

**FACULTY OF HEALTH - KINESIOLOGY AND HEALTH SCIENCE**  
**York University**  
**2018-2019**

**Course:** HH / KINE 3600 – Athletic Therapy II **Course Webpage:** Moodle

**Term:** Winter Term 2019

**Prerequisite / Co-requisite:** HH/AS/SC KINE 2490 Athletic Therapy I  
HH/AS/SC KINE 2031 Human Anatomy

**Course Instructor:**

Marnie McRoberts, BA, BAHSc, CAT(C), RKin  
Office: Stong College (by appointment)  
Email: through Moodle, or [mcroberts.yorku@gmail.com](mailto:mcroberts.yorku@gmail.com)  
Graders: TBA

**Time and Location:**

Lectures Section M – TR 1:00pm - 2:30pm VH 1152A

First IN-PERSON Class starting on January 3<sup>rd</sup>, 2019  
Final IN-PERSON Class on April 2<sup>nd</sup>, 2019

**EXPANDED COURSE DESCRIPTION:**

This course will expand on previous knowledge gained from Athletic Therapy I. It will provide students with an overview of various themed topics in Sports Medicine, which builds on the foundation for Athletic Therapy. In this course we will discuss an overview of the human factors involved in sports medicine drawing from the following areas: female athlete, male athlete, pediatric athlete, mature athlete, differently abled body athlete, travel, pharmacology, nutrition, performance enhancing agents, alternative therapies and psychology.

**Organization of the Course:**

The course involves formal lectures. The lectures may be supplemented by videos. The required readings are essential to the course. Interaction through Moodle is essential.

**Course Learning Objectives:**

**(1) Brief statement of the purpose:**

The purpose of this course is to assist students in the biophysical aspects of sports medicine.

**(2) Brief list of specific learning objectives of the course:**

The student will:

- be able to describe the factors related to specific groups who are participating in sport and physical activity

- understand recent research related to sports medicine and the human factors of sport and physical activity
- demonstrate the ability to apply theory in the context of class discussion

**University Undergraduate Degree Level Expectations (UUDLEs):**

- Demonstrate knowledge of the terminology and nomenclature in kinesiology and Health Science
- Describe the process of research that is used to develop knowledge in the field of Kinesiology and Health Science.
- Apply subject-based theories, concepts or principles to solve problems related to Athletic Therapy
- Use appropriate academic terminology and notation when preparing and presenting information
- Be aware of the limits in knowledge and methodologies when analyzing, evaluating, interpreting and disseminating information
- Be able to think independently, problem solve and set tasks

**COURSE TEXT / READINGS:**

**Required:** Anderson, M.K. (2017). *Foundations of Athletic Training*, (6<sup>th</sup> Ed). Phil., PA: Lippincott, Williams & Wilkins.  
**ISBN-13: 978-1-4963-3087-1**

Please note that additional readings may be assigned or recommended during the course. Refer to Moodle for additional content.

**COURSE TOPICS / READINGS:**

CLASS	DATE	TOPIC	RECOMMENDED READINGS	ASSIGNMENTS/ EXAMINATIONS DUE
1	January 3rd	<b><u>Course Introduction:</u></b> - Course requirements - Information on readings - Moodle information	None	
2	January 8th	<b><u>The Female Athlete – Differences &amp; Conditions:</u></b> - <b>Comparison between the sexes</b> Skeletal differences Body composition Physiological differences Training and performance - <b>Female injuries</b> Sports injuries	SEE MOODLE	
3	January 10 <sup>th</sup>			

