

KINE 4120 3.0 Nutritional Aids in Sport and Exercise
Fall Term 2012

This course investigates the influence of nutritional supplements/aids on exercise performance, with emphasis on the underlying physiologic and biochemical mechanisms behind the effectiveness of ergogenic compounds.

INSTRUCTOR

Dr. Mazen J Hamadeh
365 Bethune College
Extension: 33552
E-mail: hamadeh@yorku.ca
Office hours: By appointment

TEACHING ASSISTANT

Ms. Elnaz Moghimi
Office: *by appointment only, please contact the TA by email*
Email: elnazm@yorku.ca

PREREQUISITE

- HH/KINE 4010 3.0 Exercise Physiology
- HH/KINE 4020 3.0 Human Nutrition

TIME AND LOCATION:

First class on Thursday, September 6, 2012
Last class on Thursday, November 29, 2012

Please note, there will be no classes between October 31-November 4, 2012 (York U Co-Curricular Days)
<http://www.registrar.yorku.ca/enrol/dates/fw12.htm>

Location: 211 Calumet College
Days of the week: Tuesdays and Thursdays
Time: 10:00 am – 11:30 am

INSTRUCTOR'S STATEMENT

This course was designed to expose students to the many facets of academe. The students will gain experience in public speaking, presenting to their peers, researching the scientific literature, analyzing data, critiquing manuscripts (methods, results, discussion etc..), participating in discussions, evaluating their peers, writing a critique and a review article, familiarizing themselves with different study designs and statistical methods, preparing podium presentations on PowerPoint, presenting direction for future research and designing a clinical study in detail. The course structure is specifically designed to facilitate learning and acquire experience in these skills.

COURSE DESCRIPTION

This course investigates the physiologic, biochemical and genomic mechanisms underlying the influence of nutritional aids (diet, supplements, ergogenic aids) on exercise and sport performance. This course will address published work in the scientific literature relating to the impact of nutrition interventions on exercise performance. Published results of clinical studies in the scientific literature will be closely critiqued: study designs assessed, hypotheses evaluated, new theories developed, methodological gaps addressed, and potential future directions and clinical studies proposed. *This course is completely research based incorporating methods of critical thinking, problem-based learning and experiential learning.*

COURSE LEARNING OBJECTIVES:

The course will allow students to:

- acquire knowledge and comprehension in several areas related to nutrition and exercise performance through individual- and group-based search of the scientific literature, critical thinking, public speaking, and writing a critique and a term paper.
- develop an understanding of the biochemical and physiologic mechanisms of action of the chosen nutrition intervention (diet, dietary supplement, ergogenic aid)
- correctly and objectively interpret information re: nutrition and exercise performance
- familiarize themselves with the different components of, and critically evaluate, a published scientific research article
- develop and improve their writing skills by writing a critique and a term paper
- design a clinical study and generate a study proposal (rationale, objective, methods- subject characteristics, sample size, inclusion/exclusion criteria, biomarkers to be measured and reasons for choosing the specific biomarkers, study design, testing protocol, statistics-, and expected results based on literature search)
- practice public speaking and objectively evaluate, and get evaluated by, their peers
- gain a deeper understanding of the inter-relationship between nutrition and exercise, and develop a strong appreciation of critical thinking/analysis and problem-based learning under the guidance of the instructor
- apply the knowledge acquired in this course when consulting with athletes, fitness clients, and the recreationally active

COURSE STRUCTURE:

- This is a research-based course. Lecturing by the instructor will be minimal. Students will be guided by the instructor and/or TA.
- Students will choose topics of interest to them. It is preferred, but not necessary, that the topics for the critique and term paper be different in order to encourage learning in more than one field, and these should be approved by the instructor. A list of potential topics will be provided (please see **LIST OF POTENTIAL TOPICS** below). The students will be guided by the instructor and/or TA throughout the course.

