



**Course Name:** Social and Ethical Issues in Computer Science

**Course Number:** CS 391

**Credits:** 3

**Instructor name:** Danielle Safonte

**Instructor email:** *safonted@oregonstate.edu*

**Teaching Assistant name and contact info:** TBD – see Canvas Syllabus page for most up to date information.

### **Course Description**

This course provides an in-depth exploration of the social, psychological, political, and ethical issues surrounding the computer industry and the evolving information society using a variety of research, writing, and collaboration activities that meet BACC Science, Technology and Society (STS) synthesis requirements. You'll explore ethical theories, the balance of power related to rights, privacy, and cybersecurity, hiring and marketing issues, hardware and software issues, infrastructure and access to disruptive technologies, bias in the high-tech industry, the future of computing, and ethical dilemmas. The overall goal is to improve your decision-making in the workplace of your future. (Bacc Core Course)

Complete the 'Start Here Module' and review Module 1 – Objective and Learn pages right away...it will prepare you for the rest of the term.

### **Prerequisites or Corequisites**

Class Limitations: -1, -2 (Freshman, Sophomore)

Recommended: CS 101 or computer literacy

### **Course Content:**

- Ethical theories
- Professional ethics
- Constitution and civil liberties
- Privacy
- Computer crime
- Computer risks
- Artificial Intelligence and Society

The course does not require a background in computer science. However, the focus of this course will be the societal and ethical issues that arise in computer science; from hardware to software, the collection, storage, sharing, and analyzation of data, and how they are all

tied together in modern society. The course explores various aspects of the computer science field and how each of these aspects has its own complications, consequences, and concerns.

## **Communication**

Please post all course-related questions in the Teams Forum so that the whole class may benefit from our conversation. Please contact me privately for matters of a personal nature. I will reply to course-related questions within 24 weekday hours. I will strive to return your assignments and grades for course activities to you within five days of the due date.

Note that due to FERPA regulations, emails outside of the OSU domain, may not receive a response. All course emails should be sent from your designated oregonstate.edu email handle.

## **Time Expectations**

Through this course you will have readings to complete and videos to watch. Additionally, you will be required to discuss topics with your peers in both smaller discussion groups, as well as large class discussions on the topics covered each Module. You can expect to spend 6 to 12 hours per week on the materials and the discussions.

OSU's [definitions and guidelines for quarter credits](#) imply that 90 hours of your time will be needed to attend lectures (or read the required materials), understand the key concepts and laws, participate in discussions, and complete research writing for this 3-credit course (that's 9 hours per week).

## **Technical Assistance**

If you experience any errors or problems while in your online course, contact 24-7 Canvas Support through the Help link within Canvas. If you experience computer difficulties, need help downloading a browser or plug-in, or need assistance logging into a course, contact the IS Service Desk for assistance. You can call (541) 737-8787 or visit the [IS Service Desk](#) online.

## **Learning Resources**

This course requires high-speed broadband internet to access all lessons, media, and software. You will not be successful in this course if you anticipate having inefficient internet service during the term. There is no official textbook to purchase in this course, the start here module has some textbook resources you can use through the term to supplement the materials I have provided. You will have an opportunity to discuss topics with your peer in writing, in voice notes or in video. You will require the equipment based on the modality you wish to participate.

**Note:** Check with the OSU Beaver Store for up-to-date information for the term you enroll ([OSU Beaver Store website](#) or 800-595-0357). If you purchase course materials from other sources, be very careful to obtain the correct ISBN.

## **Baccalaureate Core Course Statement:**

This course fulfills the Baccalaureate Core Science, Technology, and Society requirement. For people working in the advanced field of Computer Science, technological progress seems painfully slow. On the other hand, there are many who argue that the forces of technology are already too strong and changing too quickly for society to handle. Given this polarity of thinking, this course provides an opportunity to confront the social, legal, and ethical issues caused by the problems and advances in the field in order to be socially responsible producers and consumers of technologies.

## **Baccalaureate Core Science, Technology and Society Category Learning Outcomes:**

Students in Science, Technology, and Society courses shall:

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

## **Evaluation of Baccalaureate Core Category Learning Outcomes:**

The assessment matrix below provides a description of how Baccalaureate Core category learning outcomes will be assessed within the course.