		<p>Biomechanical predisposition Prevention strategies Disorders of the breast Bladder and urethra Other injuries</p> <p><b><u>The Female Athlete – Gynecological Conditions &amp; Irregularities:</u></b></p> <ul style="list-style-type: none"> <li>- Female reproductive system</li> <li>- Athletes &amp; menstruation</li> <li>- Gynecological irregularities</li> <li>- Hormonal imbalances</li> <li>- Female athlete triad</li> <li>- Eating disorders (male &amp; female)</li> </ul> <p><b><u>The Female Athlete – Through Pregnancy &amp; Menopause:</u></b></p> <ul style="list-style-type: none"> <li>- Use of oral contraceptives</li> <li>- Pregnancy and sport participation</li> <li>- Menopause</li> </ul>		
4	January 15 <sup>th</sup>	<p><b><u>The Male Athlete:</u></b></p> <ul style="list-style-type: none"> <li>- <b>Male injuries</b></li> <li>Sports injuries</li> <li>Male genitalia</li> <li>Testicular dysfunction &amp; sport</li> <li>Hernias (males and females)</li> <li>Cancers</li> </ul>	SEE MOODLE	
5	January 17 <sup>th</sup>	<p><b><u>The Paediatric Athlete – Sports Medicine:</u></b></p>	SEE MOODLE	
6	January 22 <sup>nd</sup>	<ul style="list-style-type: none"> <li>- Psychological issues</li> <li>- Sociological issues</li> <li>- Physical issues</li> </ul>		
7	January 24 <sup>th</sup>	<ul style="list-style-type: none"> <li>- Training young children – controversies</li> <li>- Risk factors</li> <li>- Levels of participation</li> <li>- Growth related differences</li> <li>- Equipment considerations</li> <li>- Growth anatomy</li> <li>- Epiphyseal injuries</li> </ul> <p><b><u>The Paediatric Athlete – Injuries:</u></b></p> <ul style="list-style-type: none"> <li>- Growth related problems</li> <li>- Cartilage / Growth plate</li> <li>- Injuries &amp; Conditions</li> </ul> <p><b><u>The Paediatric Athlete – Fractures:</u></b></p> <ul style="list-style-type: none"> <li>- Types of fractures in children</li> <li>- Epiphyseal and physes fractures</li> <li>- Spondylolysis / Spondylolisthesis</li> <li>- Salter-harris classification</li> </ul>		

		- Thermoregulation		
8	January 29 <sup>th</sup>	<u><b>Veteran &amp; Masters Athletes:</b></u> <ul style="list-style-type: none"> <li>- Aging &amp; the athlete</li> <li>- Physiological considerations</li> <li>- Orthopaedic considerations</li> <li>- Benefits of exercise</li> <li>- Risks of exercise</li> <li>- Typical age-related conditions</li> </ul>	No Textbook Readings  SEE MOODLE	<b>ONLINE QUIZ</b>
9	January 31 <sup>st</sup>	<u><b>Athletes with a Disability:</b></u> <ul style="list-style-type: none"> <li>- Disabilities &amp; sport</li> <li>- Classifications</li> <li>- Spinal cord injury &amp; related medical and orthopedic conditions</li> <li>- Autonomic dysreflexia</li> <li>- Bowel and bladder issues</li> <li>- Skin conditions</li> <li>- Medical considerations</li> <li>- Paralympics</li> <li>- Special Olympics</li> </ul>	No Textbook Readings  SEE MOODLE	
10	February 5 <sup>th</sup> <b>ONLINE CLASS</b>			
11	February 7 <sup>th</sup> <b>ONLINE CLASS</b>			
12	February 12 <sup>th</sup>			
13	February 14 <sup>th</sup>	<b>IN-CLASS MIDTERM EXAM</b>		
*** Reading Week February 16 <sup>th</sup> to 24 <sup>th</sup> ***				
14	February 26 <sup>th</sup> <b>ONLINE CLASS</b>	<u><b>Nutritional Aspects of Sports Medicine:</b></u> <ul style="list-style-type: none"> <li>- Basic components</li> <li>- Heat &amp; hydration</li> <li>- Exercise &amp; nutrition</li> <li>- Tissue healing</li> <li>- Deficiencies</li> <li>- Eating disorders (review)</li> </ul>	SEE MOODLE	
15	February 28 <sup>th</sup> <b>ONLINE CLASS</b>	<u><b>Ergogenic Aids &amp; Doping:</b></u> <ul style="list-style-type: none"> <li>- Anti-doping agencies</li> <li>- Ergogenic aids</li> <li>- Performance enhancing practices</li> <li>- WADA prohibited list</li> <li>- Process of drug testing</li> <li>- Ethics of drug testing</li> <li>- Ergolytic drugs</li> </ul>	SEE MOODLE	
16	March 5 <sup>th</sup>			
17	March 7 <sup>th</sup>	<u><b>Pharmacology:</b></u> <ul style="list-style-type: none"> <li>- Names of drugs</li> <li>- Drug interactions / reactions</li> <li>- Terminology &amp; definitions</li> <li>- Indications / contraindications</li> <li>- Pharmacology &amp; the athlete</li> </ul>	SEE MOODLE	

