# COURSE OUTLINE HH/KINE 4518.03 THE MOLECULAR LINK BETWEEN OBESITY AND CANCER Fall 2022

**Course Director:** Michael Connor Ph.D.

Office: 423B Life Sciences Building Phone: (416) 736-2100 ext. 77206 E-mail: mconnor@yorku.ca

**Lecture times:** Tuesday (11:30 AM): CC211

Thursday (11:30 AM): ACE007

**Important Dates:** 

October 8-14: Fall Reading Week, No Classes

Tuesday October 18: Mid-term 1

Friday November 11: <u>LAST DAY TO DROP COURSE (NO GRADE)</u>

Tuesday November 22: Mid-term Exam 2

Tuesday December 6: Last class; classes end; Paper due;

LAST DAY TO DROP COURSE (GRADE OF W)

### **COURSE LEARNING OBJECTIVES:**

- 1. Demonstrate a broad, multidisciplinary knowledge of the human body, health (broadly defined), and physical activity throughout life (our lives?)
- 2. Critically evaluate research and information about the human body, health (broadly defined), and physical activity, across different platforms and sources.
- 3. Understand the factors/characteristics that contribute to ethical citizenship and social responsibility and their role in building a healthy community environment
- 4. Communicate ideas and arguments in a well-structured and coherent manner using diverse formats
- 5. Advocate for the fundamentals of physical activity and health of individuals and communities

#### **COURSE DESIGN/GOALS:**

This is a **molecular biology course** and although some basics will be covered, students will be responsible for "catching up" on background information that is expected to be in place. This course is designed to explore the molecular mechanisms behind Cancer and explore the link between obesity and certain types of cancer. We will discuss some of the therapies used to treat Cancer and how knowing the links between obesity and cancer can lead to new and hopefully

successful therapies. Much of the material will represent current work either recently published or currently being undertaken.

One of the goals of this course is to convey the background information on the underlying mechanisms responsible for disease development and progression. In addition, it is expected that students develop the ability to critically evaluate the existing literature in order to be able to analyze published data and begin to formulate their own **UNIQUE** opinions/ideas. Furthermore, upon completion of the course it is hoped that students will be able to better understand how diseases progress and visualize how novel treatments may be developed/implemented in an attempt to eliminate the burden of cancer on society at a social and economical level. The main underlying themes in all components of the course are communication of ideas/thoughts, ability to discuss differing opinions in a "professional" manner and using reliable facts to develop your own thoughts/ideas/expressions. These themes will not only apply to this course material, but will also be important skills to develop for other courses and, more importantly, for real life outside of the course.

#### **Breakdown of Grades**

Mid-term exam 1: 20% (Tuesday October 18)
Mid-term exam 2: 20% (Tuesday November 22)

Paper: 30% Total

- Topic Rationale - 5% (Mon Oct. 3, 11:59 PM, eclass) - Annotated bib. - 5% (Mon Oct 31, 11:59 PM, eclass)

- Paper: 20% (Tuesday December 6 11:59 PM)

Group Debate: <u>20%</u> total

(last 3 classes) - 10% oral debate

- 5% class handout

- 5% participation (peer ratings)

Opinion Paper 1: 5% (Monday December 12, 11:59 PM)
Opinion Paper 2: 5% (Monday December 12, 11:59 PM)

Exam relevant material will consist of all the material covered in lectures and power point slides. It is strongly advised that you attend all lectures. Exams will consist of short answer and essay-type questions. If you miss a midterm exam for a documented medical or other reason, the weighting of the missed exam will be split between the other graded components (not the opinion papers). There will be no make-up for mid-term exams. If you miss both mid-terms you will be required to write a cumulative make-up exam following the exam period. Do not ask to have your grade increased. THE ANSWER IS NO!! Any grade adjustments will be applied to EVERYONE, no special circumstances will be granted. No "extra assignments" will be available for anyone to write. You have 2 exams and 6 other graded components to "prove what kind of student you are". Take advantage of that fact right from the start of the course.

Students that do the best in this course (A+) are the ones that stay engaged/involved. Not only will your grade be much better but you'll take so much more away from the course.

## **Academic Honesty**

Breaches of academic honesty will not be tolerated and punished to the fullest extent of the University regulations. You can view the University policy on academic honesty at <a href="http://www.yorku.ca/academicintegrity/students/index.htm">http://www.yorku.ca/academicintegrity/students/index.htm</a>

Familiarize yourself with proper citation procedures to avoid any issues of plagiarism arising on your paper. You will be required to submit it to Turnitin.com. If you have any questions, ASK just to be sure.