

Syllabus

Computing Seminar - COMP 439

7:00 am Science 113

Fall 2008

Instructor: Dr. Frank McCown
Contact: 501-279-4826, HU Box 10764, fmccown@harding.edu
Home Page: <http://www.harding.edu/fmccown/classes/comp439-s08/> (Syllabus, useful links)
Office Hours: Science 208: 11 – 12, 1 – 3 MWF, 4 – 5 TR or by appointment

Required text: *A Gift of Fire (3rd edition)* by Sara Baase (2008)

Goals of this class:

1. For students to become familiar with ethics in computing and to equip students to make wise ethical decisions in the future.
2. For students to gain experience in independent research and technical writing.
3. To provide a forum in which students practice communicating technical information to a large audience.

Grading

The final grade assigned in this class is based on the following:

1. **Attendance** - 35% This is your attendance record over four semesters. Your attendance is required at every student-led seminar. Seminars that are given by non-student speakers are not required but may substitute for missed student seminars. You are allowed two cuts per semester without penalty. So during one semester, if you attend 9 out of 10 student seminars and 2 out of 3 non-student seminars, your overall attendance percentage for that semester is 100% (you cannot earn more than 100% attendance), and you can use the extra attendance to off-set an absence the following semester.
2. **Ethics Text** - 10% You will be required to attend two different sessions where the Ethics Text is discussed. You will be required to sign a form stating how much of the text you read before class; your grade will be based on how much you read and your participation in class discussions.
3. **Paper** - 20% This is a 10-15 page term paper on the same topic as your seminar presentation. The paper is due one week prior to your seminar (at 5pm). See the accompanying sheet for grading criteria.
4. **Trial Run** - 15% This is a complete oral presentation of your seminar given to the instructor alone for critiquing. It is given three days prior to your seminar. All visuals, handouts, etc. should be prepared at this time. The only changes after this will be in delivery. Grading will be according to the accompanying sheet.
5. **Seminar** - 20% This is the final oral presentation to your peers and department faculty. Grading will be according to the accompanying sheet.

The grading scale is 90% and above = A, 80% and above = B, etc. There will be no rounding (89.9% is a B).

Class Readings

These are the assigned readings: Chapters 1, 2 (skip sections 2.4 and 2.5), and 3 for Sept 5; Chapters 4 (skip section 4.7), 5 (skip section 5.6), and 8 for Sept 12. You must complete the readings *before* we discuss them in class. Suggested reading (not required): ACM Code of Ethics and Professional Conduct (<http://www.acm.org/about/code-of-ethics>)

Seminar Topics

When choosing a topic, try to find something that interests you and will be interesting to most CS majors. Your topic should be software-related although hardware-related topics may also be acceptable. A link to a list of possible topics can be found on the class website. You may also find a good topic by (1) looking in current magazines such as Communications of the ACM, PC Magazine, Popular Science, or Technology Review; (2) visiting websites of major research labs such as web.mit.edu/research/, www.lanl.gov, www.research.ibm.com, or www.sandia.gov; (3) visiting websites that offer technical news like news.cnet.com or technews.acm.org; (4) looking in your textbooks for chapters that were not covered in class; (5) talking to your professors.

You cannot use a topic that was presented in any seminar from the previous four seminars, so you should scan the seminar schedules of the past few semesters to see what is off-limits.

I must sign-off on your topic, so you need to choose a topic early in the semester.

Ideally you should create original research. This means you learn a new language or technology and use it to create something new. For example, you could write a networking program in ABC or create a dynamic website using XYZ. Or you could investigate how something works. For example, you could show how to unlock an encrypted file using a new security attack. It's also a good idea to find a research paper that someone has done and see if you can reproduce their work. Often you'll find that you have new insights into how the problem could be solved more efficiently or show weaknesses in the original work.

You may also choose a topic that investigates what others are doing or on a general CS-related topic and report on how it impacts us as computer scientists. For example, you could report on new types of phishing attacks or discuss copyright issues in regards to software.

Paper Requirements

Your paper must adhere to the following requirements:

- The paper should be 10-15 pages typewritten, double spaced, single column, in 10pt Times New Roman font with 1" margins on all sides. A Word template is available on the class web page.
- It should include a title page listing the title, author, date, and abstract (abstract not to exceed 250 words). The title page is not counted in the 10-15 pages. (Page 1 is the first page after the title page.)
- References (works cited) should be formatted according the Word template. All internal references will use the numbering format like this [1] as shown in the Word template.
- You may not cite Wikipedia as an authoritative source, but it may be helpful in finding good references to cite.
- All pages should be numbered (bottom-right) except the title page.
- All papers should start with an Introduction section and end with Conclusions and References sections.
- All sections should be numbered according to the Word template (e.g., 1. Introduction).
- All tables and figures should be numbered and have appropriate captions. You should make an explicit reference to every table and figure in the body of the paper.
- Use the third-person (preferred) or first-person narrative when writing.