18	March 12 <sup>th</sup> ONLINE CLASS	Pharmacology Review Assignment work period		ONLINE QUIZ
19	March 14 <sup>th</sup> ONLINE CLASS	<b>Travelling with Teams:</b> - Packing equipment & supplies - Documentation - Insurance	SEE MOODLE	Assignment Due Thursday, March 14 <sup>th</sup>
20	March 19 <sup>th</sup>	- EAP's (emergency action plans) - Language issues - Local concerns (political, environmental, health) - Electricity issues - Physiology of travel		
21	March 21 <sup>st</sup>	<b>Alternate/Complementary Therapy:</b> - <b>Alternative medicine</b>	SEE MOODLE	
22	March 26 <sup>th</sup>	Homeopathy Acupuncture / acupressure Chiropractic Osteopathy Myofascial, ART therapies, muscle energy, counter strain, craniosacral therapy - <b>Massage</b> Physiological & psychological effects Principles of massage Massage techniques Pre and post event massage Contraindications - <b>Hydrotherapy</b> Aquatic therapy Equipment Indications / contraindications Principles Sport-specific hydrotherapy		
23	March 28 <sup>th</sup>	<b>Psychological Aspects of Sports Injuries:</b> - Psychological response to trauma - Psychological aspects of rehabilitation - The stress response - Cognitive appraisal of injury - Athlete – medical team interaction - Return to play process - Pre and post injury status - Visualizations	SEE MOODLE	

24	April 2 <sup>nd</sup>	Exam Review		
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**Evaluation:**

The final grade for the course will be based on the following items weighted as indicated:

**a) Tests:**

Moodle Online Quiz – Jan 29 <sup>th</sup> , 2019 (12am – 11:59pm)	5%
Moodle Online Quiz – Mar 12 <sup>th</sup> , 2019 (12 am – 11:59pm)	10%
Midterm Exam – Thursday February 14 <sup>th</sup> , 2019	30%
Final Exam – TBD (exam week)	35%

**b) Written Assignment**

Literature Review (6 pages double spaced – 12 point Arial font)	20%
<b>Due Date: Thursday March 14<sup>th</sup>, 2019 by 11:59pm</b>	

**Written Assignment:**

**WRITTEN ASSIGNMENT INFO**

**One review of literature (20%)**

A review of the current literature on a specific topic. **Topics will be available online through Moodle.** You will review the research that has been conducted on a specific topic using a minimum of **6 journal articles** (not from the course readings). You will report the current thinking of the topic statement with the use of the research articles. This will be a **6 page**, double spaced paper, which will be submitted through Moodle (AMA Format).

**General guidelines:**

- The literature review should include research from refereed/peer-reviewed journals within the fields of sports medicine, athletic therapy/training, physiotherapy, and any other approved allied field. The synopsis should consist of a review of the literature and should present the current thinking on specific topics.
- You should include: a cover page, the body of the paper, and a reference page
- Only Microsoft **Word documents** will be accepted for your submission.
- Please be sure to read and follow all guidelines completely since this makes it easier for us to provide you with feedback.

**Grading, Assignment Submission, Lateness Penalties:**

**Assignment Submission:** Proper academic performance depends on students doing their work not only well, but on time. Accordingly, assignments for this course must be received on the due date specified for the assignment. **The written assignment must be submitted electronically through Moodle.**

**Detailed instructions regarding content, referencing, and electronic submission are also available on Moodle. Do not hand the assignment in without reading these instructions. It is your responsibility to ask questions about the assignment in class if you are having trouble.**

**Lateness Penalty:** Assignments received later than the due date will be penalized 5% per day. **No exceptions to the lateness penalty will be entertained.**

**Missed Tests:** Students with a documented reason for missing a course test, such as illness or compassionate grounds which is confirmed by supporting documentation (e.g. physician's statement form available in the KINE undergraduate office) may request accommodation from the Course Instructor. **Students will be allowed to write a make-up test on the same day as their final exam** after their final exam. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

### **IMPORTANT COURSE INFORMATION FOR STUDENTS:**

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy webpage (see Reports, Initiatives, Documents) – [http://www.yorku.ca/secretariat/senate\\_cte\\_main\\_pages/ASCP.htm](http://www.yorku.ca/secretariat/senate_cte_main_pages/ASCP.htm)

- Senate Policy on Academic Honesty and the Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation

*January 2019  
Links updated January 2019*