

SUBJECT OUTLINE



Subject Name:

Advanced Sports Injury Management

Subject Code:

MSTS323

SECTION 1 – GENERAL INFORMATION

Award/s:

Bachelor of Health Science (Myotherapy)

Total course credit points:

96

Level:

3rd Year

Duration:

1 Semester

Subject Coordinator: Brent Cunningham (Brisbane campus)

Subject is: Core

Subject Credit Points: 4

Student Workload:

No. timetabled hours per week: 6	No. personal study hours per week: 4	Total hours per week: 10
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Delivery Mode:

Face to face 2 x 3 hours practical

Full Time

Part Time

Pre-requisites: MSTS221, MSTE311

Co-requisites: Nil

SECTION 2 – ACADEMIC DETAILS

Subject Rationale

This subject will enable the student to assess the effects of complex sports related injuries and pathologies in the human body and to diagnose and treat a wide variety of athletes and recreational non-athletes effectively, including specific exercise prescription to prevent further injury and achieve effective rehabilitation.

Learning Outcomes

1. Critically evaluate and manage the rehabilitation phase for sports injuries.
2. Critically assess and describe the effect of a range of joint injuries on elite athletes.
3. Demonstrate critical thinking and judgement to determine the specific mechanism of injury and its effects on the athlete.
4. Compare and contrast aetiologies and the clinical presentation for a broad range of sports injuries.
5. Develop and adapt treatment plans for specific population groups, including female athletes, the elderly and recreational non-athletes, based on an understanding of their specific characteristics and needs.

Assessment Tasks

Type	Learning Outcomes Assessed	Session Content Delivered	Session Due	Weighting
Attendance (80% attendance is required)	N/A	1 - 26	1 - 26	Pass/Fail
Treatment Planning Assignment	1,5	1-10	13	40%

(2000 words)				
Final Practical Exam (30 mins)	1-2,4	1-24	26	30%
Final Written Exam (2 hours)	1-5	1-26	Final Exam Period	30%

Prescribed readings:

1. Brukner, P., & Khan, K. (Eds.). (2012). *Clinical sports medicine* (4th ed.). North Ryde, NSW: McGraw Hill. [eBook available]

Recommended readings:

1. Comerford, M., & Mottram, S. (2012). *Kinetic control*. Edinburgh, England: Churchill Livingstone Elsevier. [eBook available]
2. Kisner, C., & Colby, L. A. (2011). *Ther ex notes: clinical pocket guide*. Philadelphia, PA: F. A. Davis Company. [eBook available]
3. Magee, D. J., Zachewski, J. E., & Quillen, W. S. (Eds.). (2007). *Scientific foundations and principles of practice in musculoskeletal rehabilitation*. St. Louis, MO: Saunders Elsevier. [eBook available]

Subject Content	
Week	Practical
1.	Session 1 Overview of participation in sports in Australia and Internationally Principles of Injury Prevention
	Session 2 Recreational Non-Athletes <ul style="list-style-type: none"> • Athletes vs non-athletes • Recreational participation in sport: Recreational non-athletes • Specific needs and concerns of the “weekend warrior” Case studies and treatment planning
2.	Session 3 Sports, Fitness and Health in an Aging Population <ul style="list-style-type: none"> • Sports and the elderly: Health, wellbeing and quality of life • Acknowledgement of risk and safety considerations • Injury prevention, rehabilitation and adaptation with comorbidity • Osteoarthritis • Masters athletes Case studies and treatment planning
	Session 4 Sports, Fitness and Health with Osteoporosis <ul style="list-style-type: none"> • Safety considerations • Current evidence regarding weight training and other resistance exercise • Injury prevention, rehabilitation and adaptation with comorbidity Case studies and treatment planning
3.	Session 5

