



## 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

## Course Text / Readings

Additional readings may be assigned or recommended during the course. Check Moodle for other 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**

## EVALUATION:

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

### a) Tests:

Moodle Online Quiz – Jan 26 (12am) to Jan 27, 2017 (11:55pm) (10%)	5%
Moodle Online Quiz – Mar 28 (12 am) to Mar 29, 2017 (11:55pm)	10%
Midterm Exam – Tuesday February 14, 2017	30%
Final Exam – exam week	35%

### b) Written Assignment

Literature Review (6 pages double spaced – 12 point Arial font) <b>Due Date: March 10, 2017 by 11:55pm</b>	20%
---	-----

<b>Total</b>	<b>100%</b>
--------------	-------------

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.) 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/calug04\\_5\\_acadinfo.pdf](http://calendars.registrar.yorku.ca/pdfs/ug2004cal/calug04_5_acadinfo.pdf))

**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 under the 'written assignment icon' of the home page as well as Turnitin (link and info regarding submission on course Moodle page)**

**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 Curriculum & Academic Standards webpage (see Reports, Initiatives, Documents) –

[http://www.yorku.ca/secretariat/senate\\_cte\\_main\\_pages/ccas.htm](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

## **ADDITIONAL INFORMATION**

### **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 and Turnitin.

#### **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.

## **AMA CITATION STYLE GUIDELINES**

Follow the AMA style (American Medical Association). A reference list of all journals used must be included at the end of the report (also AMA style). **Only** this style of referencing is acceptable.

**Use the following examples for your own paper:**

### **Citing In-Text**

The *AMA Manual of Style* requires that you **cite each reference in your writing in numerical order as they appear by using superscript numbers.**

This means that your in-text citations appear in numerical order throughout your work. Your reference list will then have the same numbers for the same references, which means your reference list will be ordered by number (and not alphabetically!)

### **Example of In-Text Citations**

Each reference should be cited in the text, tables, or figures in consecutive numerical order through the use of superscript numbers.

S The superscript numbers in the below example refer to that item in your reference list

S Direct quotes: anytime you quote something directly, quotation marks are required

S Here is what properly formatted in-text citations would look like in your paper:

This sentence refers to content taken from the first item in your reference list, that is why the

number 'one' appears at the end of this sentence.<sup>1</sup> Keep in mind that if you are quoting, paraphrasing, or summarizing information in your work, you need to indicate the original source of information.<sup>2</sup> The 'three' at the end of this sentence refers to the third item listed in your reference list.<sup>3</sup> Notice that the superscript numbers appear immediately after the period.<sup>4,5</sup>

### Do I Need to Include Page Numbers?

*When citing AMA style, inclusion of page numbers in an in-text citation is not required, rather IT IS OPTIONAL!*

### Reference List

The *AMA Manual of Style* requires that your **reference list must be in numerical order to reflect the order of your in-text citations.**

This means your reference list is not alphabetical!

### Tips

- S Numbering: your reference list **MUST** use regular numbers (not superscripts!)
- S Left justified: items in your reference list **MUST** be left justified (flush left)
- S Spacing: each item listed in your reference list **MUST** be single spaced (no spaces between lines)

### Example Reference List

**Each item in your reference list MUST be single-spaced (meaning no spaces between each item).** Here is what a properly formatted reference list would look like in your paper:

#### Reference List

- S Canadian Press. Generic drugs to be bought in bulk by provinces. CBC News. <http://www.cbc.ca/news/canada/saskatchewan/story/2013/01/18/drug-costs-provinces.html>. Published January 18, 2013. Updated January 18, 2013. Accessed February 4, 2013.
- S Rantucci MJ. *Pharmacists Talking With Patients: A Guide to Patient Counseling*. 2nd ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2007.
- S Nathan JP, Grossman S. Professional reading habits of pharmacists attending 2 educational seminars in New York City. *J Pharm Practice*. 2012;25(6):600-605.

### Journal Articles

#### Print Journal Article

Author(s). Article title. *Abbreviated Journal Name*. Year;volume(issue):pages.

