CSC 385
Professional and Ethical Issues in Computer Science
2:00 - 3:15 p.m.
Tuesday and Thursday
Class: DO 132

Eric Patterson, Ph.D.
CIS 2031: Office Hours 1:00 p.m. - 2:00 p.m., TTh; 10:00 a.m. - 12:00 p.m., W; or by appointment.
(910) 962 - 7701
pattersone@uncw.edu

Course Information:
Ethical and professional issues arising from the impact of computer science and related technologies on society. Topics include ethical issues, obligations of professional practice, privacy and security, intellectual property, work and health issues, and the impact of emerging technologies. Students will give both oral and written presentations and participate in the discussion of case studies. Partially satisfies University Studies IV: Building Competencies/Writing Intensive. Partially satisfies University Studies IV: Building Competencies/Information Literacy.

Optional Text:
Program or Be Programmed: Ten Commands for a Digital Age by Douglas Rushkoff

Required Texts:
Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World by Bruce Schneier
Alone Together: Why We Expect More from Technology and Less from Each Other by Sherry Turkle
The Glass Cage: Automation and Us by Nicholas Carr

Also, Choose One More Required:
Who Owns the Future? by Jaron Lanier

Present Shock: When Everything Happens Now by Douglas Rushkoff

Digital Disconnect: How Capitalism is Turning the Internet Against Democracy by Robert McChesney

Technopoly: The Surrender of Culture to Technology by Neil Postman

Reality is Broken: Why Games Make Us Better and How They Can Change the World by Jane McGonigal

To Save Everything, Click Here: The Folly of Technological Solutionism by Evgeny Morozov

Countdown to Zero Day: Stuxnet and the Launch of the World’s First Digital Weapon by Kim Zetter
Suppositions:
1. Most of us live in a cave, and the modern one is very small with dimly lit walls painted by corporations.
2. We should step back from electronic technology to better study our relationship with it.
3. There is a modern bias toward brevity and currency, but we should instead seek depth and reflection in our thinking and actions.
4. We are in a time of rapid change, out of which could come significant positive or negative outcomes.
5. The unexamined life is not worth living.

Assignments:
Essay 1: Research ethics from its foundations through to the professional codes of the IEEE and ACM and discuss how this philosophical field has or has not changed in today's technological era.

Essay 2: A manager and lead developer have agreed on a plan for a large software-development project. After some time the manager wishes to release a potentially incomplete project by a certain date, but the developer also wants additional time to revise and develop major features of the software that could be important improvements but will delay the release. Discuss the ethics of this situation from the viewpoint of all potentially involved parties and provide resulting recommendations for possible solutions.

Essay 3 (with revision): Research, develop, and present a cogent argument for or against one each of the following statements.
- The Internet has fulfilled its promise of democratization.
- Heavy users of social media are more fulfilled than others.
- Technology has increased the class gap.
- Social media — you are not their customer.
- Driverless vehicles will improve our lives.
- Technology can solve all problems.
- The Internet has significantly improved society and culture.
- The mobile phone has significantly improved society and culture.
- Security should be a priority over privacy and individuality.
- Automated warfare is beneficial.
- There is no such thing as artificial intelligence.
- Technology and government do not mix.

Essay 4: Reverse your thesis for Essay 3. Research, develop, and present a cogent argument in support of this opposite stance.

Writing Assignment 5: Given a fictional character and two job postings, craft a professional resume and cover letter relative to the postings. Also, craft your own personal resume and generic, adaptable cover letter.

Presentation 1: Prepare and present an oral presentation related to one of our books. Optionally, up to three visuals may be used if they enhance the presentation.

Presentation 2 (Panel): Prepare and present a panel presentation and discussion related to your fourth book. Optionally, up to five visuals may be used if they enhance the presentation.

Optional Essay:
- Rushkoff presents ten commands for living well in a digital age. These are primarily aimed at users of technology. Discuss whether or not and how they are important for developers of technology.
- Add one or more rules to Rushkoff’s list of ten and present a case through facts, references, and a well-constructed rhetoric.
Grading:

check minus: All of the objectives of an assignment are not met, or objectives are met but the assignment is more than a week late in submission.

check: All of the objectives of an assignment are met. For essays this includes well-thought developmental materials including at least pre-writing and an outline; a grammatically correct and well-written, professional-level essay that presents substantial referenced facts and ideas that are used to build a logical argument and conclusion; references from respected, fact-checked, edited sources; and overall quality, form, and timely submission. (If work is a revision, all suggestions have been considered and integrated for an improved product). For presentations this includes a well-formulated discussion that is clearly and dynamically presented in a manner that maintains interest, exhibits effective persuasion, and limits distractions.

check plus: Work that is exceptional in some fashion beyond the standard criteria or at least meets the standard criteria and is submitted one week or more before the deadline.

Essays and presentations: All check plus work will result in 75 points, mostly check plus in 70 points, some check plus work in 65 points, all check work in 60 points, some check minus work in 55 points, and all check minus work in 50 points. Non-submissions will bring a grade even lower.

Midterm and final exams that include testing on all reading and class discussions account for 25 points for a course total of 100 points mapped to the standard UNCW letter-grade scale.

Student Learning Outcomes:

1. Students should be able to list, describe, and evaluate issues associated with the development and use of technology.
2. Students should be able to describe and evaluate different actions and reactions associated with technology and ethics.
3. Students should be able to differentiate between the main ethical theories and be able to formulate effective arguments based on sound premises.
4. Students should be able to research an ethical issue, formulate an effective related argument, and present it in a clear and logical manner.

Course Policies:

Only a notebook, writing utensil, and book of current discussion are allowed during class meetings.

Unless special circumstances are involved, more than three absences will result in class failure.

Students are individually responsible for keeping current with course material, assignments, and timely submission of work.

Academic honesty in all your work is required for a passing grade.

This syllabus may be subject to change with reasonable notice.

All other UNCW standard syllabi announcements are in effect.