EVALUATION

Article Podium Presentation	15%	by students and instructor
Written Critique	20%	by instructor
Major Topic Podium Presentation	20%	by students and instructor
Major Topic Term Paper	30%	by instructor
Attendance and In-class Participation	15%	by instructor

Senate Policy on Grading Scheme and Feedback

The following two statements were approved by the Senate to include in the course outline:

“that, under normal circumstances, graded feedback worth at least 15% of the final grade for Fall, Winter or Summer Term, and 30% for ‘full year’ courses offered in the Fall/Winter Term be received by students in all

courses prior to the final withdrawal date from a course without receiving a grade, with the following exceptions

- graduate or upper level undergraduate courses where course work typically, or at the instructor's discretion, consists of a single piece of work and/or is based predominantly (or solely) on student presentations (e.g. honours theses or graduate research papers not due by the drop date, etc.);
- practicum courses;
- ungraded courses;
- courses in Faculties where the drop date occurs within the first 3 weeks of classes;
- courses which run on a compressed schedule (a course which accomplishes its academic credits of work at a rate of more than one credit hour per two calendar weeks).

Note: Under unusual and/or unforeseeable circumstances which disrupt the academic norm, instructors are expected to provide grading schemes and academic feedback in the spirit of these regulations, as soon as possible."

This date is not the "drop and add" date but November 9, 2012, for this Fall term courses (the last day for canceling courses without failure by default), students must be given back work equal to 15% of the grade.
<http://www.yorku.ca/secretariat/policies/document.php?document=86>

ACADEMIC HONESTY

The following is an excerpt from York University's Senate Policy on Academic Honesty:

"Academic honesty requires that persons do not falsely claim credit for the ideas, writing or other intellectual property of others, either by presenting such works as their own or through impersonation. Similarly, academic honesty requires that persons do not cheat (attempt to gain an improper advantage in an academic evaluation), nor attempt or actually alter, suppress, falsify or fabricate any research data or results, official academic record, application or document."

For more information, please access the following website:

<http://www.yorku.ca/secretariat/policies/document.php?document=69>

STUDENT RIGHTS AND RESPONSIBILITIES (STUDENT CODE OF CONDUCT)

Students are reminded that they should be polite, courteous and civil during their interactions with the course instructor, TA and other students. No abuse, aggression, harassment, intimidation, threats or assault will be tolerated, be it verbal or otherwise. This includes soliciting or "pushing" the instructor or TA for a higher grade.

The following is an excerpt from the Student Code of Conduct, specifically sections 4a and 4b:

"The following behaviours are prohibited. This list is not exhaustive but provides examples of breaches of the standard of conduct. This Code deliberately does not place violations in a hierarchy. The University views all complaints made under the provisions of this Code as serious.

- a. Breaking federal, provincial or municipal law, such as: breaking into University premises; vandalism; trespassing; unauthorized use of keys to space on campus; unauthorized possession or use of firearms, explosives, or incendiary devices; possession or consumption of, or dealing in, illegal drugs; smoking

of legal substances outside designated areas; cruelty to animals; theft of University or private property including intellectual property; unauthorized copying of documents; possession of stolen property.

b. Threats of harm, or actual harm, to a person's physical or mental wellbeing, such as: assault; verbal and non-verbal aggression; physical abuse; verbal abuse; intimidation; sexual assault; harassment; stalking; hazing."

For the complete details, please access the following websites:

Student Conduct and Responsibilities:

http://www.registrar.yorku.ca/calendars/2012-2013/policies/student_conduct/index.htm

Code of Student Rights and Responsibilities:

<http://www.registrar.yorku.ca/calendars/2012-2013/policies/code/>

Student Rights and Responsibilities:

<http://www.yorku.ca/oscr/pdfs/CodeofRightsandResponsibilities.pdf>

POLICY REGARDING ACADEMIC ACCOMMODATION FOR STUDENTS WITH DISABILITIES

The following is the Policy Statement as approved by the Senate on 1991/06 and revised 2005/02/24:

"York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs.

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses.

Provided that students have given sufficient notice about their accommodation needs, instructors shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder.

'Disabilities' shall be defined as those conditions so designated under the Ontario Human Rights Code in force from time to time, and will in any event include physical, medical, learning, and psychiatric disabilities."

For more information, please access the following website:

<http://www.yorku.ca/secretariat/policies/document.php?document=68>

ASSIGNMENTS

I. Article Podium Presentation

The first Article Podium Presentation will be on Tuesday, September 11, 2012. Students who fail to present their Article Podium Presentation on the agreed upon date will receive 0% on this assignment.

