FACULTY OF HEALTH SCHOOL OF KINESIOLOGY AND HEALTH SCIENCE

Course: HH / KINE 2495 3.00 M – Introduction to Sport Related Injuries

Course Webpage: eClass

Term: Winter Term 2024

Pre/Co-requisite: HH/KINE 2031 3.00 Human Anatomy

Course Credit Exclusion: HH/KINE 2490 3.00 & HH/KINE 3600 3.00

Course Instructor:

MS. MARNIE MCROBERTS CAT(C) RM 330A STONG COLLEGE EMAIL: MCROBERM@YORKU.CA

COURSE CONSULTATION HOURS (BY APPT ONLY)

Time and Location

Wednesday from 1:30pm - 4:30pm, DB 0016

Expanded Course Description

Provides students with a broad spectrum of knowledge relating to topics in sports medicine drawing from fields such as: anatomy, biomechanics, physiology, epidemiology, pathology and psychology. Discussions of sport injuries and conditions relating to injury prevention, evaluation and management helps students develop the foundational knowledge relating to the health care field.

Course Learning Goals and Student Learning Outcomes Goals of the Course:

- 1) Introduce students to the field of sports injuries and the potential impact on the human body.
- 2) Describe the biomechanical, environmental, physiological, psychological and general medical factors that can affect the human body while engaged in sport and physical activity.
- 3) Expose the student to the critical skill of reading empirical based literature.
- 4) Inspire students to consider a career in health care

Student Learning Outcomes:

By the end of this course, students will be able to:

- 1) Identify the most common sports injuries and their potential impact on the human body.
- 2) Explain the various factors that can affect the human body relating to sport and physical activity.

- 3) Analyze the literature on a given sport injury related topic and complete.
- 4) Distinguish between the various career paths available related to the health care field.

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

Required Course Text:

Please see our eClass page or the York University Bookstore webpage (https://bookstore.yorku.ca) for ordering e-books and for the information about free shipping of course books/kits to students with a Canadian address.

Prentice, W (2021). Principles of Athletic Training: A Guide to Evidence Based Clinical Practice.

McGraw-Hill College

ISBN-13: 978-1259824005 (16th edition - 2016) ISBN13: 9781260241051 (17th edition - 2021)

Note: This is the same course text as required in KINE 3575 - Athletic Injuries.

Suggested Timeline to Complete Topics and Readings:

Wednesday, Jan. 10th, 2024:

- 1. Introduction to the Sports Medicine Team (Athletic Therapy) Chapter 1 (16th/17th ed)
 - History
 - Sports Medicine Team
 - Role of AT
 - Professional Responsibilities
 - Organizations and Educational Routes

Wednesday, Jan. 17th, 2024:

- 2. Legal Concerns and Insurance Issues
- Chapter 3 (16th/17th ed)
- Legal Concerns for the Practitioner
- Confidentiality
- Standards of Practice / Regulation
- Insurance Considerations
- Third-Party Reimbursement
- 3. Injury Prevention

Chapter 1, 4,5 (16th/17th ed)

- Athletic Injury Epidemiology
- Pre-participation Examination
- Nutritional Considerations
- Conditioning Principles in Injury Prevention

Wednesday, Jan. 24th, 2024:

Quiz #1 – via eClass (in-person or on own) (Topics 1 – 3)

- 4. Pain: Introduction to the physiological and psychological aspects of pain
 - Physiology of Pain
 - Psychology of Pain Pg. 278-282, 298-99, 350, 409(16th ed)

Pg. 284-288 (17th ed)

Wednesday, Jan. 31st, 2024:

- 5. Biomechanics and Pathology of Sports Injury Chapter 9,10 (16th/17th ed)
 - Mechanics of Injury
 - Traumatic and Overuse Injuries
 - Types of Tissue Injury (bone, muscle, nerve, etc.)
 - Tissue Response to Injury

Wednesday, Feb. 7th & Wednesday, Feb. 14th 2024:

- 6. Conditions in Specific Populations
- Chapter 29 (16th/17th ed)

- Young Athlete
- Female Athlete
- Male Athlete
- Mature Athlete
- Para Athlete

Wednesday, Feb. 28th, 2024:

Midterm Exam - IN-PERSON (Topics 1 - 6)

7. Environmental Considerations

Chapter 6 (16th/17th ed)

- Hyperthermia
- Hypothermia

- Air Pollution and Lightening Safety
- Altitude
- Circadian Dysrhythmia (Jet Lag)

Wednesday, Mar. 6th, 2024:

8. Drugs and Sport

Chapter 17 (16th/17th ed)

- Pharmacokinetics
- Types of Therapeutic Drugs
- Substance Abuse Among Athletes
- Drug Testing in Athletes

Wednesday, Mar. 13th, 2024:

Quiz #2 – via eClass (in-person or on own) (Topics 1 – 8, but mainly 7&8)

9. General Medical Conditions and the Athlete

Chapter 29 (16th/17th ed)

- Cardiovascular Sudden Death, Anemia
- Respiratory Conditions- Asthma, Infections, etc.
- Diabetic Athlete
- Seizure Disorders

