NOTE to prospective students: This syllabus is intended to provide students who are considering taking this course an idea of what they will be learning. A more detailed syllabus will be available on the course site for enrolled students and may be more current than this sample syllabus. Summer term courses may be accelerated – please check the Ecampus Schedule of Classes for more information.

HST 419
Studies In Scientific Controversy: Methods and Practices– 4 credits

COURSE CREDIT:

(4) This course combines approximately 120 hours of instruction, online activities, and assignments for 4 credits.

PREREQUISITES, CO-REQUISITES AND ENFORCED PREREQUISITES:

COURSE DESCRIPTION:

HSTS 419. STUDIES IN SCIENTIFIC CONTROVERSY: METHODS AND PRACTICES (4).
Course focuses on accounts of scientific discoveries that have been controversial, to understand the rational, psychological, and social characteristics which have defined the meaning and procedures of the natural sciences. Case studies are used from the 18th through 20th centuries.
(H) (SS) (Bacc Core Course) (Writing Intensive Course)

Baccalaureate Core Course Attributes: Core, Synth, Sci/Tech/Soc, Skills, WIC, Liberal Arts Humanities Core, Liberal Arts Social Core

CONTACT INFORMATION:

For more information, contact: Mason Tattersall: tattersm@onid.orst.edu

This course is offered through Oregon State University Extended Campus. For more information, contact:
Web: ecampus.oregonstate.edu Email: ecampus@oregonstate.edu Telephone: 800-667-1465
Sample syllabi may not have the most up-to-date information. For accuracy, please check the ECampus Schedule of Classes to see the most current instructor information. You can search for contact information by name from the OSU Home Page.

LEARNING RESOURCES:

- All course materials will be available through the course page on Canvas.

NOTE: For textbook accuracy, please always check the textbook list at the OSU Bookstore website. Sample syllabi may not have the most up-to-date information.

Students can also click the ‘OSU Beaver Store’ link associated with the course information in the ECampus schedule of classes for course textbook information and ordering.

COURSE SPECIFIC MEASURABLE STUDENT LEARNING OUTCOMES:

Students will be able to:
1. Identify the ways in which scientific ideas have become controversial among scientists and laypersons.
2. Assess the implications of scientific ideas in scientific practice and in society at large.
3. Analyze relationships among science, technology, and society using critical perspectives or examples from historical, political, or economic disciplines.
4. Analyze the role of science and technology in shaping diverse fields of study over time.

Writing Intensive Courses (WIC)
1. Develop and articulate content knowledge and critical thinking in the discipline through frequent practice of informal and formal writing.
2. Demonstrate knowledge/understanding of audience expectations, genres, and conventions appropriate to communicating in the discipline.
3. Demonstrate the ability to compose a document of at least 2000 words through multiple aspects of writing, including brainstorming, drafting, using
sources appropriately, and revising comprehensively after receiving feedback on a draft.

Science, Technology, and Society

1. Analyze relationships among science, technology, and society using critical perspectives or examples from historical, political, or economic disciplines.
2. Analyze the role of science and technology in shaping diverse fields of study over time.
3. Articulate in writing a critical perspective on issues involving science, technology, and society using evidence as support.

COURSE CONTENT AND POLICIES:

Format: You are expected to login and complete coursework each week.

Written assignments: There are a number of written assignments that will be due throughout the term including a 8-10 page term paper (draft due in week 7, final version due at the end of week 9), three 1-2 page "long responses,” and a peer review. In addition to these you will be required to contribute to the weekly forum discussion and answer the questions posed there. (See below for further details on each assignment.)

Weekly Forum Response Guidelines:

10 total, worth 20% of your final grade

The weekly forum responses take the place of class discussion. In each week’s forum you will be expected to analyze and comment on the weekly readings, share your insights, and respond to your fellow students comments (you will be expected to comment on at least two of your peers’ responses each week). In each week’s discussion forum you will find a question to answer. Use the weekly readings as your material to form a thoughtful 1-page (2-3 paragraphs, or 250 words [or more, of course!] ) answer.

Long Responses:

1-2 pages each (5% each – 3 total, worth 15% of your final grade)

The goals of the Long Responses are summary and analysis. This means that you will have to quickly summarize the main argument(s) of the readings and think about and comment on such issues as the significance, context, and
meaning of the readings –what are the broader issues, what seems to be the intent behind this document, what other texts does it seem to relate to, etc. will be the type of questions you will need to answer. You should also point out any weaknesses that you see in the readings’ arguments and offer a critique. Do not merely summarize what you have read. This will be discussed further in the first Long Response prompt in Week 2.

Midterm Exam: The midterm exam will be in the form of a “take-home” essay that deals with the broader themes of the first half of the class. You will be given an essay question to answer in 2-3 pages, using the course readings as your material.

Final Exam: As with the midterm, the final exam will be in the form of a “take home” essay that deals with the broader themes of the course as a whole. You will be given an essay question to answer in 2-3 pages, using the course readings as your material.

The Essay:

(8-10 pages)
First draft due Week 7
Final version due at the end of Week 9
The draft is worth 5% of your final grade.
This final version of your essay is worth 30 % of your final grade.

For your essay you must pick one scientific controversy from the 19th or 20th century (you may pick a controversy not covered in class) and write an 8 to 10 page paper that gives an historical account of this controversy. You must inform me of your topic by week 6.
[See the handout for further details]

You will submit a copy of your essay draft and post a copy to the forum for one of your fellow students to review. (I will assign reviewers after the essays have been submitted in Week 7.)