### **Baccalaureate Core Learning Outcomes Assessment Matrix**

<b>Outcome</b>	<b>How will this outcome be addressed in this course</b>	<b>How will this outcome be assessed in this course</b>
Analyze relationships among science, technology, and society using critical perspectives or examples from historical, political, or economic disciplines.	The relationship between computing and society will be analyzed using ethical theories such as Utilitarianism, Kantianism, Social Contract Theory, and Virtue Theory. These relationships will be explored through historical case studies and current events. For example, students could use one of the ethical theories to analyze the use of Artificial Intelligence to create lethal autonomous weapons.	On-line discussion forums and in-class discussions will provide opportunities for students to analyze and understand these relationships. Students will be assessed through their participation in these discussions. In addition, students will be evaluated through essays and a final report that require them to analyze a topic or case study using one or more ethical theory. In-class debates may also be used to assess their understanding of the relationships among science, technology, and society through a critical perspective.
Analyze the role of science and technology in shaping diverse fields of study over time.	Students will analyze how social and ethical issues have been impacted over time with advancements in science and technology, especially due to computing. In particular, this course will focus on how advances in computing have affected public policy, laws, professional ethics and social relationships. An example of a topic covered in this class is the	Instructors will use the discussion boards and in-class questions to stimulate discussion on the course topics. These discussions will require students to analyze the discussion topics using materials taught in class. Students may also be asked to provide their personal views and experiences. Students will be assessed through their participation in these discussions.

	effect of social media on society in terms of relationships, data privacy and constitutional / civil liberties.	Students will also be assessed through multiple essay assignments that explore the impact of computing on societal and ethical issues.
Articulate in writing a critical perspective on issues involving science, technology, and society using evidence as support.	Students will engage in a critical analysis of a proposition related to computing and society, specifically focusing on how advances in computing that have led to emerging issues in society. This proposition could be a particular policy, law or position regarding computing taken by government, industry, or an institution. As an example, students could be asked to provide a critical analysis regarding Section 230 of the Communications Decency Act and the effects on society of the proposed amendments to it. Student will be expected to conduct research to build a compelling argument either for or against a particular position regarding this proposition.	Students will be assigned multiple essay assignments and a final report in which they will take a critical perspective of a topic regarding the problems or benefits caused by advances in computing and explore it in sufficient depth, providing compelling supporting evidence through reliable sources, such as peer-reviewed articles, for their critical perspective. In total, the essay assignments and the final report will meet the bacc core writing requirement of at least 1250 words with at least two outside sources.

### Course Learning Outcomes (CLOs):

*At the completion of the course, students will be able to...*

#### ABET Assessed CLOs:

1. Analyze the role of science and technology in shaping diverse fields of study over time.

**Student Outcome: 4**

2. Analyze relationships among science, technology, and society using critical perspectives or examples from historical, political, or economic disciplines. **Student Outcome: 4**

#### Additional CLOs

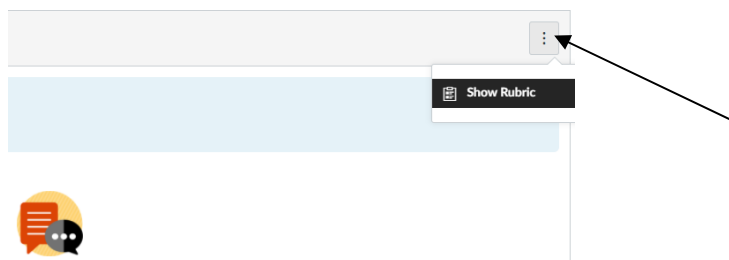
3. Apply legal and ethical principles to explain the roles and responsibilities of a computer professional. **Student Outcome: 4**
4. Articulate in writing a critical perspective on issues involving science, technology, and society using evidence as support. **Student Outcomes: 3, 4**

### Evaluation of Student Performance

*Describe how the learning outcomes will be measured (exams, projects, discussions, etc.)*

- Discussions/Participation – 30 %
- Quizzes – 15 %
- Homework – 40 %
- Final Project – 15 %
- Total – 100%

*\*see individual assignment rubrics for grading on Canvas*



#### Online section

1. Writing Requirements page includes enough detail.
2. Citation Methods page includes enough detail.
3. Synthesis page includes enough detail and is properly cited.
4. Library Research page includes enough detail and is properly cited.
5. Illustration Requirements page includes informative media, a detailed description, and a proper copyright statement.
6. Avoiding Plagiarism page includes enough detail.
7. Checking Originality page includes enough detail.
8. Bibliography page includes a list of references (3 or more expected). APA or MLA format.
9. Each bibliographic entry includes the author name, year of publication, title, publisher, and URL.
10. Writing is free of plagiarism.
11. Writing is free of grammar and spelling errors.