Wednesday, Mar. 20th, 2024:

Literature Review Assignment Due

General Medical Conditions and the Athlete

Chapter 29 (16th/17th ed)

- Cardiovascular Sudden Death, Anemia
- Respiratory Conditions- Asthma, Infections, etc.
- Diabetic Athlete
- Seizure Disorders

Wednesday, Mar. 27th, 2024:

10. Infectious Diseases and Skin Conditions

Chapter 14, 28 (16th/17th ed)

- Skin infections (Bacterial, Viral, Fungal)
- Infectious Diseases

Wednesday, Apr. 3rd, 2024:

Participation Assignment Due

11. Psychosocial Aspects of Sport Injury

Chapter 11 (16th/17th ed)

- Predictors of Injury
- Response to Injury
- Factors in the Rehabilitation Process

Wednesday, Apr. TBD

Final Exam – IN-PERSON on TBD (April Exam Period) (Topics 7 – 11)

Course Evaluation:

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

a) Tests:

Quiz #1 – Jan. 24th, 2024	10%
Midterm Exam – Feb. 28 th , 2024	25%
Quiz #2 – Mar. 13th, 2024	10%
Final Exam (non-cumulative) – TBD Apr, 2024	25%

b) Literature Review Assignment

25%

Students will write a 3-page (single spaced) literature review on a specific topic using current literature. You will review the research that has been conducted on a specific topic using a minimum of 6 peer reviewed journal articles and report on the current thinking of the topic.

All papers are to be submitted online through eClass by: **Wednesday**, **Mar. 20**th by 11:59pm.

c) Participation: Wednesday, Apr. 3rd, 2024 by 11:59pm 5%

Students can earn up to 5% through the activities listed below. Students must upload evidence of the activity under the "participation" assignment on eClass. Students should submit a single document outlining each of the activities they participated in. Evidence of the activity must include a screenshot of the activity.

- Take part in a virtual study session with a group of your peers (3 or more students) paste the outline/agenda for the study session as evidence
- Post a 1-2 minute information video on the eClass "student discussion forum" explaining a course concept
- Find an example of an injury in the media (tv, social media) and relate it to a course concept

Total 100%

IMPORTANT COURSE INFORMATION FOR STUDENTS

eClass Online Quiz:

All quizzes for this course will be performed through the eClass Course page. Details surrounding availability and timing are posted on the eClass course page.

The eClass Online exams are to be <u>completed individually</u>. Specifically, you are not to discuss or share the questions or potential answers with anyone, including other

students in this course and you are not permitted to replicate, record or copy the questions on this exam (i.e., screen shot, photograph, print, download, etc.). Any breach of this will be considered Academic Dishonesty and subject to respective University penalties.

All eClass quizzes are <u>NOT</u> open book. You are <u>NOT</u> allowed to use your textbooks or any other resources including information from the internet to answer exam questions during the scheduled exam times. You are to simply use your own knowledge gained from the course materials to answer all questions.

Also, please note that you will need to answer the questions sequentially, in the order in which they appear. Once you answer a question, you will **NOT** be able to go back and change or see your answer. Once the exam is over, your answers will be submitted for marking regardless of whether or not you are complete. For the best internet stability, it is recommended that you have LAN (cable) if possible.

Final course grades MAY be adjusted to conform to Program or Faculty grades distribution profiles. The grading scheme of the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+=9, A=8, B+=7, C+=5, etc.) Assignments and tests will bear a number grade which will be converted to a corresponding letter grade at the end of the course.

(For a full description of York grading system see the York University Undergraduate Calendar – http://calendars.registrar.yorku.ca/pdfs/ug2004cal/calug045 acadinfo.pdf)

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. attending 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 either before or after their final exam or on another specified date as determined by the course director. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

Lateness Penalty:

Assignments received later than the due date will be penalized by 5% per day that assignment is late. Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc., may be entertained by the Course Instructor but will require supporting documentation (e.g., a doctor's letter).

Students with Accommodations:

Any student who requires accommodations for this course or exams, must provide a current letter showing proof of registration with the Student Accessibility Services

Centre. Accommodation letters must be <u>submitted to the Course Director by the end of the first week of the course.</u> Upon receipt of such letters, the Course Director will accommodate the students as described in their respective letter.

Course Recordings:

1) the webinar recordings should be used for educational purposes only and as a means for enhancing accessibility; 2) students do not have permission to duplicate, copy and/or distribute the recordings outside of the class (these acts can violate not only copyright laws but also FIPPA and intellectual property rights); and 3) all recordings should be destroyed after the end of classes.

Academic Honesty:

In this course, we strive to maintain academic integrity to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing SPARK's <u>Academic Integrity module</u> at the beginning of the course. Breaches of academic integrity range from cheating (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.) to aiding and abetting (helping someone else to cheat). All breaches in this course will be reported to the appropriate university authorities, and can be punishable according to the <u>Senate Policy on Academic Honesty</u>.

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Curriculum & Academic Standards webpage (see Reports, Initiatives, Documents) – http://www.yorku.ca/secretariat/senate_cte_main_pages/ccas.htm

- York's Academic Honesty Policy and Procedures/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