

Ryerson University
Arts and Contemporary Studies Program

ACS 303: Introduction to Science and Technology

Fall 2006

Location: KHE 238
Time: Wednesdays, 9:00-12:00 am.
Instructor: Dr. Glenn Parsons
Department of Philosophy
Office Hours: Wednesday 1:00-2:00 pm or by appointment
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This course is part of the Bachelor of Arts and Contemporary Studies Program, and is open *only* to students in the Arts and Contemporary Studies Program.

Course Calendar Description

Where did our incredibly complex technology-based modern civilization come from? How did human ingenuity mesh with industry and business to shape the techno culture in which we live? What forces caused this ever greater scientific and technological convergence? This course provides students with a background to understanding the key elements put in place to build and support our technological economy.

Course Synopsis

The world of science is the most influential, successful and universally respected social institution on the planet, perhaps in history. Its technology generates much of the material fabric of our lives, it drives our economies, and it stands as a paradigm of rationality, objectivity and truth. Yet the public in Western democracies remains largely ignorant about science and the increasingly radical ways in which it affects their lives. This course aims to provide students with the knowledge base and conceptual framework needed to bring the social institution of science and its complex interrelations with society into focus.

Some questions and issues that we will consider include: Where did modern science come from? What is it like to pursue a career in science? Are the best scientists the ones who 'get ahead' in the world of science? Do women do science differently than men? Are women discriminated against in the sciences? What sort of connection exists between science and big business? Are these connections a problem? Can science tell us anything about The Big Questions ('the meaning of life', e.g.)? Is there some kind of 'war' going on between science and religion? If so, who's winning? Can we trust scientists to defend the public interest? Is technology enhancing our society's ability to solve problems, or crippling it? What does the Canadian public know about science? Do they need to know more?

Our approach to these issues will be interdisciplinary, drawing on resources from a variety of different fields, including the history of science, the philosophy of science, sociology, feminism and media studies, as well as reflections on science by journalists and scientists themselves. We will, however, be studying science itself, as a social phenomenon, rather than specific scientific theories, and so no competence in mathematics or any scientific discipline is assumed or required.

Course Format

The course will consist of weekly lectures by the instructor, as well as a number of hour long seminar sessions. The seminars will be group discussions of a specific question relating to the material presented in the lectures. Part of your grade will be determined by your participation in these discussions, and by a seminar assignment (see below). More details concerning seminar format, scheduling and topics will be provided during the first class.

Texts

You need to purchase four texts for this course:

1. A coursepack of assorted readings.
2. Steven Shapin, *The Scientific Revolution* (University of Chicago, 1996)
3. James Watson, *The Double Helix: A Personal Account of the Discovery of the Structure of DNA* (Mentor, 1968)
4. Richard Lewontin, *Biology as Ideology: The Doctrine of DNA* (HarperPerennial, 1993).

All texts are available at the Ryerson bookstore. Some additional readings may be dispensed by the instructor or made available on the web.

Evaluation

Grades will be calculated as follows:

	<i>Due Date</i>	<i>Value</i>
Mid-Term Exam	Week 6 (Wednesday, Oct. 11 th)	20%
Seminar Participation/Assignment	To be Assigned	20%
Essay (1800-2000 words)	Week 12 (Wednesday, Nov. 22 nd)	30%
Final Exam	Exam Period	30%

- Essays are due at the beginning of class on the date indicated; essays received after this time (including during or after class) are considered late. The penalty for late submission is one grade per day (*e.g.* an A+ paper submitted one day late receives an A, a C- paper two days late receives a D, and so on), including weekends, up to a maximum of seven days. Papers that are more than seven days late will receive a grade of zero, unless there is a documented medical or compassionate ground for an extension (see ‘Course Policies’ below).
- Note that, unless students make alternative arrangements with me by the end of the second week of classes, the essay for this course must be submitted electronically through Turnitin.com (see ‘Course Policies’ below for further information). Instructions on submitting work through Turnitin.com will be provided on the course Blackboard page.

- Grades for work during the term may be posted, listed by student number (minus the first two digits) on the instructor's door, or on the course Blackboard page, or using Turnitin.com. Students who do not wish to have their grades posted in this manner must contact the instructor in writing during the first two weeks of class.

Contacting Me/Email

Feel free to email me at the address indicated above, but be aware that I set aside a specific day of the week to answer student emails, so depending on when you email me you may not get an instantaneous response. Email is fine for quick logistical questions, but if you have a substantial question, I recommend that you use the scheduled office hours to come talk to me in person.