Please consult the document entitled "Article Podium Presentation Outline" for more details.

The article should be a clinical study on nutrition intervention (diet, dietary supplement, ergogenic aid) as it relates to physical activity, sport and exercise. Review articles and surveys will not be accepted. Please see the section on LIST OF POTENTIAL TOPICS below. Students should receive the instructor's approval of

their articles at least 1 week prior to their podium presentation. This can be done in person, by email or by phone. **All articles must be approved by the instructor.**

Students will work in groups of 2 for this assignment (however, depending on the final student enrolment in this course, it is possible that the students might end up working in groups of 3 for this assignment). Students will give a 20- to 30-minute seminar on a published scientific article (preferably published in the last 2 years). The presentation will be followed by 10-20 minutes of class discussion and/or question-answer period. Please prepare your podium presentations on PowerPoint.

Logistics:

- Students are strongly encouraged to meet with the instructor or teaching assistant (TA) while in the process of preparing their PowerPoint podium presentations to receive direction and feedback.
- Students will generate a double-sided, 1-page summary of the topic they will present. Follow the presentation outline below. This handout MUST be submitted to the instructor/TA at least 2 days prior to the presentation day (for photocopying and/or to be posted on Moodle).
- Once approved, the article or the link to the article or the reference (depending on the copyright instructions by that particular journal) will be posted on Moodle a few days prior to the presentation in order to allow all the students enrolled in the course ample time to read through the article, familiarize themselves with the topic, conduct their own background research and prepare questions for the presenter.
- All students enrolled in the course are expected to participate in the question/answer period and discussion following the presentation. It is the responsibility of the students to ensure that they ask questions which may directly or indirectly relate to the presentation. It is the responsibility of the presenter to coordinate the discussion. However, the instructor maintains the prerogative to coordinate or redirect the discussion to ensure -1- the majority of students are involved, -2- cross-linking with other topics and making meaningful connections regarding mechanisms of action, -3- the discussion does not deviate from the main topic and -4- the discussion does not infringe on topics to be presented by other students.
- The success of the question/answer period and discussion following the presentation reflects the level of preparation and comprehension by both the presenter and audience. The evaluation for in-class participation will heavily depend on the involvement of the audience, specifically student engagement in intellectual discourse. The instructor maintains the prerogative to ask individual students of the audience for comments, questions, opinions or explanations relating directly or indirectly to the topic being presented. The evaluation for in-class participation will be solely decided by the instructor.
- The students are required to submit their final Article Podium PowerPoint presentation to the instructor by email or on CD **PRIOR** to the presentation date.

Article Podium Presentation outline (20-30 min):

- a) Introduction – 3-5 min: Background information needed to understand the topic. What mechanisms do we need to understand? What is the nature of the nutritional/ergogenic aid? Refer to some past literature on the same topic. Present the rationale, objective(s) and hypothesis of the study.
- b) Methods and Results – 9-12 min: What were the subject characteristics, inclusion/exclusion criteria, study design, statistics, testing protocol, biomarkers measured, etc..? What were the main findings? What are the important points we should remember? Presenting tables and figures is more impactful than text alone.

c) Discussion, Summary and Conclusions – 2-5 min: Discuss important findings. Follow the same order as in the Methods and Results sections. What are the criticisms, if any, that may invalidate the authors' claims? Is there evidence published by other researchers confirming/invalidating the claims? Given what you have presented, where are we at in our current state of knowledge? Come back to important points/mechanisms. How did the article contribute to the field? Was the article able to advance science or our knowledge of the field?

d) Critiquing the article – 2-4 min: Allow some time to critique the article. Divide the points into Strengths and Weaknesses. Make sure to elaborate on the points listed. Explain why you think these are strong or weak points. **Note that critiquing the article could be done throughout the presentation.** However, a final table of Strengths/Weaknesses will help bring the issues together.

e) Suggestions for future research – 1-4 min: What would the next research project be? How can we answer some of the questions (or gaps) this article raised? Which direction should future research follow? This section provides students with the opportunity to impart some of their knowledge to their peers.

II. Written Critique

Deadline for submitting the Written Critique assignment is 2 weeks from your article presentation day. No extensions will be granted. Tardiness will cost the student 50% of the evaluation.

