BIOETHICS FOR THE LIFE SCIENCES (BIOL 4372)
Course Syllabus W2023

Faculty Information
Dr. Michael Cardinal-Aucoin (he/him)
Professor

Office: OR2008
Phone: (705) 330-4010 x2712
Email: mcardin1@lakeheadu.ca
Office Hours: via Zoom (email to schedule appointment)

Land Acknowledgement
I respectfully acknowledge that Lakehead University campuses are located on the traditional lands of Indigenous Peoples. Lakehead Orillia is located on the traditional territory of the Anishinaabeg. The Anishinaabeg include the Ojibwe, Odawa, and Pottawatomi nations, collectively known as the Three Fires Confederacy. Lakehead University acknowledges the history that many nations hold in the areas around our campuses, and is committed to a relationship with First Nations, Métis, and Inuit Peoples based on the principles of mutual trust, respect, reciprocity, and collaboration in the spirit of reconciliation.

Calendar Description
Bioethics Issues for the Life Sciences. 3-0; 3-0. Contemporary issues in ethical decision-making as related to topical situations in the life sciences will be discussed and deliberated. Particular emphasis is placed on problems surrounding laboratory-based research approaches which are commonly used in biological/biomedical contexts today. Format will be based on student-led discussions debates and case study analysis.
Notes: May only be taken by students who have successfully completed a Biology course with a laboratory component.

General Description
This course examines the ethical considerations and implications of biomedical science research and technology. It is a biology course, not a philosophy course. As such it approaches bioethics from an applied perspective and places ethical discussions in the context of the science being discussed. It begins by presenting a brief overview of the historical development of the field of bioethics along with the major principles that will guide us throughout the rest of the course. The course is designed to explore a wide range of issues that may periodically face those working in the experimental and clinical sciences of biology and biomedical disciplines, within a variety of professional/disciplinary and community contexts. It will cover topics in medical ethics, research ethics, environmental ethics, and animal ethics. The ethical implications of various biotechnologies will also be considered. The course emphasises the importance of producing sound, logical, coherent, and consistent bioethical arguments. Students will have the opportunity to construct and consider bioethical arguments on a range of topics and case studies and from a diversity of perspectives.

Topics Covered

- Brief history of bioethics
- Past and current approaches to bioethics

- What makes a good bioethics argument?
- The 4 Principles Approach to Bioethics (autonomy, justice, beneficence, non-maleficence)
- Humans as Moral Agents:
- What makes Homo sapiens unique?
- Where do morals come from?
- Concepts of 'person'
- Medical Ethics:
- Patient-Physician relationship
- Allocation of scarce resources
- End of Life Issues:
- Defining death
- Proxies and advanced directives
- Assisted dying
- Reproductive Issues:
- The right to reproduce
- When does life begin?
- Rights of the mother and the fetus
- Biomedical Research Ethics:
- Honesty and peer review
- Equipoise
- Placebo
- Ecology and Environmental Ethics:
- Do we have a responsibility to protect the environment?

Course Learning Outcomes

Upon successful completion of this course, the student will have reliably demonstrated the ability to:

- Develop an understanding of the basic principles and approaches of bioethics;
- Appreciate the bioethical consequences and implications of the major biomedical fields including scientific research, healthcare and medicine, use of humans and animals in research, ecology and the environmental, and biotechnology.
- Critically consider multiple sides of a bioethical argument and from different perspectives;
- Produce sound, logical, coherent, and consistent bioethical arguments.

Brightspace
All course information is on the *myCourselink (Brightspace (D2L)*) Lakehead University course shell. Students must have access to the course Brightspace to access assignments, quizzes, lessons, labs, etc.

To log into your course website:

1. Go to https://mycourselink.lakeheadu.ca/d2l/home.
2. Enter your Login/ID (your Lakehead University e-mail username) and your Password/PIN number.
3. Click on the course title to enter the course.

If you encounter any difficulties logging into the course site, please contact: mycourselink@lakeheadu.ca.

Textbook
There is no textbook for this course. Readings will be provided via the course Brightspace page.

