



**YORK UNIVERSITY**  
**Faculty of Health**  
**School of Kinesiology and Health Science**

**KINE 3570 3.0**  
**Theory and Methodology of Training**

**S2 2017**

**COURSE DIRECTOR**

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Office Hours: Tuesdays 12:30-1:30pm or by appointment

**DETAILS**

Vari Hall Room 1152A

Tues, Thurs 9:30 – 12:30pm

Website: [moodle.yorku.ca](http://moodle.yorku.ca)

Pre-requisite: KINE 1000 & KINE 1020

**DESCRIPTION**

The course provides an examination of the scientific and methodological theories, techniques and planning methods utilized in the training of the skilled athlete, with practical application to selected sports.

**OBJECTIVES**

- To increase students' knowledge and understanding of the theoretical basis of training and the basic concepts of planning and implementing strength and condition programs.
- To facilitate students' awareness of the spectrum of factors to consider in an athletes' strength and conditioning program such as psychological, physical, and social factors.
- To provide opportunities to consider and explore the various roles of strength and conditioning coaches within different training contexts.
- To critically reflect upon translating research studies and theory to practice.

**COURSE TEXT BOOK**

Haff, G. & Triplett, T. (2016). *Essentials of Strength Training and Conditioning* (4<sup>th</sup> Ed.). Windsor: Human Kinetics.

## **EVALUATION**

20%	Assignment # 1 – Review 2 Journal Articles	Tues, July 4 <sup>th</sup>
25%	Assignment # 2 – Experiential Learning	Tues, July 27 <sup>th</sup>
20%	Group Presentation & Assignment	Thurs, July 29 <sup>th</sup>
30%	In Class Test	Thurs, July 6 <sup>th</sup>
5%	Class Participation	

### Assignment # 1

#### **Review Sport Specific Strength and Conditioning Journal Articles**

- 20% of final grade
- Students are required to write a short review paper (not to exceed 4 pages double spaced = approximately 1000 words) based on two peer reviewed journal articles of their choosing, related to sport specific strength and conditioning journal articles. The paper should include: a) a brief summary of each study which includes the purpose, the main methods used, and the key findings (approximately 200 words), b) a practical and applied discussion on a sport specific strength and conditioning needs assessment based on the articles and findings (approximately 400 words), and c) subsequent training suggestions for athletes within the specific sport based on the needs assessment and article findings (approximately 400 words). Students must submit a copy of the journal article abstracts with the assignment. This assignment should be submitted following the guidelines of the American Psychological Association’s publication manual (6<sup>th</sup> edition). Students’ assessment is based on the review’s content, in addition to writing style, the ability to write clearly and concisely, and APA format.

### Assignment # 2

#### **Experiential Learning Field Assignment**

- 25% of final grade
- The purpose of this assignment is for students to experience a strength and conditioning program through field work, and be guided by Kolb’s Experiential Learning Cycle, to optimize learning from this experience. Students are expected to experience a strength and conditioning program through two “field sessions”. “Field sessions” include observation of a training session and conversations with instructor(s) and athlete(s). Field sessions are used as a springboard for critical reflection, abstract conceptualization, and further suggestions for best practices within the program/culture.
- Students’ final paper (not to exceed 4 pages pre-appendices; approximately 1000 words) should include a) a description of the program/context (1 page max), b) a critical reflection of experiences within the program, c) a conceptualization of the effectiveness of this particular program based on course content, and d) appendices of pre-field session outlines (developed to help guide the students’ experiences within the program), detailed description of sessions (2 page max), and notes taken during or immediately after field sessions. Kolb’s Experiential Learning Cycle (concrete experience, reflective observation, abstract conceptualization, and active experimentation) is provided to guide students throughout the assignment. This assignment should be submitted following the guidelines of the American Psychological Association’s publication manual (6<sup>th</sup>

edition). Students' assessment is based on preparedness for the field work, engagement within the field assignment, and their experiential learning guided by Kolb's Experiential Learning Cycle, in addition to writing style, the ability to write clearly and concisely, and APA format. Students are to familiarize themselves with Senate Policy on Human Ethics (consent forms may be required), and complete KHS Human Ethics Form 3.

### Group Presentation and Assignment

#### **Sport Specific Annual Training Program Plan**

- 20% of final grade
- Students will be in groups of 5. Each group will have to be approved for a specific sport, level, and age range.
- The purpose of this assignment is to develop an annual training plan for an athlete(s)/team within a specific sport (within the age range of 13 to 25 years). The plan should be informed by the literature and course content. The written plan (double spaced) should include an introduction/needs assessment (2 page), annual outline (6 pages), program rules (1 page), testing and goal setting (3 pages), and specific workout examples (5 pages). Journal articles should be used to inform and support program plans in each section (APA citations).
- Each group will present their sport specific annual training program at the end of the course (July 29<sup>th</sup>). Students are given the opportunity to engage in a presentation showcasing unique and creative program ideas they integrated into their strength and conditioning program. Length of presentations will be 6-8 minutes with 2 additional minutes for questions. Students are marked on their ability to clearly and concisely communicate chosen highlights of the program, within the given time frame, as well as proficiency in addressing questions and concerns regarding the program. All students participating in a group presentation will receive the same grade; all students in groups must deliver some of the presentation content.
- A detailed description of this assignment will be posted on the course website.