Please consult the document entitled “Written Critique Outline” for more details.

Students are strongly encouraged to submit their Written Critique assignments to www.turnitin.com to ensure that assignments are free of plagiarism. Please refer to section on Academic Honesty.

Students will work in groups of 2 on this assignment. The Written Critique should address the article presented by the same students to their peers during the Article Podium Presentation 2 weeks earlier. It should be 3-5 paragraphs in length, between 350-1000 words (not including the title page and references). Students should use between 3-10 references only (no more than 10 references). The Written Critique may include up to two figures/schematics and one table. Students will be guided by the instructor and/or TA.

The document should be type written, double spaced, using a 12-point font. Please refer to section on Referencing.

Written Critiques (in the form of Letters-to-the-Editor) present non-editorial members of the scientific community with an opportunity to express their opinion about an article published in the previous year. They are tools for sharing ideas and commentary, tackling controversial issues and/or expressing support or disagreement with other scientists. They contribute significantly to the advancement of science and the direction of future research. Please be polite and courteous in your critiques. Do not take things personally. Be objective in your approach.

Logistics:

- Students are strongly encouraged to meet with the instructor or TA while in the process of writing the Written Critique to receive direction and feedback.
- The students are required to submit their Written Critique assignments to the instructor in hard copy and electronically (by email or on CD), and are strongly encouraged to submit their Written Critique assignments to www.turnitin.com.

- Students are also required to submit copies of ALL their references in PDF format electronically (on CD or via email) to the instructor.

First paragraph:

The students should introduce the reader to the particular article they're about to tackle, briefly referring to its purpose, methodology, results and contribution to the field (or purported contribution!).

Paragraphs 2-4:

- A- The students should mention the importance of the article and the article's strong points (including its contribution to the field, if it applies), and **why** the students think they are strong points. All articles have strong points, otherwise they would not be worthy of being published.
- B- The students should then proceed with **identifying** any discrepancies in the data and/or conclusion, building up their case using research from the scientific literature to bolster their point.
- C- The students should also attempt to explain **why** such a discrepancy would occur.
- D- The students should request from the authors that they resubmit their data to new or additional analysis, or to pay their results closer scrutiny. The students should **identify the nature of the new analysis**. And explain **why**.
- E- The students should explain what they would have expected to find following the design in the article, and **what they would expect to find after submitting the data to the new analysis**, and **why** (based on previously published scientific literature).

Last paragraph:

The students should **summarize the main points** of the Written Critique and end the Written Critique with a **concluding remark(s)** falling back on evidence from the scientific literature.

III. Major Topic Podium Presentation

The first Major Topic Podium Presentation will be on Thursday, October 11, 2012. Students who fail to present their Major Topic Podium Presentation on the agreed upon date will receive 0% on this assignment.

The topic for the Major Topic should include an aspect on ergogenic aids. Purely nutrition topics will not be accepted if not applicable to the fields of sports and exercise.

Students will work in groups for this assignment. All students in the group are expected to contribute equally to the work. Students will give a 40-50-minute seminar on a topic of their interest. Please see the section on **LIST OF POTENTIAL TOPICS** below. **All topics must be approved by the instructor.** The presentations will be followed by 15-25 minutes of class discussion and/or question-answer period. Please prepare your podium presentations on PowerPoint.

Students should search the scientific literature, critically analyze it, base an opinion and further build on it using scientific data and physiological, biochemical, and molecular plausibility. In brief, students should consider, albeit not exclusively, the following: what is the supplement or nutrient, and how is it relevant to human biology?; what is it supposed to do?; how does it do it?; does it really work?; current state of knowledge in the scientific field (epidemiological studies, clinical studies, animal studies, *in vitro* studies); past and present controversies; hypotheses/theories related to the effectiveness, or lack thereof, of the ergogenic aid on measures of performance; biochemical pathways in question; any side effects and the related hypotheses/theories and biochemical pathways; could these side effects be mitigated? how?; under what conditions side effects appear?; conditions under which ergogenic aid is effective, etc..

