

**HH/KINE 4720 3.0**  
**Secondary Prevention of Heart Disease:**  
**Cardiac Rehabilitation in a Global Context**

**Winter Term 2016**

Prerequisites: HH/NURS 3515 3.00 or HH/KINE2049 or HH/IHST 2100

Location: Stong 218

Class Time: Tuesdays and Thursdays 11:30am-1pm

Course Webpage: [moodle.yorku.ca](http://moodle.yorku.ca)

Throughout the semester, I will be using Moodle to provide you with course/assignment/test information, messages, discussion, etc. It is *your responsibility to consult Moodle* on a regular basis to ensure that you receive all relevant course documentation and information.

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Electronic Communication: [cr4her@gmail.com](mailto:cr4her@gmail.com) (use this email address please or moodle)

Email is great technology when used in moderation. Although you may use email to share comments and concerns not raised in class, email will be reserved primarily for arranging appointments and/or attending to issues that need to be resolved immediately (i.e., cannot wait until the next class).

Consult the course outline prior to emailing, since often the information is there. Emailed queries on material found in the course outline and/or Moodle will NOT be answered. Course material will be reviewed in class only.

Please ensure that email messages are professional, clear and coherent. Avoid instant text messaging terms, inappropriate language, emoticons and poor spelling, punctuation

or grammar. Simply put, if I cannot understand your email, I cannot respond to it. Please see the netiquette guidelines posted on Moodle for more information.

Please include <KINE4720> in the subject line of the email. Every effort will be made to respond to emails within two working days.

Please use Moodle discussion boards to seek information from other students.

Office Hours for in-person Communication: Tuesdays 3-4 pm (please note some exceptions in the schedule below as I do have some research-related travel)

Please come and see me if your query is not brief, and is not suited to an email discussion.

\*If you have a conflict during these scheduled office hours, I am happy to arrange another appointment with you via email. Please do not drop by without arranging an appointment first, as I may be at my University Health Network office, and I have other projects on which I allocate time to complete when I am not teaching.

Expanded Course Description: This course provides an in-depth examination of the prevention and management of cardiovascular disease from a health services and global lens. It is designed to provide an overview of the primary topics in cardiac rehabilitation, and emphasizes both research approaches and application. In addition to learning the content area, the purpose of the course is to promote critical thinking about health services, and expression of ideas through written and oral means.

Class Format: Each class there will generally be a brief formal lecture according to the course schedule as outlined below. The lectures will be interspersed with extensive student discussion of the readings and lecture material, brief videos to exemplify key concepts. Some classes will be delivered by invited speakers, to provide clinical or experiential perspectives on the course content. Powerpoint files of the lecture material can be found on moodle (topic 7). Please note that these files may be updated with more recent material the morning of class as I prepare (apologies in advance for any inconvenience).

Required Readings/Supportive Materials: See PDF articles or links in Moodle (topic 6), which correspond to those listed in the weekly outline below.

Evaluation:

	<b>% of Total Grade</b>	<b>Date Due</b>
Mid-term exam	30%	February 23
Take-home final exam	50%	April 15 noon
Class Participation	20%	March 31

This course is optimized by student participation. Some of the best learning in the course can come from discussion. **Class participation** grades will be based on participation in

class discussion, and observation of the satellite cardiac rehab program in the Track and Field Centre (Tuesdays 9:30-11:00). Each week there are assigned readings, and you can contribute to the class by sharing:

- What did you learn?
- Why is it important?
- How does the material relate to your life?
- What questions do you now have about the topic?

Students can also elect to email the course gmail account with a response to these questions for the readings to earn participation grades. These would have to be *received by 11:30 on Thursdays*.

Please note I realize some students may prefer more of a lecture-style course, however this is more of a seminar-style course. Specifically, this is an upper-year course where critical thinking and discussion is promoted, in accordance with the course learning objectives. I have provided the above questions for students so that you can prepare your comments to contribute to the class discussion.