The final version of the essay will be due at the end of Week 9.

The Peer Review:

(2-3 pages)
Due at the end of Week 8
This peer review is worth 10% of your final grade.
For this assignment you will be reviewing a draft of another student’s paper. Like your weekly reviews you will need to briefly summarize their argument and offer a critique of their work (pointing out both the weaknesses and the strengths of their arguments, presentation, structure, etc.). [See the handout for further details]

You will submit your review and post a copy of it to the forum as a response to the original paper.

**Weekly Topics and Readings:**

**Week 1:**

What is history?
What is science?
What is history of science?

*Readings:*


**Week 2:**

Scientific revolutions
Science and religion
Huxley Vs. Wilberforce

*Readings:*

Desmond, Adrian. *Huxley: From Devil’s Disciple to Evolution’s High Priest.* Reading: Addison-Wesley, 1997. pp. 266-311


Week 3:

Science and the irrational
Nietzsche
Freud

Readings:


Week 4:

Peer review

Readings:

Cantor, N. & Schneider, R. How to Study History. Arlington Heights: Harlan Davidson, 1967, pp. 161-180


**Week 5:**

Science and consent
Tuskegee

*Readings:*


**Week 6:**

The fraught world of early 20th century and Weimar science
Science and the occult
Vitalism, replication, and standards of evidence

*Readings:*


Week 7:

Science and war
Physics and the Bomb

Readings:


Week 8:

Verification
Cold Fusion

Readings:


Week 9:

Science, education, and the state
Science and religion
Creation museums

Readings:


**Week 10:**

History of science
Cultural studies
The Science Wars

*Readings:*


**EVALUATION OF STUDENT PERFORMANCE:**

In the OSU online catalog, refer to AT 18 and AR 19 regarding assignment of grad

**Grades:** Your final grade will be constituted in the following manner:
1) Weekly forum responses to the week’s readings: 20 %
2) An essay draft (see below): 5 %
3) An essay on one scientific controversy: 30 %
4) A peer-review of another student’s essay: 10 %
5) A midterm exam: 10 %
6) Three 1-2 page “long responses” (see below): 15 %
7) Final exam: 10 %

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Course site login information
Information on how to login to your course site can be found HERE.

Statement Regarding Students with Disabilities
Oregon State University is committed to student success; however, we do not require students to use accommodations nor will we provide them unless they are requested by the student. The student, as a legal adult, is responsible to request appropriate accommodations. The student must take the lead in applying to Disability Access Services (DAS) and submit requests for accommodations each term through DAS Online. OSU students apply to DAS and request accommodations at our Getting Started with DAS page.

Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Additionally, Canvas, the learning management system through which this course is offered, provides a vendor statement certifying how the platform is accessible to students with disabilities.

Academic Integrity and Student Conduct (OSU policy)
Students are expected to be honest and ethical in their academic work. Intentional acts of academic dishonesty such as cheating or plagiarism may be penalized by imposing an “F” grade in the course. Student conduct is governed by the universities policies, as explained in the Office of the Dean of Student Life: Student Conduct and Community Standards. In an academic community, students and faculty, and staff each have responsibility for maintaining an appropriate learning environment, whether online or in the classroom. Students, faculty, and staff have the responsibility to treat each other with understanding, dignity, and respect. Students are expected to conduct themselves in the course (e.g. on discussion boards, email postings, etc.) in compliance with the university's regulations regarding civility. Students will be expected to treat all others with the same respect as they would want afforded to themselves. Disrespectful behavior (such as harassing behavior, personal insults, inappropriate language) or disruptive behaviors are unacceptable and can result in sanctions as defined by Student Conduct and Community Standards.

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Web: ecampus.oregonstate.edu  Email: ecampus@oregonstate.edu  Telephone: 800-667-1465
For more info on these topics please see:
- Statement of Expectations for Student Conduct
- Student Conduct and Community Standards - Offenses
- Policy On Disruptive Behavior

**Plagiarism**
You are expected to submit your own work in all your assignments, postings to the discussion board, and other communications, and to clearly give credit to the work of others when you use it. Academic dishonesty will result in a grade of “F.”
- Statement of Expectations for Student Conduct
- Avoiding Academic Dishonesty

**Technical Assistance**
If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact the OSU Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the OSU Computer Helpdesk online.
- Course Demo
  - Getting started

**Tutoring**
For information about possible tutoring for this course, please visit our Ecampus NetTutor page. Other resources include:
- Writing Center
  - Online Writing Lab

**Student Evaluation of Teaching**
The online Student Evaluation of Teaching form will be available in week 9 and close at the end of finals week. Students will be sent instructions via ONID by the Office of Academic Programs, Assessment, and Accreditation. Students will log in to “Student Online Services” to respond to the online questionnaire. The results on the form are anonymous and are not tabulated until after grades are posted. Course evaluation results are very important and are used to help improve courses and the learning experience of future students. Results from questions are tabulated anonymously and go directly to instructors and unit heads/supervisors. Unless a comment is “signed,” which will associate a name with a comment, student comments on the open-ended questions are anonymous and forwarded to each instructor. “Signed” comments are forwarded...
to the unit head/supervisor.

Refund Policy information
Please see the Ecampus website for policy information on refunds and late fees.