

SCI 105 Science and Society

SU 15 Room 2674

donna.dauphinais@rrcc.edu or via D2L Adjunct Office 2684 (This can be found inside 2670, across from 2674.) Office Hours are not regular and can be scheduled for specific times and dates.

This course (SCI105) addresses commonly discussed issues involving the application of science in everyday life and integrates the fundamental concepts of science. This course is designed to acquaint you with some of the main principles of science and show you how they relate to the world around you. It examines issues relating to the way science affects society, and how society interprets science, and discusses the “human condition” as it relates to the issues.

The course will require gathering accurate scientific information and applying critical thinking skills while using scientific problem solving skills to analyze how science plays both positive and negative role in society. Each unit discusses and interprets application of these concepts to the problems society faces today, and will have to address in the near future. *It is designed to guide the thought process with a background and understanding of factual information, so it can be used to draw informed conclusions and develop stewardship.*

Text Materials:

Angier, Natalie, *The Canon: A Whirligig Tour of the Beautiful Basics of Science*, Houghton-Mifflin, 2008.

Easton, Thomas, *Taking Sides: Clashing Views in Science, Technology, and Society*, 11ed, Mc-Graw-Hill, 2014

Topics (will include, but not limited to:)

Impacts of social behavior on global change:

- water as our most precious resource
- overpopulation: feeding the world's rapidly growing population and the role of genetically modified organisms (GMO's), demand and depletion of Earth's natural resources
- climate change
- geologic and meteorological hazards (major storms, earthquakes, etc.) and the human condition
- energy needs for a growing population
- role of medicine in pandemics

The interrelatedness of these issues will be an underlying theme.

Course Goals:

- The student will gain an understanding of the connections between science and societal issues
- The student will be able to understand that science is organized, interconnected knowledge that is applicable to everyday use
- The student will be able to develop and use problem solving skills
- The student will be able to apply scientific thinking to problems
- The student will be able to synthesize ideas and gain skills that will empower themselves to become a steward for change at all levels of society

General Objectives: The student will be able

- To understand, describe, and apply, how the basic fundamental principles of science, technology, engineering, and mathematics influence applications to the modern world
- To understand, describe, and explain the major implications of an educated society's ability to influence change
- To familiarize with and understand applications of the tools of science
- To collect and apply their knowledge to topics within various branches of science

Grading Scheme

Your cumulative total score will be in reference to total possible points available. It will be distributed with the appropriate weights listed below:

Class Participation	50%	(Includes debates, discussion, etc.)
Research Paper	10%	
Homework and Outside reading synopses	20%	
Quizzes	3@total of 20%	

Course Expectations:

Class Participation –

Class Participation is both objectively and subjectively graded. Observations of activities and shared activity responsibilities will be considered.

Attendance is absolutely critical. Attendance is part of your class participation score.

Three hours will result in your failing or having to drop the class.

Missing an hour of class will result in a 5% lowering of your final grade. More than 3 hours will mean withdrawal from the class or a failing grade.

Be an active participant in class. Asking and answering questions is an integral part of learning.

Take notes in class.

Video presentations are an important part of the course. If one is shown, it is expected that you will take notes and/or participate with a question sheet.

****Please note: In this class it is ok to disagree as long as each party gets their say in a civil, mutually respectful manner.*

I will NOT photocopy your materials. Come to class prepared with necessary materials.

Please use equipment *only when told to do so.*

Academic Integrity: We, in the Science Department, expect the students enrolled in the course to follow the Student Code of Conduct, which is outlined on page 29-31 of the Student Handbook. Students also have rights and responsibilities which are outlined in the Student Handbook as well. Most importantly we expect students to conduct themselves with academic integrity.

There is a zero tolerance policy for any form of academic dishonesty in this course.

Disciplinary action will be taken against any student found guilty of academic dishonesty such as cheating or plagiarism. You will be working with others and your participation is absolutely mandatory. If your words match those of others, I will assume you copied rather than composing the answers yourself, *unless group work is the goal*. If people complain that you are not doing the work, scoring may be affected.

The penalty for being dishonest is far greater than simply getting a wrong answer or missing the point of a major topic. Those committing academic dishonesty will be subject to disciplinary action up to and including failing the assignment, failing the course, and/or expulsion from the course or college.

Inappropriate behaviors will be addressed. If inappropriate behaviors occur, it is at the discretion of the instructor to remove you from the class. Continued inappropriate behaviors will be referred to the Dean and/or Campus Police, as needed.

If at any time you feel harassed and/or threatened, please contact me immediately so that action can be taken.

Assignments-

Not all assignments will be graded with points.

Some assignments will be given checks and check + and – and are based on completion and general review. Your tests will reflect in class activities, discussions, lecture, and presentation material

You are responsible for the assigned material. Be prepared to bring questions to class so they may be addressed.

Not all of the materials for this course will be in your texts. Other resources be provided and/or assigned.

Activities: **This class is founded on specific activities.** *Each member* of a group is expected to take notes and record findings. If you are not carrying your share of the workload, it will become obvious and recorded. We will be completing the activities in the purchased manual as well as some additional hands-on activities.

Late arrival- Late arrival is very distracting, so make is quiet and quickly settle in. Excessive late arrivals will be addressed on an as needed basis directly with the student.

Special NOTE: Desire2Learn is used as a part of the course. However, it is **not** the responsibility of the instructor to teach all aspects of the D2L usage. Help is available in the LARC if needed.

OTHER: ADAAA (Americans with Disabilities Act Amendments Act of 2008) and Section 504 of the Rehabilitation Act of 1973: Red Rocks Community College is committed to access for students with disabilities. If you are a student with a disability and need assistance or are interested in requesting accommodations, please contact the Office of Disability Services (ODS). Faculty is not obligated to provide accommodations without proper notification by the ODS. Students may contact the ODS staff by telephone or email to make an intake appointment at [303-914-6733](tel:303-914-6733) or ods@rrcc.edu. The ODS is located in Suite 1182 at the Lakewood campus. More information is available at www.rrcc.edu/disabilityservices.

Daily Schedule:

Friday: 5:00-6:45 pm	Saturday: 8:30-10:00 am
Break 15 minutes	10:15-11:45 am
7:00- 8:45 pm	Lunch 11:45-1:00
Break 15 minutes	1:00-2:45 pm
9:00-10:00 pm	3:00-5:00 pm

Class can be expected to run as follows: (not necessarily always in the same order)

Introductory question with brief discussion / can include current events

Discussion / clarification of assignments (review)

Quiz (when applicable)

WASHES: brainstorming and consensus activities (We All Share Here)

Lecture/discussion/ video presentations

Project work

Presentations with follow-up discussions

Wrap-up and continuance