Part of your class participation is to observe a cardiac rehab program in action (/3)! The University Health Network (UHN) has a satellite cardiac rehab program in the Track and Field Centre on York U's Keele campus (see [http://maps.info.yorku.ca/files/2013/02/KEELE\\_Map\\_Colour.pdf](http://maps.info.yorku.ca/files/2013/02/KEELE_Map_Colour.pdf)). It runs from 9:30-11:30 on Tuesday mornings. A maximum of 4 students can go to observe each week. If you have a course conflict during this time, you may elect to attend during Reading Week. Meet Nina Sieh in Front Area at 9:20 for professionalism and confidentiality review prior to the session start. Students are to observe only. Please dress appropriately. You must review and sign the UHN Observer Confidentiality Agreement and give to Nina before the session to earn your 3 participation marks.

The **mid-term examination** will be held during class time. Questions will be drawn from course readings and weekly lecture material. The format of the exam will consist of 10 short answer essay questions, each worth 5 points. Point form is not acceptable on the midterm examination, to promote writing skills. These questions do require some memorization of course content, but they are constructed to test your knowledge of general course content (i.e., no need to memorize statistics).

Students who miss the mid-term exam for reasons entirely beyond their control **MUST**, within one week of the missed test, submit to the instructor (in my mailbox, or in person during office hours) a written request for special consideration explaining the reason for missing the test, and attach appropriate documentation (i.e, York University medical certificate, death certificate, obituary notice, automobile accident report).

- The Attending Physician's statement in the case of illness can be found on Moodle, or: [http://www.registrar.yorku.ca/pdf/attend\\_physician\\_statement.pdf](http://www.registrar.yorku.ca/pdf/attend_physician_statement.pdf)
- There will be no make-up midterm, but your final examination will be worth 80% of your total grade.

The **final exam** will be a take-home test. The format of the questions will be essay questions which require synthesis and application of course material to promote critical thinking. The content of the exam will cover course material from the entire term.

You will be provided with 5 questions during the last lecture, along with instructions to answer 4 of the 5 questions. In response to the four questions, you may type up to one page each; single-spaced, 12 point font, Times New Roman, at least ¾ inch on all 4 sides of the paper. Ensure your name and student number appears in the header of each page. Commence each page with the question number from the exam. If the final exam does not conform with this format, we will only consider the first half of your written response when marking.

You should integrate content from the lectures and assigned readings only into your answers. Do not incorporate external material. You should cite the readings, or the citations listed in the lectures. Use superscript numbers to ensure you do not use up your page space. You can then include a 5<sup>th</sup> page of references.

Submit your take home exam through Turnitin.com, and submit the originality report with your exam. The class ID is 7490329 and the password is “cardiacrehab” (all one word). Content in parentheses will not be considered as “unoriginal”. It is recommended that you submit your exam to turnitin.com in advance of the deadline, as the option is available for you to see your originality report, and revise your work accordingly until you have an original take-home exam to submit. You may choose not to submit your work through turnitin. If you choose this option, you are required to remit an outline, as well as a first draft of each question, along with your final submission.

Submit your exam and originality report via email to [cr4her@gmail.com](mailto:cr4her@gmail.com) by the deadline. (Note: The KINE Undergraduate Office is **not** an option for handing assignments in.)

Lateness Penalties: If your take home exam is not received by the due date, you will be penalized by 10% for lateness. I specify this out of fairness for the students who remit their work punctually. Each day thereafter which it is not received, you will be penalized a further 10%. If you are ill, provide a completed York University attending physician statement (available on Moodle) and you will not be penalized for lateness, through to the date on the physician statement.

#### Policies: 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 and tests will bear either a letter grade designation or a corresponding number grade (e.g., A+ = 90-100, A = 80-90, B+=75-79, etc.). For a full description of the 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)

Students have up to two weeks from the date of return of their work to query the marking. Students who wish to have their work **re-marked**:

- Write your name, student number, and course number on a piece of paper, and list the question you wish re-examined. Write a minimum of half a page explaining

why your answer deserves a higher grade. This response can include page numbers, quotes from the readings or citations from lectures.

- Bring this paper to my office hours and we will discuss it. Please be advised that your mark may increase, decrease or stay the same. I also reserve the right to review your other course evaluations during our meeting.
- Do not come to my office hours or the TA's office with grade queries without a prepared written argument to support your case.
- Marking queries will not be entertained via email.
- These policies have been put in to place to mitigate unsubstantiated grade increase requests. They are not meant to be unfair to students. The TA does the course grading, and as the Professor, I am happy to consider any substantiated requests.