### Class Participation

- 5% of final grade.
- Attendance will be taken at the start of every class.
- Attendance is essential for success in this course. In addition to lecture slides and readings, you are responsible for all additional material, activities, and discussions presented during class for the exam and the assignments.
- Come prepared and do the readings. Engagement will be evaluated on quality of in-class discussions, questions, and participation. Students are expected to reflect comprehension and thoughtful consideration of course material.

## TENTATIVE COURSE TOPICS AND READINGS

Date	Lecture Topics	Required Readings
June 20 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Course outline and introduction</li> <li>• Theories of Training</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 1: Structure &amp; Function of Body Systems</li> <li>• Chapter 2: Biomechanics of Resistance Training</li> <li>• Chapter 3: Bioenergetics of Exercise and Training</li> <li>• Chapter 4: Endocrine Responses to Resistance Training</li> </ul>
June 22 <sup>nd</sup>	<ul style="list-style-type: none"> <li>• Adaptations to Training</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 5: Adaptations to Anaerobic Training Programs</li> <li>• Chapter 6: Adaptations to Aerobic Endurance Training Programs</li> <li>• Chapter 7: Age &amp; Sex-Related Differences and their Implications</li> </ul>
June 27 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Training Methodologies</li> </ul>	<ul style="list-style-type: none"> <li>• Chapters 14: Warm-Up and Flexibility Training</li> <li>• Chapter 15: Exercise Technique for Free Weight and Machine Training</li> <li>• Chapter 16: Exercise Technique for Alternative Modes and Non-traditional Implement Training</li> <li>• Chapter 17: Program Design for Resistance Training</li> <li>• Chapter 18: Program Design and Technique for Plyometric Training</li> <li>• Chapter 19: Program Design and Technique for Speed and Agility Training</li> <li>• Chapter 20: Program Design and Technique for Aerobic Endurance Training</li> </ul>
June 29 <sup>th</sup>	<ul style="list-style-type: none"> <li>• The Use of Sport Psychology within Training Programs and within Training Sessions</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 8: Psychology of Athletic Preparation and Performance</li> </ul>
July 4 <sup>th</sup>	<p style="text-align: center;"><b>Assignment #1 Due</b></p> <ul style="list-style-type: none"> <li>• Creating Training Programs: Periodization, Using Tests, &amp; Policies</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 12: Principles of Test Selection and Administration</li> <li>• Chapter 13: Administration, Scoring, and Interpretation of Selected Tests</li> <li>• Chapter 21: Periodization</li> <li>• Chapter 23: Facility Design, Layout, and Organization</li> <li>• Chapter 24: Facility Policies, Procedures, and Legal Issues</li> </ul>
July 6 <sup>th</sup>	<b>Mid-Term Exam</b>	
July 11 <sup>th</sup>	<i>No Class - Experiential Learning Assignment</i>	
July 13 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Sociocultural issues within Sport</li> </ul>	
July 18 <sup>th</sup>	<i>No Class - Experiential Learning Assignment</i>	
July 20 <sup>th</sup>	<ul style="list-style-type: none"> <li>• Nutrition</li> <li>• Performance Enhancement Substances</li> <li>• Injury rehabilitation</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 9: Basic Nutrition Factors in Health</li> <li>• Chapter 10: Nutrition Strategies for Maximizing Performance</li> <li>• Chapter 11: Performance-Enhancing Substances and Methods</li> <li>• Chapter 22: Rehabilitation and Reconditioning</li> </ul>
July 25 <sup>th</sup>	<p style="text-align: center;"><b>Assignment #2 Due</b></p> <ul style="list-style-type: none"> <li>• Sport specific training</li> <li>• Professional athlete training</li> <li>• Olympic preparation</li> </ul>	
July 27 <sup>th</sup>	<b>Group Presentation &amp; Assignment Due</b>	

## **UNIVERSITY UNDERGRADUATE DEGREE LEVEL EXPECTATIONS**

### **Depth and Breadth of Knowledge**

- Demonstrate knowledge of the terminology and nomenclature in Kinesiology and Health Science.
- Generalize practical physical activity experiences to enhance further opportunities.
- Critically reflect on physical activity and health from individual to societal and local to global contexts.
- Integrate and critically analyze the bio-science, behavioural, and socio-cultural aspects of physical activity and health.
- Critically evaluate and discuss current issues relating to Kinesiology and Health Science.
- Demonstrate a breadth and depth of knowledge in Kinesiology and Health Science in one or more specialized areas.