Please read *Technical Writing Made Easier* by Bernhard Spuida and *Clarity in Technical Reporting* by S. Katzoff before writing your paper (links to both are on the class website). These guides will give you excellent advice about technical writing.

Keep in mind that you are not writing a tutorial. You should avoid using "you" in your paper. Instead of writing, "First, you must set the variable to...," you should write, "First, the variable must be set to..." Instead of writing, "You would be surprised to learn...," you should write, "Many individuals would be surprised to learn..."

At the same time you submit a paper copy to me for grading, you should also submit an electronic copy to TurnItIn.com. This web service is one method which is used to check the originality of your work. If you already have used this site before, you can join the Computing Seminar using the class ID number **2354567** and the password **bison**. If you have not used this site before, just visit the website and click on New Users in the upper-right side of the screen. You will then create an account and then join the Computing Seminar class where you can submit your paper.

The paper will be graded according to the criteria given on the grading sheet which follows on the next page of this document.

Presentation Requirements

Your seminar presentation should include a well thought-out set of slides using PowerPoint or other presentation software. There are several things to keep in mind when developing your slides. Please read *PowerPoint Presentations: The Good, the Bad and the Ugly* and *Oral Presentation Advice* (links on class website) for excellent advice on preparing for your seminar. I'll summarize a few points:

- Speak clearly and audibly; look your audience in the eye.
- Don't put too much text on your slides, and do not read your slides to the audience.
- You should have approximately 1 slide or less per minute.
- Use screen-shots, diagrams, and pictures liberally (a picture is worth 1000 words).
- Do not switch back and forth between your slides and websites unless absolutely necessary. It's better to include screenshots in your slides because it's less distracting, and if the website goes down or changes, you won't be publicly embarrassed when you try to access it during your presentation.
- If at all possible, prepare a nice demo which demonstrates your topic. Make sure you practice it over and over so it goes smoothly during your presentation.
- Avoid using the whiteboard since the lighting will be dark, and it's difficult for everyone to hear you talking when you are facing the whiteboard.

Your presentations (the trial run and final) will be graded according to the accompanying grading sheet.

Students with Disabilities

It is the policy for Harding University to accommodate students with disabilities, pursuant to federal and state law. Therefore, any student with a *documented disability* condition (e.g. physical, learning, psychological, vision, hearing, etc.) who needs to arrange reasonable accommodations, must contact the instructor and the Disabilities Office at the *beginning* of each semester. (If the diagnosis of the disability occurs during the academic year, the student must self-identify with the Disabilities Director *as soon as possible* in order to get academic accommodations in place for the remainder of the semester.) The Disabilities Office is located in Room 102 of the Lee Academic Center, telephone, (501) 279-4019.

Name: _____ Date: _____ Title: _____

The paper will be graded according to the following categories:

___ Overall Content (20%)

Did your paper have an in-depth examination of the chosen topic or was it just a cursory look at the area? Is it of sufficient length? Are examples and/or diagrams used to clarify important pieces of information?

___ References and Bibliography (10%)

Is it evident that you have spent adequate time in the library? Do you have a substantial number of sources for the topic chosen? Have you consulted all of the available and obvious materials? Are the sources balanced between books, periodicals, and WWW? (Note: You may not cite Wikipedia as an authoritative source.)

___ Conformance to Format Specification (10%)

Is the paper 10-15 pages? Does it conform to the given Word template? Are the references formatted correctly and alphabetized? Is there a proper Introduction, Conclusions, and References section?

___ Organization and Structure (15%)

Is it obvious that you were following an outline? Does your paper "ramble" or do the points fit together and follow well from what proceeds? Is there an appropriate introduction and conclusion?

___ Grammar (15%)

Are all of the sentences well formed? Are there sentence fragments? Do subjects and verbs agree? Are verb tenses consistent? Are the standard rules of English grammar used?

___ Spelling and Typing (10%)

Are words spelled correctly? Do not rely totally on a spelling checker as these will miss a large number of words which are incorrectly used. Do not use contractions or the word "I".

___ Cohesion (10%)

Does all of the material given "belong" here? Have you simply listed isolated pieces of information from various sources or have you summarized, blended, and found the common themes from these sources and brought them together into a result that is more than just the sum of its parts?

___ Writing Style (10%)

Is the paper easy to read? Is it interesting? Do you exhibit some originality and creativity? Does it flow? Does it pull the reader in and keep their interest until the end?

___ Total Score (total of above categories)

___ Late Penalty (minus 10% per day)

___ Final Score