

Welcome to IS 100

Unless you have either the prerequisites for this course or written special permission from your Dean to enroll in it, you will be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

All course material will be posted to OWL: <http://owl.uwo.ca>. Students should check OWL (<http://owl.uwo.ca>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class. Students are responsible for checking OWL on a regular basis. If students need assistance, they can seek support on the OWL Help page or contact the Western Technology Services Helpdesk (519)-661-3800 ext. 83800.

OWL will be used for the following:

- Announcements
- Posting lecture slides
- Submitting work and discussion
- Accessing course component grades

Textbooks:

- 1) *The Structure of Scientific Revolutions* by Thomas S Kuhn with an introductory essay by Ian Hacking (Chicago; 4th edition – the 50th anniversary edition), ISBN: 978-0-226-45812-0 (used in first term)
- 2) *Science, Culture, and Society: Understanding Science in the 21st Century* by Mark Erickson (Polity Press; 2nd edition), ISBN: 978-0745-66225-1 (used in second term)

Please note that these textbooks are required for participating in the in-class discussions and assignments. Both textbooks are available in hard copy through the Western Bookstore. Electronic copies are also available for order online using the link:

<https://press.uchicago.edu/ucp/books/book/chicago/S/bo13179781.html>

This discussion course foc

In the first term, we will be using Kuhn (4th Ed) to address the following basic questions:

What is the scientific process?

What is the definition of a scientific paradigm?

What is a paradigm shift?

Are scientific revolutions related to political and social change?

In the second term, we will be using Erickson (2nd Ed) to discuss scientific concepts in culture and society from a sociological perspective. Students will develop the critical scientific literacy skills as they navigate through academic databases, historical material, and grey literature.

The overall learning outcomes for the course are as follows:

Define a scientific paradigm and explain the scientific process.

To pass the course, you need to obtain an overall course grade of at least 50%. The grades for each assessment will be posted to the OWL course page regularly. It is your responsibility to check these marks regularly. Any errors or requests for appeals to your grades must be reported to your instructor within two weeks of the posting of a grade item.

There are seven classes per term. You are expected to attend and participate in every class. You may miss one class during the year without penalty with the exception of the classes scheduled for presentations (group presentations for term 1 and poster presentations for term 2). If you miss more than one class, you must provide valid medical or other supporting documentation to the academic counselling office of the Faculty of Science within five days of the missed class. The scientific discussions and engagement grade is worth a total of 18 % and is based on completing these criteria:

1. Attendance of the entire class (3% - 1.5% for attendance for each term)
2. Pre-Class Online Readings Discussion (15% - 1.5% for each discussion post). There is a total of 10 online discussions throughout the year and each discussion is worth a total of 9 marks and will consist of the following:
 - a. Post a short (200 – 300 word) discussion (summary + reflection) of the required readings to the OWL discussion forum.
 - b. Respond to at least 3 posts from your fellow classmates

Each online discussion will be graded according to the following rubric:

	Poor	Good	Excellent
Summary and References	Discussion post summarizes the readings on a surface level. <i>1 mark</i>	Discussion post summarizes readings but does not include specific references/quotes from the text. <i>2 marks</i>	Discussion post thoughtfully summarizes readings and integrates specific references/quotes from the text using APA format. <i>3 marks</i>
Reflection	Discussion post does not include a reflective component. <i>0 mark</i>	Discussion post includes a basic reflective component. <i>1 mark</i>	Discussion post makes insightful connections between the readings and life/ society/ science experience/ in-class discussions/ future career/ history/ politics/ etc. <i>2 marks</i>
Length	Discussion post does not meet length requirement of 200 – 300 words <i>0 marks</i>		Discussion post meets length requirement of 200 – 300 words <i>1 mark</i>

Replies	1 reply <i>1 mark</i>	2 replies <i>2 marks</i>	3 replies <i>3 marks</i>
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Students must submit their summary electronically to the OWL discussion **two days before the scheduled class at noon** (i.e. before 12 pm on the Monday before the Wednesday class). Each summary will be peer reviewed by other members in the class.

Term 1 scientific revolutions oral presentation

Each group will prepare an oral presentation using PowerPoint or any other presentation tool. You will have 12 minutes to present your summary and an additional 3 minutes to answer questions at the end of the presentation. All groups are required to upload their presentation to the OWL assignment folder 48 hours before the presentation date. See section 20 for in-class presentation date.

Term 2 science and society poster presentation

Each group will present a poster (either a digital or physical version). Your instructors will provide you with more information on the presentation including topics and selection deadlines.

You will write two essays throughout the year (one per term). Each assignment will be based on your presentation in the term. You may work collaboratively with your group members on your research; however, you must write your assignments individually. Each written assignment is worth 12% and consists of two components – an essay overview (~100 words) and the complete essay (1000-1500 words), which must be submitted by the deadlines outlined in section 20. The peer feedback for the essay overview is due one week after the essay overview deadline. The rubric below will be used to evaluate your written assignments.