#### Example

- S Nathan JP, Grossman S. Professional reading habits of pharmacists attending 2 educational seminars in New York City. *J Pharm Practice*. 2012;25(6):600-605.

**Online Journal Article (URL only, no DOI)**

Author(s). Article title. *Abbreviated Journal Name*. Year;volume(issue):pages. URL. Publication date. Updated date. Accessed date.

*Example*

S Cain J, Scott DR, Akers P. Pharmacy students' Facebook activity and opinions regarding accountability and e-professionalism. *Am J Pharm Educ*. 2009;73(6):1-6. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2769526/pdf/ajpe104.pdf>. Published October 1, 2009. Accessed February 4, 2013.

**Online Journal Article (has DOI)**

Author(s). Article title. *Abbreviated Journal Name*. Year;volume(issue):pages. doi:.

*Example*

S Fischer MA, Stedman MS, Lii J, et al. Primary medication non-adherence: analysis of 195,930 electronic prescriptions. *J Gen Intern Med*. 2010;25(4):284–290. doi:10.1007/s11606-010-1253-9.

*Note:* When the DOI is given for a journal article, AMA style prefers that the DOI is cited instead of the URL. Do not cite both.

**Books****Entire Book**

Author(s). *Book Title*. Edition number (do not indicate 1st edition). City, State (or, Province or Country) of publication: Publisher name; copyright year.

*Example*

S Rantucci MJ. *Pharmacists Talking With Patients: A Guide to Patient Counseling*. 2nd ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2007.

**Book Chapter**

Author(s) of chapter. Chapter title. In: editor(s), ed. *Book Title*. Edition number (do not indicate 1st edition). City, State (or, Province or Country) of publication: Publisher name; copyright year:pages of chapter.

*Example*

\$ Solensky R. Drug allergy: desensitization and treatment of reactions to antibiotics and aspirin. In: Lockey P, ed. *Allergens and Allergen Immunotherapy*. 3rd ed. New York, NY: Marcel Dekker; 2004:585-606.

**Edited Book**

Editor(s), ed. *Book Title*. Edition number (do not indicate 1st edition). City, State (or, Province or Country) of publication: Publisher name; copyright year.

*Example*

1. Tatro DS, ed. *Drug Interaction Facts: The Authority on Drug Interactions*. St. Louis, MO: Wolters Kluwer; 2011.

**Online Book**

Author(s). *Book Title*. Edition number (do not indicate 1st edition). City, State (or, Province or Country) of publication: Publisher's name; copyright year. URL. Accessed date.

*Example*

Olsen CG, Tindall WN, Clasen ME. *Geriatric Pharmacotherapy: A Guide for the Helping Professional*. Washington, DC: American Pharmacists Association; 2007.  
<https://online.statref.com/Document.aspx?docAddress=b722bOI4Cx5PboVh08z>. Accessed February 27, 2013.

**Other Types of Information Website**

Author(s). Title of specific item cited (or, if unavailable, give the name of the organization responsible for the site). Name of Web Site. URL. Publication date. Updated date. Accessed date.

*Example*

S Canadian Press. Generic drugs to be bought in bulk by provinces. CBC News.  
<http://www.cbc.ca/news/canada/saskatchewan/story/2013/01/18/drug-costs-provinces.html>. Published January 18, 2013. Updated January 18, 2013. Accessed February 4, 2013.

**Online Government or Organization Report**

Author(s). Report title. URL. Published date. Updated date. Accessed date.

*Example*

S Management Committee. Moving forward: pharmacy human resources for the future final report. <http://blueprintforpharmacy.ca/docs/default-document-library/2011/04/19/Moving%20Forward%20Final%20Report.pdf?Status=Master>. Published September 2008. Accessed February 4, 2013.

### **Presentation, Lecture, Poster Presentation (unpublished material)**

Presenter(s). Title of presentation. Description of presentation context; date; City, State (or, Province or Country).

*Note:* You will need to clarify whether your instructor permits citing lecture material. Not everyone allows this—*always* talk to your instructor.

#### *Example*

S Gordon S. Demystifying citing information in your written work. Presented as part of Pharmacy 127; February 13, 2013; Waterloo, ON.

