1 Course Details

1.1 Calendar Description

Through a series of historical and/or current case studies, this course introduces students to the ways in which social forces interact with inquiry. Students learn how to locate, present and critically evaluate evidence. This course also introduces students to the importance of good academic conduct and accountability in their work.

Equates: ASCI*1000
Restrictions: Registration in the BAS degree program.

1.2 Course Description

Divided into four thematic areas, this course is an introduction into the social, political, and cultural dimensions of science and technology in our world. In the 21st century we are quite literally “surrounded by science”. Science, and the technology that grows out of it, enter into all aspects of our lives: food, transportation, communication, health, entertainment, all the human-made physical objects that surround us, our understanding of the world, and many more areas. We will exam a number of ‘cases’ which will assist in understanding science as a human activity with all the consequences that this entails. We will also consider science as a human activity that has shaped and been shaped by particular individuals and their circumstances, as well as by larger social and cultural contexts. Science impacts the world, and the world impacts science. The main historical focus of the course will be post 1900.

1.3 Timetable

Lectures: Mon, Wed 10:30am – 11:20 am, ALEX 100

Timetable is subject to change. Please see WebAdvisor for the latest information.

Seminars: You must attend the seminar section in which you are registered
Section 0101 – Fri 3:30pm - 4:20pm, ANNU 306 - Joshua Grant-Young
Section 0102 – Tues 8:30am - 9:20am, MINS 101 - Malissa Bryan
1.4 Final Exam

FINAL EXAM: 5 December 2019, 7:00 - 9:00pm, Location TBA

Exam time and location is subject to change. Please see WebAdvisor for the latest information.

2 Instructional Support

3 Learning Resources

3.1 Required Resources

Required Textbooks (Textbook)


- A copy of each of these three books has been placed on Course Reserve. They are to be found in the McLaughlin Library Reserve Collection.

- Thomas R. Klassen and John A. Dwyer, How to Succeed at University (and Get a Great Job!) UBC Press, 2015 (This is a free ebook [pdf]. It is available on the Asci 1110 CourseLink website).

- Other texts are available on the Asci 1110 CourseLink (CL) website.

4 Learning Outcomes
4.1 Course Learning Outcomes
By the end of this course, you should be able to:
1. recognize ways in which social forces have interacted with science, technology, and industry
   1. locate, present, and critically evaluate evidence
   1. practice good academic conduct and accountability
   1. demonstrate self-awareness and engaged citizenship
   1. practice collaborative learning
   1. demonstrate proficiency in written and oral communication

5 Teaching and Learning Activities

5.1 Lecture

Week 1
Topics:
Sept 9 Introduction

Week 1
Topics:
Sept 11 Discovery of the Structure and Role of DNA
   Film: The Secret of Photo 51
   Start Reading: The Immortal Life of Henrietta Lacks

Week 2
Topics:
Sept 16 What is Science I
   Finish film: The Secret of Photo 51
   For next class read: "What is Science?" (20p),
   Mark Brake Text on CL
   Continue reading: The Immortal Life of Henrietta Lacks
### Week 2
**Topics:**

<table>
<thead>
<tr>
<th>Date</th>
<th>What is Science? II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 18</td>
<td>Discussion: Film and Readings</td>
</tr>
<tr>
<td></td>
<td>Continue reading: Henrietta Lacks</td>
</tr>
</tbody>
</table>

### Week 3
**Topics:**

<table>
<thead>
<tr>
<th>Date</th>
<th>What is Science III?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 23</td>
<td>BBC Film on Lacks, The Way of all Flesh (58 min)</td>
</tr>
<tr>
<td></td>
<td>Continue reading The Immortal Life</td>
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</tbody>
</table>

### Week 3
**Topics:**

<table>
<thead>
<tr>
<th>Date</th>
<th>What is Science IV?</th>
<th>First Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 25</td>
<td>Source material for this section:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Photo 51, Immortal Life, Way of all flesh</td>
<td>Piece due Sept 27</td>
</tr>
</tbody>
</table>

### Week 4
**Topics:**

<table>
<thead>
<tr>
<th>Date</th>
<th>What is Science V?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept 30</td>
<td>Start reading Michael Frayn, Copenhagen</td>
</tr>
</tbody>
</table>
Week 4
Topics: October 2 The Atomic Age and the Manhattan Project
Film: J. Robert Oppenheimer (20 min)
Continue reading Frayn, Copenhagen

Week 5
Topics: October 7 The Manhattan Project

Week 5
Topics: October 9 Atomic Energy and Atomic Weapons
First Assignment Due Oct 11
Frayn, Copenhagen

Week 6
Topics: October 14 + 15 Fall Break

Week 6
Topics: October 16 Writing Centre Workshop
Week 7

Topics:          October 21         TBA
                Copenhagen

Week 7
Topics:          October 23         The Case of Fritz Haber
                Film: Fritz Haber: The Giver and Taker Away
                    (20 min)