### **Knowledge of Methodologies for Inquiry**

- Describe the process of research that is used to develop knowledge in the field of Kinesiology and Health Science.
- Evaluate information about physical activity and human health that is disseminated via popular media and discipline related research journals.

### **Application of Knowledge**

- Apply multi-disciplinary knowledge of physical activity and health to life situations.
- Use knowledge and skills to advocate for the fundamentals of physical activity and health from general to specific situations.
- Apply subject-based theories, concepts or principles to solve problems.

### **Communication Skills**

- Access Kinesiology and Health Science information from a variety of sources.
- Use appropriate academic terminology and notation when preparing and presenting information.
- Present ideas and arguments in a well-structured and coherent manner using appropriate communications formats.

### **Awareness of Limits of Knowledge**

- Understand and appreciate the dynamic nature of information in Kinesiology and Health Science.
- Be aware of the limits in knowledge and methodologies when analyzing, evaluating, interpreting and disseminating information.

### **Autonomy and Professional Capacity**

- Be able to evaluate new information in Kinesiology and Health Science.
- Have developed strategies to maintain or enhance knowledge in the Kinesiology and Health Science field.
- Be able to identify areas for personal and professional development.
- Be able to think independently, problem solve and set tasks.
- Have developed mutually beneficial peer relationships for the purposes of mentoring and networking.

## **COURSE POLICIES**

***Communication with Classmates:*** The discussion board is available on the course website for students to engage in course-related communications. Students are encouraged to post relevant links, or ask insightful questions for class discussion. Students are required to show respect in accordance with University policies when posting on the discussion board.

***Communication with Course Instructor and Teaching Assistant:*** Email can be directed to the course director or teaching assistant. Email will be answered on weekdays only, and will generally be responded to within 3 business days. Please keep in mind that SPAM filters may block non-York University email addresses. Academic email policy requires emails to use the following format:

1. The subject line must include course code: KINE 3570.
2. The body of the email should be easy to read – free from grammatical and punctual errors.
3. The email should be brief and to the point. 1 or 2 questions that can be answered in 1 or 2 sentences each. More complex discussion should take place in-person or via phone meeting. You may need to schedule a time to meet with the instructor.
4. Your closing should include your full name and student number.

***Grading:*** The grading scheme for 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 will bear a numerical grade designation; cumulative numerical grades will result in a corresponding letter grade (e.g. A+ = 90 to 100, A = 80 to 90, B+ = 75 to 79, etc.). For a full description of York grading system see the York University Undergraduate Calendar - <http://calendars.registrar.yorku.ca>. Unofficial grades will be posted on the course website as soon as they are available.

### ***Marking Request Policy:***

- Any appeal of graded work must be given in writing (via email is acceptable).
- Written appeal must be received between 1 to 5 days of return of work (even if you were not present to receive the document). An appeal received less than 24 hours after the return of work will not be considered.
- The written appeal must clearly identify the evaluation in question and clearly detail the grounds of the appeal.
- The entire assignment will be reviewed and the overall mark may increase or decrease.
- Mistakes relating to addition of marks are excluded from this policy.

### ***Bumping Letter Grade Requests Policy:***

- Students' request for extra work or an extra percent to round up their letter grad will not be considered.

***Curriculum and Academic Standards:*** 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/files/CourseInformationForStudentsAugust2012.pdf>

- 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

**Assignment Submission:** Proper academic performance depends on students completing their work not only well, but on time. Accordingly, assignments must be received on the due dates specified and are to be handed in as hard-copies during class; alternatively, assignments must be handed in to the undergraduate office before class time (assure time-stamped). Assignments will not be accepted via email. Assignments received later than the due date will be penalized 10% per day. Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc., may be entertained by the Course Director but will require supporting documentation (Deferred Standing Agreement Form; Doctor's Letter).

**Attendance Policy:**

- Arrive for class on time and prepared (i.e., required readings completed before class & come prepared with discussion and student quiz questions)
- Be respectful and engaged (i.e., listen, ask questions during class, engage in discussions and activities). The more you actively engage – ask questions and answer questions in class – the more you will get out of the course.
- Cellphones – Do not use them during class, it is disrespectful. Do not leave your cellphone out on your desk, it is likely to be a distraction to you and others.
- Laptops – You can use your lap top during class to take notes. Do not use if for personal use (emails, social media), it is disrespectful and you will be distracted.

**Written Assignment Policy:**

- Title page – name, student number, course number & date bottom right
- Table of contents (appendices A, B, C...)
- Page 1 is page 1 of content, NOT title page or table of contents page.
- Doubled spaced, 1 inch margins, Times New Roman, staple in top left corner.
- Include a copy of assignment evaluation rubric at end. The rubric will be posted on Moodle.
- Refer to APA guidelines (6<sup>th</sup> Edition) for references and in text citations.