Logistics:

- Students are strongly encouraged to meet with the instructor or TA while in the process of preparing their PowerPoint podium presentations to receive guidance and feedback.
- Students need to submit an outline of their presentations to the instructor/TA at least 3 weeks prior to their Major Topic Podium Presentation for approval and feedback.
- Students will generate a double-sided, 1-page summary. This will be a comprehensive synopsis of what they will present. Students should follow the presentation outline below. This handout MUST be presented to the instructor/TA at least 2 days prior to the presentation day (for photocopying and/or to be posted on Moodle).
- Once the topic has been approved by the instructor, a review article from the scientific literature on the topic to be presented will be emailed to all the students enrolled in the course and/or posted on Moodle (or the reference provided on Moodle for all students to access; depending on copyright instructions by that specific journal) a few days prior to the presentation in order to allow them time to read through the article, familiarize themselves with the topic, conduct their own background research and prepare questions for the presenters. The students presenting on the same topic are responsible to provide the review article to the instructor/TA and/or post it on Moodle.
- All students enrolled in the course are expected to participate in the question/answer period and discussion following the presentation. It is the responsibility of the students (attendees) to ensure that they ask questions which may directly or indirectly relate to the presentation. It is the responsibility of the presenters to coordinate the discussion. However, the instructor maintains the prerogative to coordinate or redirect the discussion to ensure -1- the majority of students are involved, -2- cross-linking with other topics and making meaningful connections regarding mechanisms of action, -3- the discussion does not deviate from the main topic and -4- the discussion does not infringe on topics to be presented by other students.
- The success of the question/answer period and discussion following the presentation reflects the level of preparation and comprehension by both the presenters and audience. The evaluation for in-class participation will heavily depend on the involvement of the audience, specifically student engagement in intellectual discourse. The instructor maintains the prerogative to ask individual students of the audience for comments, questions, opinions or explanations relating directly or indirectly to the topic being presented. The evaluation for in-class participation will be solely decided by the instructor.
- The students are required to submit their final Major Topic Podium PowerPoint presentation to the instructor by email or on CD **PRIOR** to the presentation date.
- Students are also required to submit copies of ALL their references in PDF format electronically (on CD or via email) to the instructor.

Major Topic Podium Presentation outline (40-50 min):

- a) Introduction – 5-10 min: Background information needed to understand the topic. What mechanisms do we need to understand? Present the big picture and then discuss the details. Pathways, diagrams etc..
- b) Review of pertinent research – 20-25 min: Present the most important articles that heavily contributed to the field. What were the main findings? What are the important (take-home, bottom line) points we should remember (a picture is worth a 1000 words)? It is always helpful to present the data divided into different categories: -a- clinical studies, animal studies, *in vitro* studies, or -b- endurance exercise, resistance exercise, or -c- exercise bouts, exercise training, etc.. Formulate a table summarizing the studies after each category.

Any controversies? Reasons/mechanisms underlying these controversies? What are the different theories/hypotheses/mechanisms/controversies in the field? Does one theory lend more credence than the other? Why? Link them back to mechanisms.

c) Summary and Conclusions – 5 min: Given what you have presented, where are we at in our current state of knowledge? Come back to important points/mechanisms. What are the gaps in our knowledge?

d) Suggestions for future research and proposed clinical study – 5-10 min: What could/should be done in order to provide us with a solid conclusion? What is the direction for future research to address the gaps present in the field? What other potential mechanisms might be involved? Suggest a research project in detail (rationale, objective, methods- subject characteristics, sample size, inclusion/exclusion criteria, biomarkers to be measured and reasons for choosing the specific biomarkers, study design, testing protocol, statistical analysis to be used-, and expected results based on literature search).

IV. Major Topic Term Paper

Deadline for submitting the term paper is on Monday, December 3, 2012. No extensions will be granted. Tardiness will cost the student 50% of the evaluation. Please start writing the term paper early in the semester.

Please consult the document entitled “Major Topic Term Paper Outline” for more details.

Students are strongly encouraged to submit their term papers to www.turnitin.com to ensure that term papers are free of plagiarism. Please refer to section on Academic Honesty.

This is a group-based effort. All students in the group are expected to contribute equally to the term paper. The paper is on the same topic as the Major Topic Podium presentation. It should NOT be longer than 12 pages in length (not including title page, abstract, table of contents, tables, figures and references). Figures and tables should be interspersed throughout the document.

