CS 301 - Computers and Society
Fall 2017 Course Syllabus
Northern Arizona University • College of Engineering, Forestry and Natural Sciences
School of Informatics, Computing, and Cyber Systems

General Information
• **Meeting Times:** MW 11:30AM – 12:20PM
• **Location:** Engineering Building 69, Room 120
• **Credit Hours:** 2
• **Grading:** Letter
• **Prerequisites:** CS 249
• **Co-requisites:** None
• **Instructor:** Steven M. Jacobs, Lecturer, School of Informatics, Computing, and Cyber Systems
• **Contact Information:** Steven.Jacobs (at) nau.edu. PLEASE include “CS301” in the subject or body of any email message.
• **Office Hours:** Building 69, Rm 324C
  See on-line schedule at Prof. Jacobs’ faculty page: [http://cefns.nau.edu/~smj93/](http://cefns.nau.edu/~smj93/) (click on “schedule”)

Course prerequisites
CS 249 with a grade greater than or equal to C

Course Description
This class explores issues that deal with the societal and ethical implications of widespread use of computer technology.

Student learning expectations/outcomes for this course
Students will become familiar with
• Issues related to the global impact of computer technology,
• Professional ethics, ethical use of the Internet,
• Privacy issues, property rights of software,
• Accountability and social implications of information technology.
• Students will understand the motivation for lifelong learning and be well grounded in workplace expectations.

ABET Learning Outcomes supported by this class
This course directly supports the following Program Learning Outcomes in the CS program assessment and improvement plan:
   E. An understanding of professional, ethical, legal, security and social issues and responsibilities
   F. An ability to communicate effectively with a range of audiences
   G. An ability to analyze the local and global impact of computing on individuals, organizations, and society
   H. Recognition of the need for and an ability to engage in continuing professional development

Assessment of Student Learning Outcomes

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Points</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Attendance/Class Participation</td>
<td>100</td>
<td>10</td>
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<tr>
<td>and Review quizzes</td>
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<tr>
<td>Homework</td>
<td>100</td>
<td>10</td>
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<tr>
<td>Essay</td>
<td>200</td>
<td>20</td>
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<tr>
<td>Class Project (Mock Trial)</td>
<td>50</td>
<td>5</td>
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<tr>
<td>Case Study Team Presentation</td>
<td>150</td>
<td>15</td>
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<tr>
<td>Midterm</td>
<td>200</td>
<td>20</td>
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<tr>
<td>Final Exam</td>
<td>200</td>
<td>20</td>
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<tr>
<td>Total</td>
<td>1000</td>
<td>100</td>
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Grading System: Letter
Grading scale: 90%=A, 80%=B, 70%=C, 60%=D, below 60%=F

Methods of Assessment
Homework Assignments:
There will be multiple homework assignments throughout the semester.

Essay Paper:
There will be one comprehensive essay paper requiring students to thoroughly discuss a contemporary issue in which the student is interested. The paper will require discussion and analysis of societal and global impacts of computer technology. The essay paper assignment supports professional development with the requirement to cite sources from professional journals and conference proceedings.

Class Project:
A student-run, team-based mock trial will be held to discuss a relevant, timely topic in social, ethical, and global issues in computer science. Instructions will be handed out closer to the “trial date”.

Case Study Presentation:
A team-based student presentation on a Case Study will be completed. Instructions will be handed out closer to the presentation date(s).

Midterm and Final Exams:
In this course, there will be 1 midterm exam and 1 final exam. The midterm is tentatively scheduled for Wed. Oct. 4, 2017 [revised 9-28-17: slipped to Wed. Oct. 11, 2017]. The final exam will be held Wed. Dec. 13, 2017, 10am – 12 Noon.

Regrade requests of test questions (or homework) may include regrade of the entire test or homework. You have 2 weeks to question a grade once it is posted in BbLearn. It is your job to check your grades.

Course Structure/approach
This course is structured as lectures and discussions plus a comprehensive essay paper and project.

