HIST*1250-SCIENCE AND TECHNOOLOGY IN A GLOBAL CONTEXT

Winter 2015 Tuesdays, 7-10 pm ALEX 200

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This course is an introduction to the culturally specific ways in which science and technology have developed historically from the ancient period through the twenty-first century. Emphasis will be placed on the patterns in which scientific knowledge and practices have traveled and been constructed across cultures and the interconnected but distinct histories of science and technology.

By the end of the course, students will have developed their *critical thinking* and research skills and be able to produce *critical and original historical research* using both primary and secondary sources. Students will be responsible for finding and evaluating sources of information for their research. Students will also *communicate* effectively and demonstrate *literacy* in their written assignments.

METHOD OF EVALUATION AND WEIGHTS:

Test #1: 20% (February 10)Test #2: 20% (March 24)

• Written Assignment: 20% (March 17)

Final Exam: 40% (April 8, 7pm, location TBD)

TEXTS:

While there is no set text for this class (readings and downloads will be posted to the course website) you may find these texts (available in the library) a useful source of context and additional information:

- Andrew Ede and Lesley B. Cormack. A History of Science in Society: From Philosophy to Utility.
- Arnold Pacey. The Maze of Ingenuity: Ideas and Idealism in the Development of Technology.
- Frederick Gregory. Natural Science in Western History
- Patricia Fara. Science: a four thousand year history
- One Internet site you may find particularly useful is Robert Hatch's Scientific Revolution page: http://www.clas.ufl.edu/users/rhatch/pages/03-Sci-Rev/SCI-REV-Home/

LATE POLICY:

The penalty for late assignments is 25% for each missed class. If your assignment is more than two weeks late, it will not be accepted for grading. The <u>only acceptable</u> way to submit an essay for marking is in printed form and in person, to the professor or to one of the teaching assistants. *In addition* to the hard copy of your essay or book report, you must also submit an electronic copy that will be used to check for plagiarism.

E-mail Communication

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

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. See the undergraduate calendar for information on regulations and procedures for Academic Consideration.

Drop Date

The last date to drop one-semester courses, without academic penalty, is **Friday, 6 March 2015**. For regulations and procedures for Dropping Courses, see the Undergraduate Calendar.

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.

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Student Accessibility Services as soon as possible. For more information, contact SAS at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: http://www.csd.uoguelph.ca/csd/

Student Rights and Responsibilities

Each student at the University of Guelph has rights which carry commensurate responsibilities that involve, broadly, being a civil and respectful member of the University community. The Rights and Responsibilities are detailed in the Undergraduate Calendar

Academic Misconduct

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 discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

<u>Please note</u>: 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. <u>The Academic Misconduct Policy is detailed in the Undergraduate Calendar.</u>

Recording of Materials

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

Resources

The <u>Academic Calendars</u> are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

CLASS LECTURES AND READINGS

WEEK 1: Introduction and Overview: what is "science"?

WEEK 2: How Science and Technology Affect Societies (and vice-versa)

WEEK 3: Where are we? Finding our Place in the Universe

WEEK 4: Science and Sources of Authority

WEEK 5: Communicating and popularizing science

WEEK 6: Enlightenment Science and the "Age of Reason"

WEEK 7: What's it all made of? A History of Chemistry

WEEK 8: Where did we come from? Materialism and Life

WEEK 9: Engineering the Future

WEEK 10: Technology versus Science in the Age of Invention

WEEK 11: Science in the 20th century

WEEK 12: Contemporary Science, Contemporary Society