Week 8
Topics:          October 28         TBA

Week 8
Topics:          October 30         In Class Mid-Term

Week 9
Topics:          November 4         The Rise of Environmentalism
                Earthrise (Apollo 8, 1968)
                Rachel Carson, Silent Spring (1962); short
Week 9
Topics: November 6
Chernobyl (1986)
Film: 20 min

Week 10
Topics: November 11
Rachel Carson and Chernobyl

Week 10
Topics: November 13
Environmental Activism
Grenpiece, Greta Thunberg, Green Parties,
Inconvenient Truth, Al Gore

Week 11
Topics: November 18
Science in/and out of the Classroom
Film: Surrounded by Science (10 min)

Week 11
Topics: November 20
Science Fiction
Start reading Redniss, Radioactive: Marie and Pierre Curie
**Week 12**

Topics:  
November 25  Science in Fiction  
Keep reading Redniss book

**Week 12**

Topics:  
November 27  Marie Curie: A Life in Science  
Redniss: Radioactive

**Week 13**

Topics:  
November 29  Science as a human activity--  
Make up class for Oct 14  
Second Assignment due on Dec 2  
Review of term  
Final Reflection due Nov 29

**5.2 Seminar**

**Week 1**

Topics:  
Sept 9 - How to get the most out of this course, the BAS, and your university experience  
Klassen and Dwyer, Chapters 1 & 5  
Asci 1110 Booklet
Week 2

Topics:

Sept
16 - What is Academic Integrity?
20

Week 3

Topics:

Sept 23 - How to find sources, how to evaluate sources?
27

Klassen and Dwyer, Chapters 4 & 6

Take note of the Ten Golden Rules at:

https://academicintegrity.uoguelph.ca/academic-integrity/ten-golden-rules-academic-integrity

Week 4

Topics:

Sept 30 - Oct 4 Effective Writing

Klassen and Dwyer, Chapter 3

Week 5

Topics:

Oct 7 - 11 Oral Communication

Klassen and Dwyer, Chapters 2 & 10

Week 6

Topics:

Oct 14 - 18 No Seminar this week
Week 7
Topics: Oct 21 - Presentation of Topics for Assignment #2 to Editorial Board 1

Week 8
Topics: Oct 28 - Presentation of Topics for Assignment #2 to Editorial Board 2

Week 9
Topics: Nov 4 - Presentation of Topics for Assignment #2 to Editorial Board 3

Week 10
Topics: Nov 11 - 14 How to Peer Edit

Week 11
Topics: Nov 18 - 22 Peer-Editing Session
6 Assessments

6.1 Assessment Details

Assignment #1 (10%)
Due: Wed, Oct 9

Assignment #2 (20%)
Due: Thu, Nov 28

Seminar Participation (25%)

Reflection Exercise #1 (5%)
Date: Wed, Sep 25

Reflection Exercise #2 (5%)
Due: Fri, Nov 29

Mid-Term Examination (10%)
Date: Wed, Oct 30, 10:30 AM - 11:20 AM

Final Examination (25%)
Date: Thu, Dec 5, 7:00 PM - 9:00 PM

7 Course Statements

7.1 Late Policy

All assignments are to be submitted to the appropriate Dropbox by the due date indicated in the Course Outline. Students must request permission from the Instructor for a late submission. Permission for late submission is not automatic. A late penalty of 3% per day will be applied in all cases.

7.2 Use of Turnitin in this Course
This course uses Turnitin (integrated with the CourseLink Dropbox tool) to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to maintain academic integrity at the University of Guelph. All submitted assignments will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

A major benefit of using Turnitin is that students will be able to educate and empower themselves in preventing academic misconduct. In this course, you may screen your own assignments through Turnitin as many times as you wish before the due date. You will be able to see and print reports that show you exactly where you have properly and improperly referenced the outside sources and materials in your assignment.

### 7.3 Use of Electronic Devices

### 8 University Statements

#### 8.1 Email Communication

As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

#### 8.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals  
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Graduate Calendar - Grounds for Academic Consideration  
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions  
https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml

#### 8.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses  
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml
8.4 Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

8.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance and not later than the 40th Class Day.

For Guelph students, information can be found on the SAS website https://www.uoguelph.ca/sas

For Ridgetown students, information can be found on the Ridgetown SAS website https://www.ridgetownc.com/services/accessibilityservices.cfm

8.6 Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community-faculty, staff, and students-to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before
submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Undergraduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml

Graduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

8.7 Recording of Materials

Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

8.8 Resources

The Academic Calendars are the source of information about the University of Guelph’s procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars
https://www.uoguelph.ca/academics/calendars