Note that you are required to use a Ryerson email account for this course. You will need this for submitting your essays to Turnitin.com, and if I need to communicate to the class I will email you at your Ryerson address. Also, I reserve the right not to respond to non-Ryerson email addresses (*e.g.* yahoo, hotmail, etc.) and be aware that junk mail filters may automatically delete such messages. For information on how to activate your Ryerson email account, go to:

<http://www.ccs.ryerson.ca/students/index.cfm?nblockID=22>

Course Evaluations

The Faculty Course Survey will be administered in the period November 6th and November 24th, 2006.

Course Web Page

This course has a Blackboard page, which you should be able to access through <http://my.ryerson.ca>. Various announcements will be posted there periodically, along with certain class material and possibly grades. Also note that the authoritative version of the class schedule will be the one on the class website, and you should check it periodically for updates. There will also be a discussion board on the website, where students can ask questions or discuss material pertinent to the course.

Course Policies

Alternate Arrangements for missed Exams and Assignments

- In general, **circumstances interfering with your ability to perform required course work must be brought to the instructor's attention as they arise, and if at all possible, in advance of missed work.** Requests made at the end of term for extensions, rewrites, etc. due to ongoing personal circumstances will not be considered. Alternate arrangements for missed exams and assignments will normally be granted only for reasons of illness or injury, religious observance, disability and compassionate grounds (see below). Extensions and/or make up examinations will not be granted on the basis of other reasons: *e.g.*, computer failure, social engagements, coincident deadlines.
- *Illness/Injury.* Students must provide, within three working days of the missed assignment, essay, or exam, a completed Ryerson Medical Certificate or a letter from a physician (on letterhead) with the student declaration portion of the Ryerson Medical Certificate attached (this form can be obtained at www.ryerson.ca/rr/medical.pdf). The nature of the alternate arrangement for making up the missing grade is left to the discretion of the instructor. For further details, refer to Ryerson Academic Policy 134,

Undergraduate Academic Consideration and Appeals, available at www.ryerson.ca/acadcouncil/current/pol134.pdf.

- *Religious Observance.* Ryerson policy extends accommodation for religious observances. Requests for such accommodation must be made formally during the first two weeks of class. For the appropriate forms and instructions, see <http://www.ryerson.ca/rr/observemain.htm>. Ryerson's full policy on Accommodation of Student Religious Observance Obligations is available at www.ryerson.ca/acadcouncil/current/pol150.pdf.
- *Disability.* Students with a diagnosed physical or learning disability must register with the Ryerson Access Centre at the start of the term. For more information, visit their website at <http://www.ryerson.ca/accesscentre/>
- *Compassionate Grounds.* Students unable to complete assignments due to loss of a family member or loved one, or due to personal difficulties that are interfering with their studies, should speak to the instructor as soon as is possible. The instructor reserves the right to require documentation, depending upon the circumstances.

Concerns About Grades

Students with a concern about a grade assigned to their work must arrange to meet with the original marker to discuss their decision in person within ten working days of return of the graded assignment to the class. Requests for re-grading made via email, or more than ten days after work has been returned will *not* be considered. Note also that students should have specific concerns regarding the original grading, and that students are expected to have carefully reviewed the assignment and any provided comments before meeting with the instructor.

Academic Misconduct and Turnitin.com

- Students are reminded that they are required to adhere to all relevant University policies, such as the Student Code of Academic Conduct (available online at <http://www.ryerson.ca/acadcouncil/current/pol60.pdf>). This code treats plagiarism (the misrepresentation of someone else's work as your own) as a form of academic misconduct. For detailed information concerning academic misconduct and the relevant penalties, see the Student Code. Note that **the instructor will be distributing information specifying the required citation practices for assignments in this course, and that you are responsible for being aware of and employing this information.** Note also **that it is your responsibility to be aware of what constitutes plagiarism**, and that ignorance of this is not an acceptable excuse.
- Ryerson University subscribes to Turnitin.com, an on-line service that evaluates the originality of written work. Students agree that by taking this course, they are aware that all required papers will be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database, solely for the purpose of detecting plagiarism of such papers. Detailed instructions on submitting written work to Turnitin will be provided. Note that you are required to use an official Ryerson email account when submitting to Turnitin.com: assignments from other email addresses (yahoo, *e.g.*) will not be accepted. In accordance with Ryerson's academic policy, students who do not wish to submit their work to

Turnitin.com must, by the end of the second week of classes, consult with the instructor to make alternate arrangements. Also, students should be aware that “when an instructor has a reason to suspect that an individual piece of work has been plagiarized, the instructor shall be permitted to submit that work to any plagiarism detection service”, including Turnitin.com. For more information, see Ryerson’s Course Management Policy, Section 4.3.a, available at www.ryerson.ca/acadcouncil/current/poll45.pdf.

- Students should be aware that the instructor reserves the right to conduct an oral examination on the contents of any submitted assignment.
- Note that Ryerson’s Examination policy prohibits the bringing of any electronic device, such as a cell phone, PDA, or other such device, into a test or examination. This policy will be enforced in this course.