	<p>Sports, Fitness and Health with Cardiovascular and Metabolic Disease</p> <ul style="list-style-type: none"> • Safety considerations • Injury prevention, rehabilitation and adaptation with comorbidity • Health outcomes <p>Case studies and treatment planning</p>
	<p>Session 6</p> <p>Sports, Fitness and Health for People with a Disability</p> <ul style="list-style-type: none"> • Benefit vs risk of participation • Adaptation to enable participation for physical and intellectual disability • Injury prevention, rehabilitation and comorbidity • Elite athletes with a disability <p>Case studies and treatment planning</p>
4.	<p>Session 7</p> <p>Female Athletes</p> <ul style="list-style-type: none"> • Injuries common to female athletes • Special considerations • Focus on research regarding female athletes • Prevention specific to female athletes • Rehabilitation for female athletes <p>Case studies and treatment planning</p>
	<p>Session 8</p> <p>Special Female Populations</p> <ul style="list-style-type: none"> • Pregnancy • Post-partum • Young female athletes <p>Case studies and treatment planning</p>
5.	<p>Session 9</p> <p>Young People in Sport: Non-athletes</p> <ul style="list-style-type: none"> • Benefits • Considerations and adaptations • Prevention and rehabilitation • Resistance training <p>Case studies and treatment planning</p>
	<p>Session 10</p> <p>Young Athletes</p> <ul style="list-style-type: none"> • Considerations and adaptations • Injuries common to younger athletes • Prevention and rehabilitation <p>Case studies and treatment planning</p>
6.	<p>Session 11</p> <p>Field-side Treatment</p> <ul style="list-style-type: none"> • The field-side team • Field-side assessment • Fitness to play <p>Case studies</p>
	<p>Session 12</p>

	<p>Field Emergency Treatment</p> <ul style="list-style-type: none"> • Concussion rules • Bleeding • Taping, bracing and splinting • Other treatment <p>Case studies</p>
7.	<p>Session 13</p> <p>Review</p> <p>Doping in Sport</p> <ul style="list-style-type: none"> • Responsibilities of the therapist • Responsibilities of the athlete • Overview of WADA and ASADA • ASADA anti-doping training
	<p>Session 14</p> <p>Treatments used for musculoskeletal conditions in sports medicine</p> <ul style="list-style-type: none"> • Analgesics, NSAIDs, traumeel, corticosteroids • Prolotherapy, sclerosing therapy • antidepressants, local anaesthetic injections, • Blood and blood products, nitric oxide donor • Hot and cold therapies, electrotherapy, extracorporeal shock wave therapy • Manual therapies and dry needling • Surgery <p>Treatment planning in multidisciplinary care</p>
<p>NON-TEACHING WEEK (note that make-up classes may be scheduled in this week)</p> <p>Semester 1 - This aligns with the week after Easter so it may fall between weeks 6 to 8.</p> <p>Semester 2 - The break week falls between Weeks 7 and 8.</p>	
8.	<p>Session 15</p> <p>Sports Related Head and Neck Pain</p> <ul style="list-style-type: none"> • Acute wry neck • Cervical acceleration-deceleration injury • Head injury • Acute nerve root pain <p>Sports Related Thoracic and Chest Pain</p> <ul style="list-style-type: none"> • Costovertebral and costotransverse joint disorders • T4 syndrome • Sternoclavicular joint problems <p>Review of current evidence and case studies</p>
	<p>Session 16</p> <p>Sports Related Lower Back and Gluteal Pain</p> <ul style="list-style-type: none"> • Intervertebral disc injuries • Apophyseal joint injuries • Spinal canal stenosis and acute nerve compression • Spondylolisthesis and pars interarticularis stress fracture • Sacroiliac joint injury • Vertebral crush fracture • Hamstring origin tendinopathy and ischiogluteal bursitis • Proximal hamstring avulsion injuries