Class Schedule

Lecture	Mondays and Wednesdays	5:30-7:00pm	OA2020/AT5041 and via Zoom
No classes on:	Monday, Feb. 20 to Friday, Feb. 24, 2023 (Study Week) Wednesday, April 12 to Thursday, April 13, 2023 (Exam Preparation Days) Friday, April 14 and Monday, April 24, 2023		

Exam Period runs Friday April 14, 2023 to Monday, April 24, 2023 (Includes two weekends) with Tuesday, April 25, 2023 as a contingency date. This course will have an assigned time period for an exam. Further details to be released.

- This course will be offered remotely in a hybrid synchronous/asynchronous format. We will generally meet "in-person" or via Zoom every Monday. Wednesdays will usually be reserved for independent work or guest lectures.
- Independent work, including readings, assignments, and discussions, will be assigned to be completed at your leisure.
- A **course schedule** will be provided separately including readings and assignment due dates.

Grading Scheme and Dates

Component		Value
Term tests	Midterm (Feb. 8) Final (TBD, during exam period)	= 25% = 25% **= 50%**
Assignments	Details provided at a later date	**= 25%**
Term project	Current ethical issues	**= 15%**
Discussions	Online discussion forums	**= 5%**
Q-focus Journal	Bi-weekly reflections	**= 5%**
Total		**= 100%**

Exam and Assignment Policies

Term Test Policies: Term tests will consist of a variety of question types including multiple choice, mix-and-match, true/false, diagrams, and short answer. Term tests are non-cumulative, but it should be understood that material covered prior to the test may be included indirectly if it is essential to the understanding of the topics being tested. All term tests will be written online via the course Brightspace page. More detailed instructions will be provided.

A student who misses a term test will receive a zero. Exceptions to this policy may be granted at the discretion of the course director if either a medical or family emergency occurs and documentation is provided. Failure to make contact within 48 hrs. will result in a forfeiture of any opportunity to do a re-write. In the event of a missed term exam the value of the exam will be redistributed to the next term test.

Assignment Due Date Policies
Assignment due dates are indicated in the course schedule and on the course Brightspace page. Assignments submitted past the due date will be deducted 10% each day for 5 days after which the student will receive a grade of 0%. Exceptions to this policy may be granted at the discretion of the course director if either a medical or family emergency occurs and documentation is provided. It is your responsibility to contact the course director.

No Extra Credit: There is no possibility of **extra credit** (i.e. doing extra work if you did not do well on something) to increase your mark either during the term or after the final exam. Anyone receiving a final course grade of 49% will **automatically** have their final exam re-graded.

Learning Environment

Everyone learns more effectively in a respectful, safe, and equitable learning environment free from discrimination or harassment. I invite you to work with me to create a classroom space—both real and virtual—that fosters and promotes values of human dignity, equity, non-discrimination and respect for diversity. These values and practices are in accord with the Lakehead University Equity, Diversity, and Inclusion Plan 2019-2024, which can be found at https://www.lakeheadu.ca/faculty-and-staff/departments/services/human-rights-and-equity/edi-action-plan-2019-2024. Please feel free to discuss with me any questions or concerns you have about equity in our classroom or in the Lakehead community. If I cannot answer your questions or help you address your concerns, I encourage you to contact the Office of Human Rights and Equity at humanrights@lakeheadu.ca or visit their contact page (https://www.lakeheadu.ca/faculty-and-staff/departments/services/human-rights-and-equity/contact).

Behaviour and Conduct

- Students are expected to ensure that the classroom and laboratory learning environments are inclusive, respectful, peaceful, and safe.
- Interactions and relationships with instructors and other students (in person, online, in email, etc.) within the academic context should be professional and characterized by integrity, courtesy and mutual respect.
- Lectures should be interactive - please get engaged in the material and ask as well as answer questions!
- I fully encourage a reduction in the use of paper but if you bring your laptop to take notes, please refrain from using the internet in class (otherwise you will be banned from bringing your computer).
- Please be considerate in lectures and refrain from talking as it will disturb the learning environment.
- For your benefit and the benefit of students around you, turn your phone off to ensure it does not ring during lecture and to avoid the urge to text or you may be asked to leave the lecture hall.
- Students are expected to attend all lectures and labs.
- Recording devices of any kind are not permitted to be used in lectures.