Unofficial final letter grades will be posted on Moodle at the end of the term. Final course grades may be adjusted to conform to Program or Faculty grades distribution profiles. The TA will hold office hours if you wish to query or review your grading. Please consult Moodle.

#### Other Important Course Information and Policies:

All students are expected to familiarize themselves with the following information, available at: <http://secretariat-policies.info.yorku.ca/>

- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student conduct standards
- Religious observance accommodation
- York's academic honesty policy and procedures / academic integrity website

You are expected to meet York University standards related to academic honesty, including cheating, impersonation, plagiarism, improper research practices, abuse of confidentiality, falsification, or unauthorized modification of an academic record. Accurate referencing is critical. Please be advised that cutting and pasting from a website with no appropriate referencing is considered plagiarism.

York students are required to maintain high standards of academic integrity and are subject to the Senate Policy on Academic Honesty (<http://www.yorku.ca/secretariat/legislation/senate/acadhone.htm>).

There is also an academic integrity website with complete information about academic honesty. Students are expected to review the materials on the Academic Integrity website (<http://www.yorku.ca/academicintegrity>).

#### General Expectations:

I am passionate about cardiac rehab! I will come to class prepared and eager to share what I know about cardiac rehab. I want to have a great time in this class, but that cannot happen if I am the only one who is prepared. I expect that you will come to class on time (and not leave early), participate in class discussions, and learn. I am sure you understand that receiving phone calls (or making them), and reading the newspaper, etc. will not be

tolerated. *To avoid giving into temptation, please leave your laptops, cell phones, and newspapers in your bags.*

### Access/Disability

York provides services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. It is the student's responsibility to register with disability services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs. Failure to make these arrangements may jeopardize your opportunity to receive academic accommodations. Additional information is available at [www.yorku.ca/disabilityservices](http://www.yorku.ca/disabilityservices) or from disability service providers:

- Office for Persons with Disabilities:
  - N108 Ross, 416-736-5140, [www.yorku.ca/opd](http://www.yorku.ca/opd)
- Learning and Psychiatric Disabilities Programs - Counselling & Development Centre:
  - 130 BSB, 416-736-5297, [www.yorku.ca/cdc](http://www.yorku.ca/cdc)

### Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact the Course director immediately. Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete an Examination Accommodation Form, which can be obtained from Student Client Services, Student Services Centre or online at [http://www.registrar.yorku.ca/pdf/exam\\_accommodation.pdf](http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf) (PDF)

### Student/Direction Conduct

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect and to refrain from actions disruptive to such a relationship. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. A statement of the policy and procedures involving disruptive and/or harassing behaviour by students in academic situations is available on the York website <http://www.yorku.ca/secretariat/legislation/senate/harass.htm>

Learning Objectives: After completing this course, students will be able to:

1. Understand and appreciate the dynamic nature of information in cardiac rehabilitation

2. Use appropriate academic terminology and notation when preparing and presenting information
3. Present ideas and arguments in a well-structured and coherent manner using appropriate communication formats
4. Be aware of the limits in knowledge and methodologies when analyzing, evaluating, interpreting and disseminating information
5. Evaluate information about cardiovascular rehabilitation this is disseminated via popular media and discipline-related journal articles
6. Identify areas for personal and professional development
7. Think independently, problem solve and set tasks
8. Have developed mutually-beneficial peer relationships for the purposes of networking and mentoring.

## Tentative Course Schedule / Timetable

### Week 1

Jan 5

*Introductions, Review of syllabus*

*Responsible Student Conduct in the Community*

Readings/Supporting Materials: York University Student Code of Conduct (moodle topic 1); UHN Confidentiality form (moodle topic 2)

Jan 7

*Working as a Kinesiologist in the Cardiac Rehab Setting*

Guest Lecture: Nina Sieh, BSc

*\*attendance will be taken – you can earn 1 participation grade just for showing up!\**

#### Reading:

Core Competencies for Cardiac Rehabilitation/Secondary Prevention Professionals: 2010 Update: Position Statement of the American Association of Cardiovascular and Pulmonary Rehabilitation. Hamm, Larry F.; Sanderson, Bonnie K.; Ades, Philip A.; et al. Journal of Cardiopulmonary Rehabilitation & Prevention. 31(1):2-10, January/February 2011.