### **Protocols**

Author(s). Protocol name. In: editor(s), ed. *Book Title*. Edition number (do not indicate 1<sup>st</sup> edition). City, State (or, Province or Country) of publication: Publisher name; copyright year:pages of protocol. *Note:* The *AMA Manual of Style* does not have a specific example for referencing a protocol—this is a recommended approach which may need to be tweaked depending on the information you have (or don't have).

#### *Example*

S Cappuccino JG, Sherman N. Gram stain. In: Wasfi O, ed. *Medical Microbiology Lab Manual for PHARM 232L*. Boston, MA: Pearson Learning Solutions; 2011:55-57.

### **Personal Communication (such as an email or conversation)**

*Note:* The *AMA Manual of Style* says to never include personal communication in your reference list. AMA style only permits inclusion of personal communication in your text. *Permission from the author is required.*

*Example* According to an August 2012 email from local pharmacist J Addison...

**COURSE TOPICS AND READINGS:****READINGS  
ANDERSON****a) Course Introduction:**

- course requirements
- information on readings
- Moodle information

**b) Female Biological Factors:**

- gynecological aspects
- female athlete triad
- menstrual irregularities
- birth control and sport
- pregnancy and sport participation
- menopause and sport participation
- biomechanical aspects of injury in the female versus the male
- breast injuries and support
- vaginal injuries
- hormonal imbalances

Moodle  
pp. 830-833  
p.848-850  
pp.866-871

**c) Male Biological Factors:**

- male injuries/conditions in sport (varicocele, hematocele, testicular torsion, hernias, spermatocele, priapism, penile injuries, male infertility in endurance sport)
- testicular cancer

Moodle  
pp.833  
pp.858  
pp.866

**d) Paediatric Sports Medicine:**

- "proper age" for competition (CA vs. BA)
- orthopaedic considerations
- physiological considerations
- sport and equipment modifications for children

pp.407-413  
pp.466-478  
pp.530-536  
p.592  
pp.626-633  
pp.663-668  
pp.674-680  
p.815

- e) Veteran or master athlete:** Moodle
- physiological considerations
  - orthopaedic considerations
  - sport modifications
  - benefits/risks of exercise for older adults
- f) Differently Abled Athletes:** Chapter 30
- disabilities and sport
  - medical aspects
  - Spinal cord injury and related medical and orthopedic conditions (autonomic dysreflexia, bladder issues, skin conditions)
  - Paralympics
  - Special Olympics/World Championships
- g) Nutritional aspects of sports medicine:** Moodle
- basic components
  - effect of food on medications
  - nutritional aspects of tissue repair
  - overview of nutritional concerns for athletes and sports medicine professionals nutritional concerns for athletes
- h) Ergogenic aids/doping:** Moodle  
pp.287-296
- performance enhancing practices
  - ethical issues for athletic therapists
  - WADA and CCES testing
  - IOC/CIS banned list
  - testing and the athletic therapist
  - **ergolytic compounds**
- i) Pharmacology** Chapter 11
- pharmacokinetics, pharmacodynamics, pharmacotherapeutics
  - therapeutic/prescribed medications
  - administering vs dispensing
  - indications/contraindications/side effects
  - analgesics/antipyretics and anti-inflammatory

**j) Travel with Sport Teams**

Moodle

- world wide health/travel organizations
- electricity concerns
- vaccines
- traveling with medications
- packaging equipment and supplies
- warranties and documentation
- permitted supplies and equipment
- language issues
- insurance
- local concerns (political, environmental, health)

**k) Alternate/complementary Therapy:**

Moodle

- an introduction will be provide to the following: acupuncture, shiatsu, osteopathy, homeopathy, reflexology, massage, naturopathy, chiropractic, myofascial and ART therapies, muscle energy, counter strain, craniosacral therapy
- Eastern versus Western medicine

p.325

**l) Psychological Aspects of Sports Injuries:**Moodle  
Chapter 9

- psychological states contributing to injuries
- psychological effect of athletic injuries
- psychological strategies to overcome injuries
- return to play factors
- Integrated Rehabilitation Model