Biochemistry 9535Q

Ethical and Societal Issues in Biochemistry

September 2016 - 0.25 credits

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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 topics unrelated to your field of interest.
3. Present verbally and debate an argument.
4. Enhance your ability to work in a group.

The course will be comprised of six 2-hour sessions. Attendance is compulsory. (A two-page written review covering the debate topic will be expected, should a session be missed.) In the event of illness or absence for other unexpected reasons, please notify Dr. Brandl and Ms. Green in the Biochemistry office as soon as possible.

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 moderator(s) will also be chosen.

Role of the moderator(s): The moderator(s) will present a 15-minute presentation detailing the topic from a scientific perspective. At the end of class the moderator(s) will summarize Affirmative and Negative arguments, and provide any of their insight based on their analysis.

Role of the participants: Each class member will be placed into the Affirmative or Negative side the week before the debate. The two groups 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 2 minutes following the moderators summary to refine their arguments.

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 present their argument and refute the argument(s) of the Affirmative. The Affirmative will be given 3 minutes to refute this argument. The debate will then continue in this style with 2 minutes for rebuttal. One minute will be allowed when switching between groups. 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. Arguments should be supported by evidence. After four rounds of debate, a 5 minute recess will be called. The negative side will give a two minute closing argument, followed by the affirmative side.

Evaluation:
Presentation as a Moderator: 20%
Summary as a Moderator: 10%
Participation: 40% Determined on a weekly basis by the instructors (8%/wk).
Debating: 30% The instructors will decide the winner of the debate based upon the side with the best support for their argument and the ability to refute the other side’s argument. 4%-6% will then be awarded to each member of the winning side per debate; 4% or less to the losing side.

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/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf).

**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).

For UWO Policy on Accommodation for Medical Illness and a downloadable SMC see: [http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf) [downloadable Student Medical Certificate (SMC): [https://studentservices.uwo.ca/](https://studentservices.uwo.ca/) under the Medical Documentation heading]

Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department.

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/](http://www.music.uwo.ca/), and our own McIntosh Gallery [http://www.mcintoshgallery.ca/](http://www.mcintoshgallery.ca/). Information regarding health- and wellness-related services available to students may be found at [http://www.health.uwo.ca/](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](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](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/](http://www.sdc.uwo.ca/writing/)  **SDC’s Learning Skills Services**, Rm 4100 WSS, [www.sdc.uwo.ca/learning](http://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/](http://success.uwo.ca/)**