	Poor	Fair	Good	Excellent
Ideas and relation to textbook	Ideas do not relate to textbook <i>1 mark</i>	Ideas relate to course readings but no new connections are presented <i>2 marks</i>	Ideas relate to course readings and new connections are presented <i>3 marks</i>	Ideas relate to course readings and new connections are presented in an insightful, rich discussion <i>4 marks</i>
Connection to presentation topic and impact on wider society	Ideas do not connect to presentation topic and impact on society is not discussed <i>1 mark</i>	Ideas somewhat connect to presentation topic but impact on society is not discussed <i>2 marks</i>	Ideas connect to presentation topic and impact on society is discussed <i>3 marks</i>	Ideas strongly connect to presentation topic and impact on society is explored in a deep and thoughtful way. <i>4 marks</i>
Organization of main ideas/ arguments	Contains irrelevant material, is disorganized, or inconsistent <i>1 mark</i>	Appropriate ideas/ arguments are included, but not communicated in an organized or consistent fashion <i>2 marks</i>		

Essay Overview	No essay overview submission nor peer feedback given <i>0 marks</i>	Submission of overview or peer feedback is incomplete <i>0.5 marks</i>	Submission explains main ideas of essay OR peer feedback provided to 3 peers <i>1 mark</i>	Submission explains main ideas of essay AND peer feedback is provided to 3 peers. <i>2 marks</i>
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Please note that all written assignments may be subject to submission for textual similarity review to the commercial plagiarism detection software Turnitin under licence to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the

Presentations – If you anticipate missing your presentation, it is your responsibility to inform your presentation group members and the instructors at least 24 hours before your presentation date. Academic consideration is required to book a make-up presentation date.

Written Assignments – Academic consideration is required in order to receive an extension on your written assignment. If you have academic consideration via an SRA (self-reported absence) for a late assignment, your new due date will be 24-h after your 48-h SRA. It is your responsibility to submit your assignment according to your revised due date.

University policy on missed course work:

1. If you are unable to meet a course requirement due to illness or other serious circumstances, you must seek approval for the absence as soon as possible. Approval can be granted either through a self-reporting of absence or via the Dean's Office/Academic Counselling unit of your Home Faculty. If you are a Science student, the Academic Counselling Office of the Faculty of Science is located in NCB 280, and can be contacted at scibmsac@uwo.ca
2. For further information, please contact the university's policy on absences - https://www.uwo.ca/sci/counselling/procedures/academic_consideration_for_absences
3. It is the student's responsibility to make alternative arrangements with their instructor once the accommodation has been approved and the instructor has been informed.
4. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the academic counselling office immediately.

Violations of academic integrity are taken very seriously. Carelessness or ignorance is not a defense for violations of academic integrity. The University policy on cheating plagiarism, or other scholastic offenses can be found by accessing the link.

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

Scholastic offenses include but are not limited to cheating on a test or exam, plagiarizing a course assignment, and copying information from websites or textbooks without referencing the appropriate sources. A student who is caught cheating or committing any other violation of academic integrity will result in a mark of zero for that grade item and may be subject to further academic penalty, which may include expulsion from the program.

The classes in this course are intended to provide you with an opportunity to learn in a safe and inclusive environment. Both the instructors and students have a collective responsibility to establish a safe classroom. **Due to the COVID-19 pandemic, everyone will be required to wear a mask at all times in the classroom.** Other classroom policies:

Limiting your conversations to those essential to the course content

Arriving to class on time

Switching off

Not leaving during classes unless it is an emergency. Please inform the instructors at the start of class if you have to leave the class early

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Consideration_for_absences.pdf

For the Student Medical Certificate (SMC), see:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

Masking Guidelines

Students will be expected to wear triple layer, non-medical, paper masks at all times in the classroom as per University policy and public health directives. Students who are unable to wear a mask must seek formal accommodation through Western Accessible Education, and present medical documentation. Students are not permitted to eat or drink while in class to ensure masks stay in place. Students will be able to eat and drink outside of the classroom during scheduled breaks. Students unwilling to wear a mask as stipulated by Western policy and public health directives will be referred to the Dean, and such actions will be considered a violation of the student Code of Conduct.

Course Absences due to Daily COVID Screening Questionnaire:

Missed assessments (e.g., presentations, essays, quizzes, tests, midterms, etc.) require formal academic considerations (typically self-reported absences and/or academic counselling). Methods for dealing with missed work and course content are at the discretion of the instructor(s). Students should be aware that some learning outcomes cannot be easily made up and may need to be completed in a subsequent year. Your instructor will provide you with further information as to how this applies within this course. Students who demonstrate a pattern of routinely missing coursework due to self-reported COVID symptoms, and therefore do not demonstrate mastery of the learning outcomes of the course, will not receive credit for the course.

Religious Accommodation

Students should consult the University's list of recognized religious holidays, and should give reasonable

Contingency plan for an in-person class pivoting to 100% online learning

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any remaining assessments will also be conducted online as determined by the course instructors.

needed for a more comprehensive understanding of science. Issues of diversity in science will be discussed from time to time throughout this course. Furthermore, we strive to create a learning environment for everyone that supports equity, diversity, and inclusion. Please let us know if you any suggestions to help achieve an inclusive classroom.

Student feedback is an important aspect of establishing a positive learning environment. Please feel free to provide feedback to your instructors in-person, email, or through OWL. Your feedback is welcomed and will remain confidential.

Below is a tentative schedule of the topics covered throughout the year.

Class	Date	Topic	Assigned Readings	*Assessment
1	Sept 8 th	Introduction to the course and WISc mentors Discussion of big revolutions in science Assignment of group projects		
2	Sept 22 nd	Scientific literacy skills: Writing Skills (Paul Schmidt – Writing Support Centre) Discussion of preface and Ch 1 -2	Kuhn: preface, Ch 1 -2	
3	Oct 6 th	Scientific literacy skills: Finding and evaluating scientific information (Western Libraries) Paul Weigert (Visiting Speaker from Physics) Discussion on Ch 3 -5	Kuhn: Ch 3 -5	
4	Oct 20 th	Scientific literacy skills: Citation and References (Western Libraries) Discussion of term paper Discussion on Ch 6 -8	Kuhn: Ch 6 -8	
Fall Reading week (Nov 1 st - 7 th no classes)				

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Nov
24th

Scientific revolution presentations

No required
reading