	Review of current evidence and case studies
9.	Session 17 Sports Related Hip Pain <ul style="list-style-type: none"> • Femoroacetabular impingement • Synovitis and labral tears • Chondropathy • Greater trochanteric pain syndrome • Gluteus medius pathology • Trochanteric bursitis Sports Related Anterior Thigh Pain <ul style="list-style-type: none"> • Quadriceps muscle contusion and strain • Myositis ossificans Review of current evidence and case studies
	Session 18 Sports Related Groin Pain <ul style="list-style-type: none"> • Adductor tendinopathy • Iliopsoas tendinopathy and bursitis • Abdominal wall pathologies • Pubic bone stress • Hip stress fractures Sports Related Posterior Thigh Pain <ul style="list-style-type: none"> • Hamstring muscle contusion and strains • Biceps femoris, semimembranosus and semitendinosus tendinopathies • Adductor magnus strain Review of current evidence and case studies
10.	Session 19 Sports Related Acute Knee Injuries <ul style="list-style-type: none"> • Meniscus tear • MCL, LCL, ACL and PCL sprains • Articular cartilage injury • Patellar dislocation Sports Related Knee Pain <ul style="list-style-type: none"> • Patellar and quadriceps tendinopathy • Fat pad impingement • Infrapatellar bursitis • Synovial plica • Baker's cyst • Iliotibial band friction syndrome • Pes anserinus tendinopathy and bursitis • Popliteus tendinopathy Review of current evidence and case studies
	Session 20 Sports Related Leg Pain <ul style="list-style-type: none"> • Tibial stress fractures • Muscle strains – fibularii, gastrocnemius, soleus Sports Related Achilles Tendon Pain and Acute Ankle Injuries <ul style="list-style-type: none"> • Achilles tendinopathy

	<ul style="list-style-type: none"> • Posterior impingement syndrome • Ligament sprains of the ankle • Fractures of the ankle • Osteochondral lesion of the talus <p>Review of current evidence and case studies</p>
11.	<p>Session 21</p> <p>Sports Related Ankle Pain</p> <ul style="list-style-type: none"> • Tibialis posterior, peroneal and flexor hallucis longus tendinopathies • Tarsal tunnel syndrome • Sinus tarsi syndrome • Anterolateral impingement <p>Sports Related Foot Pain</p> <ul style="list-style-type: none"> • Stress fractures of the region • MTP joint sprain • Sesamoid pathology <p>Review of current evidence and case studies</p>
	<p>Session 22</p> <p>Sports Related Shoulder Pain</p> <ul style="list-style-type: none"> • Strains and tendinopathies of the rotator cuff • AC joint sprains • Biceps tendinopathy • Clavicle fracture <p>Sports Related Shoulder Pain</p> <ul style="list-style-type: none"> • Glenohumeral dislocation and instability • Glenoid labral tears <p>Review of current evidence and case studies</p>
12.	<p>Session 23</p> <p>Sports Related Elbow and Arm Pain</p> <ul style="list-style-type: none"> • Extensor and flexor tendinopathy • Medial collateral ligament sprain • Triceps tendinopathy • TFCC tear • Carpal tunnel and tunnel of Guyon syndromes • Ligamentous sprains of the fingers <p>Sports Related Wrist and Hand Pain</p> <ul style="list-style-type: none"> • Distal radius, scaphoid, hamate and lunate fractures • Ligamentous sprains • Scaphoid impaction syndrome • De Quervain's tenosynovitis <p>Review of current evidence and case studies</p>
	<p>Session 24</p> <p>Sports Related Injuries of the Younger Athlete</p> <ul style="list-style-type: none"> • Perthes' disease • Osgood-Schlatter's lesion • Sinding-Larsen-Johansson lesion • Sever's lesion • Scheuermann's lesion

	<ul style="list-style-type: none"> • Other osteochondrosis and insertional conditions Review of current evidence and case studies
13.	Session 25 Treatment planning and case studies Mock exam
	Session 26 Final Practical Exam
14.	Study Week/Practical Exam Week 1. Note that make-up classes may be scheduled in this week.
15.	Study Week/Practical Exam Week 2. Note that make-up classes may be scheduled in this week.
16.	Final Exam Week 1 Please refer to the Exam Timetable for your campus for the exact time and day of the final exam.
17.	Final Exam Week 2 Please refer to the Exam Timetable for your campus for the exact time and day of the final exam.