The document should be type written, double spaced, using a 12-point font. Margins should not be less than the following: top, 0.75”; left, 0.75”; right, 0.50”; bottom, 0.50”. Please refer to section on Referencing.

The paper should introduce the reader to a topic, summarize the important literature, integrate findings from different studies and highlight key issues which remain unresolved. The paper should contain your own opinions and interpretations based on articles you have read. In other words, tell me what you think and draw on the studies you have read to support your opinion.

Logistics:

- Students are strongly encouraged to meet with the instructor or TA while in the process of writing the Major Topic Term Paper to receive direction and feedback.
- Students need to submit an outline of their Major Topic Term Paper to the instructor/TA at least 3 weeks prior to the Term Paper submission deadline for approval and feedback.
- The students are required to submit their Major Topic Term Paper assignments to the instructor in hard copy and electronically (by email or on CD), and are strongly encouraged to submit their Major Topic Term Paper assignments to www.turnitin.com.

- Students are also required to submit copies of ALL their references in PDF format electronically (on CD or via email) to the instructor.

The paper should include a -1-title page, -2-abstract (maximum 1 page, only 1 paragraph), -3-introduction, -4-review of the scientific literature, -5-summary (integrate your interpretations of the current pool of literature), -6-suggestions for future research and -7-proposed clinical study (research project based on what you have read; outline in details a study that would be worth pursuing and that would contribute to the current literature). That is, students should propose a research project that would advance the field.

LIST OF POTENTIAL TOPICS

Students can pick any topic that involves diet, drugs, etc.. that might affect athletic performance in a positive way (i.e., enhances performance - an ergogenic aid) or that is purported to enhance, but actually adversely affects (i.e., reduces performance - an ergolytic aid), performance in sport/exercise/physical activity. The following is a non-comprehensive list of potential topics:

alcohol, amino acids (e.g. alanine, glutamine/glutamate, branched chain amino acids-BCAA), anabolic steroids, antioxidants (e.g. vitamin E, vitamin C, selenium, carotenoids, coenzyme Q10, alpha-lipoic acid), anorexia nervosa/athletica, blood doping (erythropoietin: EPO), buffers (blood buffers such as bicarbonate and citrate), calcium, caffeine, carbohydrates (e.g. quantity, in the presence of other macronutrients, timing - before, after, and/or during exercise), carbohydrate loading, carnitine, chromium, clenbuterol, creatine monohydrate, fat (e.g. fat loading), ephedrine (ephedra, pseudoephedra), fluid replacement (before, after, and/or during exercise), glycerol, human growth hormone (hGH), growth hormone inducing amino acids (ornithine and arginine), nitric oxide, steroids, IGF-1, iron, medium chain triglycerides (MCTs), n-3 and/or n-6 fatty acids, minerals, pre-game meals, protein requirements (e.g. gender differences, endurance vs. strength, untrained vs. trained athlete), vitamins, glucosamine sulfate, different diets (e.g. AHA, Atkins, vegetarian vs. omnivorous, Mediterranean), polyphenols, diet and voluntary activity, etc..

REFERENCING (NO FOOTNOTES)

Please follow these guidelines when you are citing references:

- Cite **original** references when you are reporting facts, results, data, tables, figures, schematics, diagrams etc.. or when you are referring to a hypothesis, mechanism, discovery etc.. made by others. If you do not, then this would constitute plagiarism.

- ***In the text*** (Written Critique and Major Topic Term Paper):

Please use the referencing method followed by The American Journal of Clinical Nutrition (Am J Clin Nutr, www.ajcn.org). **Number the references** in order of appearance. The following is an example extracted from Burke DG, Chilibeck PD, Parise G, Candow DG, Mahoney D, Tarnopolsky M. Effect of creatine and weight training on muscle creatine and performance in vegetarians. Med Sci Sports Exerc 2003;35:1946-55.:

“Ingestion of creatine monohydrate (CM) has been shown to enhance adaptations to resistance training by augmenting changes in lean tissue mass, muscle fiber area, strength, and resistance to fatigue (4, 17, 21, 30-32).”

