otago.ac.nz - FULL YEAR 10pt course

The course content will be delivered across an intensive four days, split into two days in semester one and two days in semester two, as well as a couple of 1 to 1 zoom connect-ups. Content will be a mix of lectures, discussion groups and practical sessions. You will be required to read and view key resources prior to the intensive course days to add to the depth of discussion. The content and assessments in this course are aligned with Sports and Exercise Science New Zealand (SESNZ) Level 2 Strength and Conditioning accreditation requirements. Following successful completion of this course you will be able to apply for the SESNZ accreditation.

Due to residential workshops throughout the year, anyone enrolling in this module as part of SPEX451 should be aware of this.

(Prerequisite knowledge: Completion of SPEX305)

<i>Teaching Block Semester 1:</i>
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<i>Teaching Block Semester 2:</i>
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SPEX 461 **ADVANCED TOPICS IN SPORT MANAGEMENT & POLICY (S2)**

Module Options

Sport Media and Communication Skills (Dr Sebastian Potgieter)
sebastian.potgieter@otago.ac.nz

This course aims to develop students' ability to communicate effectively through written word. It will provide students with the necessary tools to communicate their ideas in a clear, concise, and confident manner, ensuring they are able to convey their message through

writing. Students will be instructed on a practical guide to craft different formats of written communication, which may include: writing reports and memorandums; crafting media releases and developing a journalistic style; effectively communicating technical information to non-technical audiences; crafting written communication which resonates with a specific target audience; recognizing the diversity of audiences and their respective needs; assisting in the development of students' own creative and unique writing style; tightening up writing skills and the ability to write in a short format; and advancing students' self-expression through writing. This paper is suitable for all students as effective communication ability is a vital component in any workplace environment. In particular, students keen on entering into leadership positions, public relations roles, or have an interest in freelance journalism are encouraged to attend the course.

(Not suitable for students who have completed the Graduate Communication Skills during SPEX316.)

Offered in the first half of semester 2

Critical Aspects of Sport Management (Prof. Sally Shaw) sally.shaw@otago.ac.nz

This advanced level module critiques the mainstream sport management approach of focusing on organisational gains at the expense of organisational members. Develops advanced, reflective thinking, examining and critiquing the position of the individual in organisations. Focuses on theories and research methods to offer alternative organisational practices.

No pre-requisites but SPEX 314 or equivalent highly recommended.

Offered for 6 weeks from 21st august, 2024 on a weekly basis. Day of the week TBC.

Quantitative Data Analysis (Dr Pete Lamb) peter.lamb@otago.ac.nz

This module provides an introduction to statistical inference and hypothesis testing, broadly applied across the sub-disciplines of sport and exercise science. The open-source application, Jamovi, is used to work through practical examples demonstrating data exploration, visualisation and statistical analysis and interpretation.

Offered in the first half of Semester 2

Theorising Sport and Physical Culture (A/Prof. Mark Falcous)
mark.falcous@otago.ac.nz

This module focusses upon understanding the relevance and usefulness of social theory as a means of explaining sport development and physical culture. The aim is to develop students' understanding of social and cultural theory but also to promote critical reflection upon the value of theory and the ways in which theory can be used to inform academic research within physical education and sport development.

