Biochemistry 9535Q
Ethical and Societal Issues in Biochemistry

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Biochemical and Molecular Genetics is having an enormous impact on many aspects of society. As scientists we are excited by these advances, but also recognize that in many instances serious ethical considerations are raised. Often these issues lead to a significant pull-back from society in general. In this course we will discuss topics in which biochemistry/molecular genetics has resulted in societal concerns. We will do so in the form of debates, where both scientific and societal points of view are raised.

The objectives of this course are for you to:

1. Think critically about the impact that biochemistry and molecular genetics is having on society from the perspective of both a scientist and a lay person.
2. Research a topic unrelated to your field of interest.
3. Present verbally and debate an argument.
4. Discuss in written form how society and the media interpret the impact of biotechnology on a topic.

The course will be comprised of six 2-hour sessions. Attendance is compulsory. (A 2 page written review covering the debate topic will be expected, should a session be missed.)

In the first session we will as a group discuss the rules for debating and decide on the topics to be debated. One topic to be debated the following week will be decided on. The topic will be assigned to one student who will moderate the debate.

Role of the moderator: The moderator will present a 20-minute presentation detailing the topic from a scientific perspective. At the end of class the moderator will summarize Affirmative and Negative arguments, separating fact from fiction.

Role of the participants: Each class member will be placed into the Affirmative or Negative side the week before the debate. Each member should research the popular literature (and websites) and scientific literature to uncover arguments that support their perspective. They should also be sufficiently aware of the other side’s argument so that they can refute points raised. At the beginning of class each side will meet for 15 minutes following the moderators summary to refine their arguments and determine the order in which they will be presented.

Rules of the debate: The affirmative group will have 7 minutes to refine the topic and present their opening argument. The negative will have 7 minutes to both refute the first argument of the Affirmative and present their argument. The Affirmative will be given 2 minutes to refute this argument. The debate will then continue in this style with 3 minutes for a new argument and 2 minutes for a rebuttal. Participants will stand when making a point. Points will be addressed to the moderator. No interruptions are allowed. Resource material may be used in the arguments or rebuttals but no additional time will be allocated.

Written assignment: Each student will write an essay of up to 3-pages (not including references) detailing how society and the media view one of the specific debate topics and the rationale for the opinions raised. Counter arguments can be presented if backed by scientific studies. Margins should be 2 cm; font must be 12 point. The essay should be in a form suitable for the lay public. One-third of the mark for the assignment will be on writing style, organization and presentation.

Evaluation:
Presentation as a Moderator: 20%
Summary as a Moderator: 10%
Participation: 40% (20% to be determined by your peers with half of this mark based on the material you present, half will be on the manner you present the argument.)
Debating: 10% The instructors will decide the winner of the debate. 2.5% will then be awarded to each member of the winning side per debate.
Written assignment: 20%
The statement: “Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_grad.pdf

All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

Plagiarism: Students must write their essays and assignments in their own words. Whenever students take an idea or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar).

As part of a successful graduate student experience at Western, we encourage students to make their health and wellness a priority. Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your graduate degree. For example, to support physical activity, all students, as part of their registration, receive membership in Western’s Campus Recreation Centre. Numerous cultural events are offered throughout the year. Please check out the Faculty of Music web page http://www.music.uwo.ca/ and our own McIntosh Gallery http://www.mcintoshgallery.ca/. Information regarding health- and wellness-related services available to students may be found at http://www.health.uwo.ca/

Students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate chair), or other relevant administrators in their unit. Campus mental health resources may be found at http://www.health.uwo.ca/mental_health/resources.html

To help you learn more about mental health, Western has developed an interactive mental health learning module, found here: http://www.health.uwo.ca/mental_health/module.html. This module is 30 minutes in length and provides participants with a basic understanding of mental health issues and of available campus and community resources. Topics include stress, anxiety, depression, suicide and eating disorders. After successful completion of the module, participants receive a certificate confirming their participation.

Helpful Resources @ Western for Graduate Students

Writing Support Centre http://www.sdc.uwo.ca/writing/  SDC’s Learning Skills Services, Rm 4100 WSS, www.sdc.uwo.ca/learning
LS counsellors are ready to help you improve your learning skills. We offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

The Student Success Centre: http://success.uwo.ca/