#### Letter Grade

Grade	Percent Range
A	94-100
A-	90-93.99
B+	87-89.99
B	83-86.99
B-	80-82.99
C+	77-79.99
C	73-76.99
C-	70-72.99
D+	67-69.99

<b>Grade</b>	<b>Percent Range</b>
D	63-66.99
D-	60-62.99
F	<59.99

## **Course Policies**

### **Discussion Participation**

Students are expected to participate in all graded discussions. While there is great flexibility in online courses, this is not a self-paced course. Discussion participation is expected and mandatory

If you are not active in your Canvas discussion groups or on Teams, you will be missing a large portion of the mandatory requirements of this course. Discussions are meant for you to all experience various perspectives, understand the viewpoint from other backgrounds and cultures and to learn from your peers. Understanding ethics and morality in society is going to require a communal effort. We ask that you stay professional and civil, ethics and morality are a fluid topic with no one right or wrong answer. Differences of opinion are expected and will enrich your experience. Embrace various viewpoints and refrain from being accusatory or combative in your discussions. Explain your side, your viewpoint, and your opinion, while avoiding downplaying or disrespecting someone else's.

### **Managing this course**

Each weekly module will have 3 pages: "Overview", "Learn", and "Assignments". The Overview page will give a brief listing of the week's topics, the learning outcomes, and the tasks you need to accomplish. The Learn page will have content for you to read and understand. Sometimes it will include videos, reading links or activities to help you grasp the material. The Assignments page will have instructions for all of the work that is due for that module, with submission links. Sometimes there will be special "required reading" in the Overview page which you will need to read for the quizzes or assignments.

### **Videos and Reading Links**

Each module will contain a variety of videos, referenced articles and some interactive tools. You are expected to watch all videos on the Learn pages and/or within the assignments. These video's provide a broader explanation and/or professional and non professional examinations of the topic being discussed.

Throughout the Learn pages, you will notice articles that are referenced within instruction. You are expected to familiarize yourself with the full perspective of the reading, not just my snippet or description. One way to eliminate bias, is to have the full story. My perspective of the reading is not what is important, rather an understanding of your own perspective is.

## **Assignment Modifications**

Assignments changes that require updates to the content of the assignment will generally be minimal and be released at least 5 days before the assignment due date. Changes that only impact the formatting of the deliverables (file type, number of files etc) can be changed up to 3 days prior to the assignment due date.

## **Late Work Policy**

Each assignment must be submitted before the Due date and time as specified on the Canvas Home tab. The Available Until date and time constitutes a grace period, which can be used in an emergency, or if you are ill (it cannot be used for every assignment).

Students who submit using the Available Until date may incur score reduction. Students on a DAS Flexibility Contract typically have 48-hour to 72-hour Available Until dates. Abuse of the Flexibility Contract will be reported to DAS. Note that discussions are to be made on a timely basis in order for peer discussion to be successful.

## **Proctored Exams**

There are no proctored exams in this course.

## **Makeup Quizzes**

Makeup quizzes will be given only for missed quizzes excused in advance by the instructor. Excused absences will not be given for airline reservations, routine illness (colds, flu, stomach aches), or other common ailments. Excused absences will generally not be given after the absence has occurred, except under very unusual circumstances.

## **Incompletes**

Incomplete (I) grades will be granted only in emergency cases (usually only for a death in the family, major illness or injury, or birth of your child), and if the student has turned in 80% of the points possible (in other words, usually everything but the final paper). If you are having any difficulty that might prevent you completing the coursework, please don't wait until the end of the term; let me know right away.

## **Statement Regarding Religious Accommodation**

Oregon State University is required to provide reasonable accommodations for employee and student sincerely held religious beliefs. It is incumbent on the student making the request to make the faculty member aware of the request as soon as possible prior to the need for the accommodation. See the [Religious Accommodation Process for Students](#).