Course outline
1. Module 1: Ethics (Weeks 1-5)
   a. Introduction to Computers and Society
   b. Privacy
   c. Freedom of Speech
   d. Intellectual Property and Copyright
   e. Work/business ethics
   f. Evaluating and Controlling Technology
   g. Professional Ethics and Responsibilities
   h. Mock trial project
2. Module 2: Global Perspective and Impacts (Weeks 6-8)
   a. World Wide Web reach (e.g. country-specific variations) and universal access to
technology
   b. Cross-cultural and global teaming/development
   c. Sustainability and e-waste challenges
   d. International cybercrime
   e. Case study team presentations
   a. Major events, e.g. digital revolution
   b. Key people (then and now), e.g. Turing, e.g. Bill Gates
   c. Women in computing, e.g. Grace Hopper
4. Module 4: Career Objectives (Weeks 12-13)
   a. Motivation and skills for lifelong learning
   b. Well-formed expectations about workplace and/or grad school
5. Module 5: Writing and Licenses (Weeks 14-15)
   a. Preparation of research paper
   b. Software licensing including Open Source solutions

Textbook

Course website
http://bblearn.nau.edu We will use the BbLearn web site for this class to submit homeworks, provide access to some course material, and post grades.

Attendance Policy
You are responsible for all material covered during the lectures whether you attend or not. If you must miss a class, be sure to get the notes from another student.

Attendance will be taken and will contribute to your final grade, in conjunction with participation points, see "Assessment of Student Learning Outcomes" above.

Don't be late, and don't leave until class is dismissed. While class attendance is expected, please be cautious about attending class if you are feeling ill. Please inform me by email if you are feeling unwell; if you are experiencing flu-like symptoms, you should not attend class; please take precautions not to infect others, and seek medical attention if your symptoms worsen. Recall that absences do not include institutionally documented and approved absences. Besides illness, absences are also permitted for other medical reasons, or family matters, if discussed in advance of the missed class. If attendance is poor, I will use my judgment at the end of the semester to drop one letter grade for poor attendance.

Late Policy
In general, no late work will be accepted without a documented excuse. If you miss (or know that you will miss) an assignment or exam, discuss the matter with your instructor as soon as possible. Late work and makeup exams will only be allowed if cleared with me in advance or if a documented excuse is presented.

Lectures and the Book
The lecture topics follow the same general outline as the book. However, the lecture complements the book rather than being a mirror of it. If you only read the book or only pay attention to the lecture you're likely to end up missing some key concepts. To succeed in the class, read each chapter before we discuss the corresponding topic in the lecture, then use the lecture as an opportunity to reconsider the key points of the material and ask questions on anything you're confused on.

Electronic Devices and Recording
Feel free to bring your laptops and SmartPhones, take electronic notes, or research things as we talk about them during lecture. Note that updating your Facebook page does not count. During exams, no electronic device use is allowed; this includes music players with headphones. Also, please be courteous to your classmates and me by silencing your cell phones. I reserve the right to ask you to stop using any device if it is bothersome or distracting to the class.
Please do not record (either audio or visually) class lectures or discussions without first obtaining permission to do so from your instructor or (if appropriate) from Disability Resources.

**Plagiarism and Cheating**
Copying or any other form of academic dishonesty will result in an immediate failure in the course in addition to recommendation of other penalties. In the event of cheating, both the receiver(s) and the giver(s) will be treated the same way. Consulting with others and using their advice on homework assignments or the essay paper is fine. However, the work you submit should be your own work that you thoroughly understand and for which you are entirely responsible. Consulting or communicating with others is prohibited during exams.

**Pre-requisites and dropping the course**
If you have not completed the prerequisites for a course as stated in the academic catalog or if you are absent from class during the first week, you may be administratively dropped from the course before the 21st day of the term. Do not rely on your instructor to drop you from the courses that you want to drop. You are responsible for changing your own course schedule.

**University Policies**
There are a number of university policies that govern your education and safety that all students should be aware of. These are:

1. Safe Working and Learning Environment
2. Students with Disabilities
3. Accommodation of Religious Observance and Practice
4. Institutional Review Board (And Use of Human Subjects)
5. Academic Dishonesty
6. Medical Insurance Coverage for Students
7. Classroom Management
8. Evacuation Policies

You will find a complete description of the policies here: [http://nau.edu/university-policies/](http://nau.edu/university-policies/)