- ***In the References section:***

Please use the referencing method followed by The American Journal of Clinical Nutrition (Am J Clin Nutr, www.ajcn.org):

A – For articles:

Please indicate authors, title of article, journal name (abbreviated), year of publication, volume, and pages.

Burke DB, Sliver S, Holt LE, Smith-Palmer T, Culligan CJ, Chilibeck PD. The effect of continuous low dose creatine supplementation on force, power, and total work. *Int J Sports Nutr Exerc Metab* 2000;10:235-44.

B – For books/book chapters:

Please indicate author of chapter or book, title of chapter in book (or book if there are no chapters), title of book (if there's a chapter title in the book), editors (if the book was compiled by an editor/editors, if not then the author name should only appear in the beginning of the reference), edition #, company name and location, year of publication, and pages.

Bender DA. Protein nutrition and metabolism. In *Introduction to nutrition and metabolism*. Fourth edition, CRC Press, Boca Raton, FL, 2008, pp. 256-262.

C – For websites:

Please indicate the -1- the institute/author, -2- the complete url of the website, and -3- the date the website was accessed.

Canadian Diabetes Association. http://www.diabetes.ca/Section_About/thefacts.asp, accessed on April 18, 2009.

• ***In PowerPoint presentation:***

References should be cited below the text (to the right hand side) in the following manner:

Option #1: (*Burke et al, Int J Sports Nutr Exerc Metab 2000*)

Option #2: (*Burke et al, Int J Sports Nutr Exerc Metab 2000;10:235-244*)

and for website referencing:

(Can Diabetes Assoc, http://www.diabetes.ca/Section_About/thefacts.asp, April 18, 2007).

• ***Websites:***

Websites can be cited only when they provide factual, scientific data (no referencing of anecdotal, non-scientific websites is allowed). For example, when citing the rate of diabetes in Canada, you can use the information on the Canadian Diabetes Association website, with proper referencing. Proper referencing includes the name of the institution/author, the url of the website page where the information was found, and the date when the student accessed the said website page. For example:

Canadian Diabetes Association, http://www.diabetes.ca/Section_About/thefacts.asp, accessed on April 18, 2009

SUBMITTING ASSIGNMENTS

• ***For the Written Critique and Major Topic Term Paper:***

Submit the written assignment as follows:

A – By email to: - Instructor

B – Hard copy to: - Instructor

C – www.turnitin.com: - Follow the procedure outlined on Moodle (the course website).

• For the PowerPoint presentations and Summary Sheets:

Submit the PowerPoint presentations and summary sheets as follows:

A – By email to: - Instructor; **PRIOR TO** the corresponding presentation

• PDF references for all assignments (PowerPoint presentations, Written Critique and Major Topic Term Paper):

Submit ALL references used in the assignments in PDF format to the instructor by email or on CD.

SUBMITTING ASSIGNMENTS TO TURNITIN.COM

Students are strongly encouraged to submit their written assignments (Written Critique and Major Topic Term Paper) to www.turnitin.com to ensure academic honesty. When submitting to www.turnitin.com, submit the assignments without the references. Please refer to section on “Academic Honesty” above.

For details, please consult the document entitled “HOW TO ENROL IN TURNITIN.COM FOR KINE 4120”, which is already posted on Moodle.

MOODLE@YORK University

This course is found on Moodle under HH/KINE 4120 – Nutritional Aids in Sport and Exercise

To access the central installation of '[Moodle @ York University](http://moodle.yorku.ca/moodle/)' you will need your Passport York ID and password. All students must login to '[Moodle @ York University](http://moodle.yorku.ca/moodle/)' first, then registered students will be automatically added to their registered courses.

Go to <https://moodle.yorku.ca/moodle/>

- * Enter your Passport York ID in the username field
- * Enter your Passport York password in the password field.

For a quick overview of Moodle, go to the homepage of Moodle, under “Students” section you will find a ‘Quickstart Guide’ that will familiarize you with Moodle and its functions.

If you have any questions or need help to guide through the Moodle framework and philosophies, please consult with the computing center.

IMPORTANT COURSE INFORMATION FOR STUDENTS

All students are expected to familiarize themselves with the following information, available on the York University Secretariat webpage (see Policies, Procedures and Regulations)

<http://www.yorku.ca/secretariat/policies/index-policies.html>

- 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