## **Guidelines for a Productive and Effective Online Classroom**

(Adapted from Dr. Susan Shaw, Oregon State University)

Students are expected to conduct themselves in the course (e.g., on discussion boards, email) in compliance with the university's regulations regarding civility. Civility is an essential ingredient for academic discourse. All communications for this course should be conducted constructively, civilly, and respectfully. Differences in beliefs, opinions, and approaches are to be expected. In all you say and do for this course, be professional. Please bring any communications you believe to be in violation of this class policy to the attention of your instructor.

Active interaction with peers and your instructor is essential to success in this online course, paying particular attention to the following:

- Unless indicated otherwise, please complete the readings and view other instructional materials for each week before participating in the discussion board.
- Read your posts carefully before submitting them.
- Be respectful of others and their opinions, valuing diversity in backgrounds, abilities, and experiences.
- Challenging the ideas held by others is an integral aspect of critical thinking and the academic process. Please word your responses carefully, and recognize that others are expected to challenge your ideas. A positive atmosphere of healthy debate is encouraged.

## **Expectations for Student Conduct: <https://beav.es/codeofconduct>**

The following is adapted from *Dr. Susan Shaw, Oregon State University*

- Make a personal commitment to learning about, understanding, and supporting your peers.
- Assume the best of others in the class and expect the best from them.
- Acknowledge the impact of sexism, racism, ethnocentrism, classism, heterosexism, ageism, and ableism on the lives of class members.
- Recognize and value the experiences, abilities, and knowledge each person brings to class. Value the diversity of the class.
- Participate actively in the discussions, having completed the readings and thought about the issues.
- Pay close attention to what your classmates write in their online comments. Ask clarifying questions, when appropriate. These questions are meant to probe and shed new light, not to minimize or devalue comments.
- Think through and re-read your comments before you post them.
- Never make derogatory comments toward another person in the class.
- Do not make sexist, racist, homophobic, or victim-blaming comments at all.
- Disagree with ideas, but do not make personal attacks.



- Be open to being challenged or confronted with your ideas or prejudices.
- Challenge others with the intent of facilitating growth. Do not demean or embarrass others.
- Encourage others to develop and share their ideas.
- Be willing to change.

Student conduct is governed by the university's policies, as explained in the Student Conduct Code (<https://beav.es/codeofconduct>). Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the university's regulations regarding civility.

By the time you finish this course and leave the university, you will want to have practiced appropriate ways to communicate in writing so that you appear professional at all times. [NACE's Job Outlook 2018](#) lists attributes employers want to see on new college graduates' resumes. Written Communication Skills is in the top 3! Remember that when you communicate online, you cannot provide eye contact and body language to help explain yourself, so your message may be misunderstood. Sometimes the thread of a message is lost, making readers rely on memory (which is often faulty). And if you need the reader to act on your request, good manners will help you be successful.

Some of the topics we'll cover in this class will evoke negative feelings. So that the sharing of those feelings is met with support and not more negativity, our behavior towards each other will remain civil. We will use our best manners when questioning ideas so that all students (as well as the instructor and teaching assistants) feel safe and not alienated or bullied. This is the way of the world...without manners, the world descends into chaos. If you feel you are being harassed or bullied in this course, please report it to the instructor immediately. Describe the situation and provide links to the locations of the harassment so the instructor can address it. Follow the discussion netiquette posted on Canvas as a golden rule on how to interact with your peers in this course, and others.

Any students who do not follow the guidelines above will be dealt with in the following ways:

1. A private message from the instructor asking for a behavior change.
2. Reporting to the Student Conduct office  
([OSU Bullying Policy](#))
3. Reporting to the Equal Opportunity office  
([OSU Student Conduct Reporting](#))

### **Academic Integrity**

Integrity is a character-driven commitment to honesty, doing what is right, and guiding others to do what is right. Oregon State University Ecampus students and faculty have a responsibility to act with integrity in all of our educational work, and that integrity enables this community of learners to interact in the spirit of trust, honesty, and fairness across the globe.

Academic misconduct, or violations of academic integrity, can fall into seven broad areas, including but not limited to: cheating; plagiarism; falsification; assisting; tampering; multiple submissions of work; and unauthorized recording and use.