Email Policies and Etiquette

I will try to respond to email within two working days, but this is not always possible as there are many students and only 1 professor. I may also answer your question in the next class meeting if appropriate. Questions and answers that I deem of interest to the entire class may be posted (anonymously) on Brightspace or sent via course announcements if urgent. Emails that do not meet the requirements below will not be answered:

- Use your @lakeheadu.ca or @georgiancollege.ca email address when emailing instructors and others within the university. Email from other sources may be filtered out and not reach the intended recipient.
- SUBJECT LINE - Include the course code, and a brief indication of topic.
- Lecture email example: BIOL 3250 – question regarding plasma membranes
- Lab email example: BIOL 3250 Tuesday am – missed lab 2 because of illness.
- Include your NAME and STUDENT NUMBER at the end of each email. I work with many students and this facilitates my ability to help you.

- Remember, you are in a professional environment and thus all your written correspondence, including emails, should be professional. This means full sentences, proper grammar, NO text message lingo.
- Before emailing the instructor, consider the nature of your question and whether another resource should be consulted first. For example, lab-related queries should be directed to the Lab Instructors.

Accessible Learning

The University is committed to principles of respect, inclusion, and equality of all persons. The University provides services for students with disabilities (including physical, medical, learning, and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. For access to the resources and services available at Lakehead visit: https://www.lakeheadu.ca/students/student-life/student-services/accessibility/. Students requiring accommodation are asked to register by contacting Alisia Johnston, the Accessibility and Academic Skills Advisor for the Orillia Campus, at oraccess@lakeheadu.ca. ***Students are encouraged to contact their professor to discuss accommodation needs or any way in which they can help you succeed.***

Academic and Student Code of Conduct Policies

- Academic and student policies and procedures for those enrolled in the Lakehead-Georgian programs can be found on the Lakehead-Georgian Student Portal.
- All Lakehead-Georgian programs will follow the Lakehead Regulations as list in the Lakehead University Academic Calendar (http://csdc.lakeheadu.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&loaduseredits=False).The University Regulations include but are not limited to Registration, Examinations, Reappraisals and Academic Appeals, Special Examinations, Academic Misconduct, Withdrawal, and Timely Feedback. Additional Faculty Regulations may also apply. Please review the Academic Calendar.
- The Lakehead University Student Code of Conduct - Academic Integrity (https://www.lakeheadu.ca/students/student-life/student-conduct) will apply to all Lakehead-Georgian students regardless of campus of study.
- The Lakehead University Student Code of Conduct - Appeals (https://www.lakeheadu.ca/students/student-life/student-conduct) will apply to all Lakehead-Georgian students regardless of campus of study.
- The Georgian College Student Code of Conduct (http://www.georgiancollege.ca/student-code-of-conduct/) will apply to the Lakehead-Georgian students studying at the Barrie campus. Additional campus policies of Sexual Violence Procedure and Protocol (https://www.georgiancollege.ca/about-georgian/campus-safety-services/tab/sexual-violence), Alcohol, Drugs and Tobacco (https://www.georgiancollege.ca/about-georgian/campus-safety-services/tab/alcohol-drugs-and-tobacco), and Information Technology Acceptable Use Procedure (http://www.georgiancollege.ca/wp-content/uploads/2-117IT-acceptable-use.pdf) also apply.
- The Lakehead University Student Code of Conduct – Non-Academic (https://www.lakeheadu.ca/students/student-life/student-conduct) will apply to the Lakehead-Georgian students studying at the Orillia campus.

Plagiarism and Academic Dishonesty

A breach of Academic Integrity is a serious offence. The principle of Academic Integrity, particularly of doing one's own work, documenting properly (including use of quotation marks, appropriate paraphrasing and referencing/citation), collaborating appropriately, and avoiding misrepresentation, is a core principle in university study. Students should view the Student Code of Conduct -Academic Integrity (https://www.lakeheadu.ca/students/student-life/student-conduct) for a full description of academic offences, procedures when Academic Integrity breaches are suspected and sanctions for breaches of Academic Integrity.

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