A number of emerging technologies from Robotics to Genetic Engineering, Artificial Intelligence, Social Media and the Internet, to name just a few, are shaping our world in ways unimaginable only a few years ago. In this course, we will look at some of these technological forces and how they impact politics, social relations and economics today. This will not be a science fiction class, but many of the things we will examine can feel almost like science fiction. But rather than future gazing into a world that we cannot imagine, the central goal of this course is to explore how the significant technological changes we are witnessing today are affecting our world today.

This course will be highly interactive and will demand significant student participation and involvement. The centerpiece of the course will be student presentations and projects. We will begin with some basic introductions into some of the incredible technological advances that are reshaping our world (for example, Artificial Intelligence, Robotics, Social Media, Internet-Interconnectivity, etc.). We then explore how these technological forces are shaping and reshaping the world around us including things like education, communication, medicine, international development, international relations, work, social life, politics, elections and democracy.

The second half of the course will be dominated by student/group presentations. Groups of students will focus on particular fields or subjects that interest them (how technology is reshaping medicine, education, agriculture, elections, etc. etc.). We will have several discussions early in the course where we assign groups and pick topics. The idea here will be to allow you to focus on an area of your interest. Each group (4-5 students each?) will meet in and outside of class to prepare presentations. I expect to be flexible about the character and nature of these presentations (and hope to be surprised by them). But the starting point, I expect, should be a brief overview of the particular area of interest, how has technological change shaped this field up to this point and how are the technologies that are currently online or being developed reshaping this part of our world. Finally, what are the implications of these changes for us as citizens, consumers, workers and so forth?

I also expect to take advantage of the significant insights that can be brought to these questions through alternative media and films. We will, as an example, view several episodes of “Black Mirror” together and discuss their insights and implications. To be honest, I think that creative artists are probably better at thinking about where we are going and how our world is changing than political scientists.

Recommended prerequisite: PSCI 2223

Course Requirements:

Class participation and course presentations are a very significant part of this course. In class participation will count for 10% of the course grade. We will have at least 2 “pop” quizzes based on the readings as well as a mid-term exam. These quizzes will be worth 10% of class grade (5% each) and mid-term will count for 20% of the class grade. The group presentation will count for 25% of the course grade. Students will be evaluated individually and
collectively for their group presentations. Each student will also write a 15-page paper on the
topic of her or his presentation topic. This paper will count for 35% of the course grade.
There will be no final exam. Student research papers are due at the last class session (May 3).

The two in class “pop” quizzes will consist of s short answer questions covering class
materials and readings. The mid-term exam will consist of short answer questions and an
essay question. The essay questions for the mid-term will be handed out in class at least one
week before the test. I will choose which question or questions the students will write on
during the in-class exam.

**Group presentations and Research Papers:**
Early in the semester, you will choose topics you would like to examine in depth and work in
groups to examine the topic and eventually make a presentation to the class on what you’ve
learned. I will discuss these topics with you extensively in advance. Some examples of
possible topics include: “Will Robots take our Jobs?” “What is Artificial Intelligence and is it
a threat to human kind?” “Genetic Engineering and Super-Humans,” “Social Media and
Citizenship,” “Technology and the Future of Democracy.”

The idea is for you to explore a topic that is of special interest to you and allow you to
research it in depth with a group. The group will then make a presentation to the class and
teach us what you’ve learned. You will also be responsible to assign readings (or videos) for
students to read/watch in preparation for your class session.

Each student will then write a paper on the topic they have researched.
For the written research paper, the students will write on the topic of their presentation. I
expect that each student in the group will write a separate paper. I am, however, open to
alternative suggestions. This research paper should be approximately 15 pages and include
and extensive bibliography and citations. Papers are due the last class session (May 3).

Class Participation: 10%
“Pop” Quizzes: 10% (5% each)
Mid-term exam 20%
Class Presentation: 25%
Research Paper: 35%

**Readings:**
(Note: Some readings will be posted on the class web cite. All readings are subject to change
as we move through the semester. Please check WEB site weekly for current reading
assignments).

