CSCI 369 Ethical Issues in Computing Spring 2020

"What is the right thing to do?" -Michael Sandel

"People are the only sources or destinations of information, or indeed of any meaning . . . Digital information is just people in disguise." -Jaron Lanier

Course Description

Is computerized surveillance good or bad? Was Edward Snowden a hero or a villain? Will artificially intelligent computers eventually replace human beings? Should scientists stop researching in fields such as artificial intelligence or nanotechnology in order to safeguard future lives? When software malfunctions, who is responsible? Do humans have a right to privacy? How does Facebook change our relationships? Is playing video games harmful to our children?

This course will examine how computers contribute to our lives in good and bad ways. Students will become familiar with a variety of ethical perspectives, will look at how these perspectives crop up in twenty-first century life and dialog, and will apply these perspectives to questions that arise in the design of software systems and the use of computers.

This course is designed to address the professional and ethical concerns of computer science majors. It is also designed to help students integrate their orientation as scientists with their personal belief system to promote better informed decisions as professionals and to see their lives as an integrated whole.

Goals of the Course

The goals of the course will be for each student:

- 1. to gain an understanding of some of the numerous and complex ethical issues that underlie computer use and development
- 2. to understand how good or poor design is integral to these ethical issues and problems
- 3. to examine how good or poor software design contributes or detracts from the common good
- 4. to develop a personal professional code that integrates one's work as a computer scientist with one's own belief system

Professor

Dr. Noreen Herzfeld Theology Department Primary Office: 206 Luke Hall (off the Quad) Phone: 2693 E-mail: <u>nherzfeld@csbsju.edu</u> Office hours: 2:30-3:30 T and Th, and by appointment

Required Texts

Sandel, Michael. Justice: What's the Right Thing to Do? Shelly, Mary. Frankenstein (Annotated for Scientists, Engineers, and Creators of All Kind)

Evaluation

Because this class depends on discussion, attendance is mandatory. In case of illness or other unavoidable difficulties, contact me as soon as possible. Two unexcused absences are ok. After that, your grade will be lowered by two percentage points for each class that you miss. Class attendance also presumes that you come prepared and demonstrate completion of the reading assignments for each day. Each day you will be expected to bring a "ticket" to get into class, which will consist of at least two paragraphs of reflection on the reading and three questions. I will generally not collect these, but you will be expected to show it. Lack of demonstrated preparation will lower your grade. To earn an A you must show consistent deep engagement with the material.

The following criteria will be used to assess your written work in the course:

-accuracy in representing an author's viewpoint or data

-a clear thesis

-organization and coherence of your argument

-appropriate grammar, spelling, and proofreading

-Any plagerism will result in failure of the course

Late papers will be accepted for up to one week but will lose points for each day they are late. Work that is more than one week late will not be accepted unless you have a prior arrangement with me.

Your grade will be based on the following:				
Three short essays (2-3 pages)	45%			
Book review and presentation (15+5)	20%			
Final paper and presentation (15+5)	20%			
Class participation and "tickets"	15%			

You may request S/U grading any time before the last day of class.

Etiquette

You may bring the beverage of your choice to class, but please, no food. No laptops--e-mail and Facebook are just too distracting, even for me. Cell phones off. This is one CSCI class that is for sitting and talking together, so it will be a technology free zone, as much as possible.

Course Calendar (this is a best guess and could change)

Jan	14	Introduction: Why Computer Ethics? Ethical Reasoning: Right and Wrong Ways to Do It
	16	Sandel: Utilitarianism Discussion: Would you walk away from Omelas?
	21	Surveillance Discussion: How much surveillance do we need?
	23	Sandel: Libertarianism Discussion: What is freedom?
	28	Social Media Discussion: How free should speech on social media be?
	30	no class Essay 1 due Friday 5 pm (or discuss with me)
Feb	4	Sandel: Markets and Morals Discussion: What things should not be bought or sold?
	6	The Internet Discussion: Are we commodities?
	11	AI Discussion: How will we make a living in the age of AI?
	13	Should Robots Have "Human" Rights? Video
	18	Ethics of Robotics: People and Robots Discussion: Is having sex with robots ok?
	20	Ethics of Robotics: War and Robots Discussion: Should autonomous weapons be banned?
	25	Frankenstein: Vol. 1 and 2 Discussion: Moral Development
	27	Frankenstein: Volume 3 and Introduction Discussion: Boeing, software design, and fail-safe planning
		Spring break
March	10	Frankenstein: Essays Discussion: How responsible are we for our creations?

	12	no classwork on trials with attorney groups
	17	Trials of Dr. Frankenstein and his monster
	19	Sandel: Kant and Motives Discussion: Should companies pay white hat hackers? Ransomeware? <i>Essay 2 due Friday 5 pm</i>
	24	Sandel: Rawls and the Case for Equality Discussion: Rawls and making a living in the age of AI.
	26	Sandel: Aristotle and Virtue Discussion: How do computers shape moral character?
	31	Virtual Reality and Video Games Discussion: What is ethical in a virtual world?
April	2	Book review team meetings
	7-9	Book Review panels Book Review due Friday 5 pm
	14	Sandel: Dilemmas of Loyalty Snowden video and discussion
	16	Whistleblowing in Silicon Valley: Tech and Sexism Discussion: Do we need a "veil of ignorance" in the tech world?
	21	Codes of Ethics Discussion: Do codes of ethics do any good?
	23	no class: Scholarship and Creativity Day Essay 3: Personal Code of Ethics due Friday 5 pm
	28	Sandel: The Common Good Presentations of final paper topics
	30	no class Final Paper due Wednesday, May 6