It is important that you understand what student actions are defined as academic misconduct at Oregon State University. The OSU Libraries offer a [tutorial on academic misconduct](#), and you can also refer to the [OSU Student Code of Conduct](#) and [the Office of Student Conduct and Community Standard's website](#) for more information. More importantly, if you are unsure if something will violate our academic integrity policy, ask your professors, GTAs, academic advisors, or academic integrity officers.

Please see the Academic Integrity policy posted on Canvas for the most up to date information.

### **TurnItIn**

Your instructor may ask you to submit one or more of your writings to Turnitin, a plagiarism prevention service. Your assignment content will be checked for potential plagiarism against Internet sources, academic journal articles, and the papers of other OSU students, for common or borrowed content. Turnitin generates a report that highlights any potentially unoriginal text in your paper. The report may be submitted directly to your instructor or your instructor may elect to have you submit initial drafts through Turnitin, and you will receive the report allowing you the opportunity to make adjustments and ensure that all source material has been properly cited. Papers you submit through Turnitin for this or any class will be added to the OSU Turnitin database and may be checked against other OSU paper submissions. You will retain all rights to your written work. For further information, visit [Academic Integrity for Students: Turnitin – What is it?](#)

### **Statement Regarding Students with Disabilities**

Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at <http://ds.oregonstate.edu>. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

### **Accessibility of Course Materials**

All materials used in this course are accessible. If you require accommodations please contact [Disability Access Services \(DAS\)](#).

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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.

## Tutoring and Writing Assistance

TutorMe is a leading provider of online tutoring and learner support services fully staffed by experienced, trained and monitored tutors. Access TutorMe from within your Canvas course menu.

The Oregon State [Online Writing Suite](#) is also available for students enrolled in Ecampus courses.

## Ecampus Reach Out for Success

University students encounter setbacks from time to time. If you encounter difficulties and need assistance, it's important to reach out. Consider discussing the situation with an instructor or academic advisor. Learn about [resources that assist with wellness and academic success](#).

Ecampus students are always encouraged to discuss issues that impact your academic success with the [Ecampus Success Team](#). Email [ecampus.success@oregonstate.edu](mailto:ecampus.success@oregonstate.edu) to identify strategies and resources that can support you in your educational goals.

*If you feel comfortable sharing how a hardship may impact your performance in this course, please reach out to me as your instructor.*

- **For mental health:**

Learn about [counseling and psychological resources for Ecampus students](#). If you are in immediate crisis, please contact the Crisis Text Line by texting OREGON to 741-741 or call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255).

- **For financial hardship:**

Any student whose academic performance is impacted due to financial stress or the inability to afford groceries, housing, and other necessities for any reason is urged to contact the Director of Care for support (541-737-8748).

## Academic Calendar

All students are subject to the registration and refund deadlines as stated in the Academic Calendar: <https://registrar.oregonstate.edu/osu-academic-calendar>.

**Religious Holidays** Oregon State University strives to respect all religious practices. If you have religious holidays that are in conflict with any of the requirements of this class, please see the instructor immediately so that you can make alternative arrangements.

## Student Evaluation of Courses

During Fall, Winter, and Spring term, the online Student Evaluation of Teaching system opens to students the Wednesday of week 8 and closes the Sunday before Finals Week. Students will receive notification, instructions and the link through their ONID email. They may also log into the system via Online Services. Course evaluation results are extremely

important and used to help improve courses and the learning experience of future students. Responses are anonymous (unless a student chooses to “sign” their comments, agreeing to relinquish anonymity) and unavailable to instructors until after grades have been posted. The results of scaled questions and signed comments go to both the instructor and their unit head/supervisor. Anonymous (unsigned) comments go to the instructor only.

### **Reach Out for Success:**

University students encounter setbacks from time to time. If you encounter difficulties and need assistance, it’s important to reach out. Consider discussing the situation with an instructor or academic advisor. Learn about resources that assist with wellness and academic success at [oregonstate.edu/ReachOut](https://oregonstate.edu/ReachOut). If you are in immediate crisis, please contact the Crisis Text Line by texting OREGON to 741-741 or call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255)

### **Establishing a Positive Community:**

It is important you feel safe and welcome in this course. If somebody is making discriminatory comments against you, sexually harassing you, or excluding you in other ways, contact the instructor, your academic advisor, and/or report what happened at <https://studentlife.oregonstate.edu/studentconduct/reporting> so we can connect you with resources.

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