

Syllabus for SCIE300: Science and Society

Spring 2019

Dickinson College

Instructor: John MacCormick

Goals

Students will

- gain a technical understanding of a selection of scientific topics relevant to the interactions between science and society. (Specific topics for spring 2019 include sustainable energy, artificial intelligence and its impact on society, and ecology of East Anglia.)
- deepen their ability to write and present information that combines scientific, technical, political, and cultural ideas
- increase their understanding of the culture, geography, and politics of the United Kingdom

When and where

- Class meetings during the spring UEA semester scheduled approximately every second week on Tuesdays, 7:00-8:30pm (1/15, 1/22, 2/5, 2/12, 2/26, 3/12, 3/26, 4/30, 5/14).
- One-week study and travel excursion during the UEA Easter vacation (4/6-4/13)
- Four one-day excursions/activities on weekends during the semester (2/2, 3/2, 3/24, 5/4)
- For details of office hours, please see the instructor's website. As a guideline, office hours are usually Wednesday and Friday 10-11am in Building 5, level 3, room SCI 3.04a.

Every effort will be made to keep to the above schedule, but some changes may be necessary. Attendance at all of the above events is required.

Books

The following are required texts for the course:

Sustainable Energy – without the hot air by David MacKay. UIT Cambridge, 2008. Free electronic version available from withouthotair.com.

Life 3.0: Being Human in the Age of Artificial Intelligence by Max Tegmark. Knopf, 2017. Any edition.

Waterland by Graham Swift. Originally published in 1992 by Knopf, but there are many editions and any is acceptable.

Electronic or printed versions of these books are acceptable.

Assessment and grading

The final grade will be calculated as follows, based on eight reading assignments (abbreviated RA1, RA2, ... RA8), a substantial "science and society paper" (abbreviated SSP), and on participation, attendance and engagement (PAE). Brief descriptions of these assignments are as follows:

- RA1-8 will comprise short- and long-answer questions based on assigned readings.
- SSP will consist of three milestones: topic selection (SSP0), a paper proposal (SSP1), and the final paper (SSP2). The topic for the SSP assignment will be chosen by each student based on individual interest within the general area of science and society.
- PAE scores are explained on a separate "academic expectations" webpage. PAE scores will be awarded for every academic event, such as classroom sessions, discussions, excursions, and study trip activities.

The weighting and timing of the assignments are likely to be as follows:

	% of final grade	due dates
Reading assignments (RA1-RA8, about 5% each)	40%	1/22, 2/5, 2/12, 2/26, 3/12, 3/26, 4/30, 5/14
Science and society paper (topic SSP0, proposal SSP1, final paper SSP2)	SSP0: 0% (PAE only) SSP1: 10% SSP2: 35%	SSP0: 3/22 SSP1: 4/5 SSP2: 5/17
Participation, Attendance and Engagement (PAE)	15%	

All reading assignments (RA1-RA8) are due at the start of class on the due date. Other assignments are due at 11:59 PM UK time on the due date, unless otherwise specified.

Final scores will be converted to grades according to the following thresholds (or possibly more generous thresholds): 93%=A; 90%=A-; 87%=B+; 83%=B; ... ; 60%=D-.

Late Work Policy

Each student is permitted a total of four no-penalty days of lateness for submitted work over the entire semester; every subsequent day of lateness incurs up to a 25% penalty for the late assignment. Late days can be used only in whole day units. Accounting for late days is mostly via an honor system: students should keep count of their late day usage. To use one or more late days on a given assignment, state clearly at the start of your submission how many days you are using and the total used so far in the semester. Late days cannot be used on certain assignments, such as presentations.

Plagiarism, copying, and collaborating

The College's standard policy on plagiarism applies and you should be familiar with it. Unless an assignment specifically states otherwise, all work should be your own.

Accommodations

The instructor will follow college policy on [accommodations](#) for students who need them.