### Week 2

Jan 12

**In lieu of class:**

Observation of CR satellite class in York U Track & Field Ctr on a Tuesday morning (sign up for your specific week)

Facilitator: Nina Sieh

Office hours cancelled

Jan 14

*What is Cardiovascular Disease?*

Worksheet: Facts about CVD

#### Reading:

European Guidelines on Cardiovascular Disease Prevention in Clinical Practice. Perk, J et al. 2012. (this is a long reading – let's focus on section 1, 2 and 4.1 through 4.7 this week).

### Week 3

Jan 19, 21

*Treatment of Heart Diseases*

#### Reading:

European Guidelines on Cardiovascular Disease Prevention in Clinical Practice. Perk, J et al. 2012. (other sections).

**Week 4**

Jan 26, 28

*Introduction to Cardiac Rehabilitation*

Reading:

1. Mampuya WM. Cardiac rehabilitation past, present and future: an overview. *Cardiovasc Diagn Ther* 2012;2(1):38-49. DOI: 10.3978/j.issn.2223-3652.2012.01.02
2. [http://www.bacpr.com/resources/8BZ\\_BACPR\\_Standards\\_and\\_Core\\_Components\\_2012.pdf](http://www.bacpr.com/resources/8BZ_BACPR_Standards_and_Core_Components_2012.pdf)

**Week 5**

Feb 2, 4

*Cardiac Rehabilitation – Benefits & Models*

Reading:

*Eur J Prev Cardiol*. Alternative models of cardiac rehabilitation: a systematic review. Clark RA, Conway A, Poulsen V, Keech W, Tirimacco R, Tideman P. 2015; 22(1):35-74

**Week 6**

Feb 9, 11

*Under-Represented Patients in Cardiac Rehabilitation*

Readings:

Valencia, H. et al. (2011). Cardiac rehabilitation in underserved populations. *JCRP*; 31(4), 203-210.

**\*\*\* READING WEEK \*\*\*NO CLASS \*\*\*\* (no office hours)\*\*\***

**Week 7**

Feb 23

MIDTERM

Feb 25

*Cardiac Rehabilitation Practice in a Global Context*

Readings:

Cardiac Rehabilitation Services in Low- and Middle-Income Countries: A Scoping Review. Shanmugasegaram S, Perez-Terzic C, Jiang X, Grace SL. *J Cardiovasc Nurs*. 2013 Jul 8

Turk-Adawi, K., Sarrafzadegan, N., & Grace, S.L. (2014). Global availability of cardiac rehabilitation. *Nature Reviews: Cardiology*, 11: 586-596. October.

**Week 8**

Mar 1, 3

*Mar 6: Understanding and Addressing CR Under-Utilization and Disparities in Access*

Readings:

Eur J Prev Cardiol. 2013 Aug;20(4):692-700. doi: 10.1177/2047487312447846.

Factors influencing referral to cardiac rehabilitation and secondary prevention programs: a systematic review. Clark AM, King-Shier KM, Duncan A, Spaling M, Stone JA, Jaglal S, Angus J.

**Week 9**

Mar 8, 10

*Depression & Psychosocial Issues*

Readings:

[Prog Cardiovasc Dis](#). 2013 May-Jun;55(6):511-23. doi: 10.1016/j.pcad.2013.03.010.

Depression and cardiovascular disease. [Elderon L](#)<sup>1</sup>, [Whooley MA](#)

**Week 10**

Mar 15, 17

*Psychosocial Treatments for Cardiac Patients*

Readings:

[Prog Cardiovasc Dis](#). 2013 May-Jun;55(6):574-81. doi: 10.1016/j.pcad.2013.03.009. A global perspective on psychosocial risk factors for cardiovascular disease. [Neylon A](#)<sup>1</sup>, [Canniffe C](#), [Anand S](#), [Kreatsoulas C](#), [Blake GJ](#), [Sugrue D](#), [McGorrian C](#).

**Week 11**

Mar 29, 31

Wrap Up, Q&A

Take-home exam distribution

THANK YOU FOR YOUR CONTRIBUTIONS TO THE COURSE!