There are two required texts ordered for the class (available in the bookstore):
- Kevin Kelly, *The Inevitable: Understanding the 12 Technological Forces that will

In addition to these texts we will have assigned readings drawn from internet and open access
sources. These will be linked to the course syllabus on line. There will also be reading
assignments directed by the student groups making presentations each week.

The majority of the required readings for this class will be found in these books. However, in
order to bring other perspectives to the class readings and/or to cover materials not found in these books, we will also have readings that can be accessed through the class WEB site. To access these readings, go to the class web site and click on the highlighted reading... identified with (ON Class WEB).

Weekly Schedule:

Week 1 (January 16 -18) - Introductions and Orientation
Have Smart Phones Ruined a Generation? 

Week 2 (January 23 -25) The Interconnectivity of Everything
Reading: The Inevitable, Chapters 1 + 2, pp. 9-60.

Week 3 (January 30 – Feb. 1) - The Rise of the Robot

Week 4 (Feb 6 – Feb 8) – Artificial Intelligence vs. Human Intelligence?
Readings:
The Inevitable,
Group work/planning session

Week 5 (Feb 13 – Feb 15) Big Data
Readings: Industries of the Future, Big Data Ch. 5, pp. 152-186.
Reading: The Inevitable, Chapters 8, pp. 193–211.

Week 6 (Feb 20 – Feb 22) Creativity in the Sharing Age
Reading: The Inevitable, Chapters 6 + 7, pp. 135-192.

Week 7 (Feb 27- March 1) Politics and Democracy in the Age of the Internet
Readings: Industries of the Future, Ch. 4, pp. 121 – 151.
Group Planning Sessions and/or group presentations

Week 8 (March 6 – March 8) Medicine, Health and Genetic Engineering.
Readings: TBA
Group work/planning sessions

Week 9 (March 13 – March 15) The Future of Work
Reading: Industries of the Future, Ch. 6, Geography of Future of Markets, 186-240

Week 10 (March 20 – March 22)
Group work/planning sessions
March 22, Mid-term Exam

Week 11 (March 26 – March 30) SPRING BREAK
Enjoy your break

Week 12 (April 3 – April 5)
Reading: Industries of the Future, Conclusion, pp. 140-150
The Inevitable, Chapter 7, pp. 191
Group presentations

Week 13 (April 10- April 12) - CWA Week -
You must attend at least two CWA panels during this week. I will try to insure that the CWA covers topics of special interest to this class and ideally have at least one of these sessions held during our class period.

Week 14 (April 17 – April 19)
Group Presentations
Readings: TBA

Week 15 (April 24 – April 26)
Group Presentations

Week 16 (May 1 – May 3)
Group presentations

Conclusions – What do YOU do from here?

Research Essays due in class May 3

No class final.

Accommodation for Disabilities
If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website (www.colorado.edu/disabilityservices/students). Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition or injury, see Temporary Medical Conditions under the Students tab on the Disability Services website and discuss your needs with your professor.
Religious Holidays

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, {[[insert your procedures here]]}

See the campus policy regarding religious observances for full details.

Classroom Behavior

Faculty and students should be aware of the campus Classroom and Course-Related Behavior policy which describes examples of unacceptable classroom behavior and provides information on how to handle such circumstances should they arise. Faculty are encouraged to address the issue of classroom behavior in the syllabus, and to understand their professional rights and duties.

Classroom behavior

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Class rosters are provided to the instructor with the student’s legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on classroom behavior and the Student Code of Conduct.

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation

The University of Colorado Boulder (CU Boulder) is committed to maintaining a positive learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct, discrimination, harassment or related retaliation against or by any employee or student. CU’s Sexual Misconduct Policy prohibits sexual assault, sexual exploitation, sexual harassment, intimate partner abuse (dating or domestic violence), stalking or related retaliation. CU Boulder’s Discrimination and Harassment Policy prohibits discrimination, harassment or related retaliation based on race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Individuals who believe they have been subject to misconduct under either policy should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127. Information about the OIEC, the above referenced policies, and the campus resources available to assist individuals regarding sexual misconduct, discrimination, harassment or related retaliation can be found at the OIEC website.
Honor Code

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the academic integrity policy. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, resubmission, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code Council as well as academic sanctions from the faculty member. Additional information regarding the academic integrity policy can be found at the Honor Code Office website.