CS187 - Science Gateway Seminar for CS and Math

Fall 2013 – Class 1

Sep. 3, 2013

Contact Information

- Instructor: Nurit Haspel
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- Phone – 617-287-6414.
- Office – S-3-071
- Office hours - Tu Th 2:30–4:00 or by appointment.
- Course schedule: Tu Th 11:00–11:50 at W-2-123 (Wheatley building, 2nd floor, room 123).

Course Description

- This is the first course of a two-semester sequence. Successful completion of the sequence will fulfill the students First-Year Seminar requirement.

- During the Fall semester we will focus on understanding various facets of Computer Science (CS) and how it relates to our lives.

- We will discuss different concepts of CS, read relevant articles, and discuss important matters in writing and orally, both individually and in small groups.

- We will become increasingly familiar with and experienced in scientific discourse, the scientific method and scientific communication.

- Course website: `http://www.cs.umb.edu/~nurith/cs187`.

- Syllabus:
  http://www.cs.umb.edu/∼nurith/cs187/Syllabus_fall.pdf.

The Course Structure

- Unlike most courses – the class will be run in sequence, no particular order.
- The following topics will be focused upon:
  - Introduction to Computer Science, algorithms and programming languages.
  - Applications of Computer Science and Math to other areas.
- There will be guest talks from people in the college.
- Some demos – building a computer for example.
- Student presentations.

General Stuff

- The course material will be available online and updated regularly with class notes and announcements.
- Attendance is required and accounts for 10% of your grade.
- If you miss a class for a justifiable reason (should be documented) please let me know as soon as possible.
- Don't be afraid to ask questions in or out of class. I won't think you are stupid and it won't lower your grade. Active participation is highly encouraged in this course.
- Don't hesitate to send me e-mails. I expect e-mails. It won't lower your grade.

Course Requirements

- Attendance – 10%.
- Individual topic essay (3 pages) – 30%.
- Individual topic presentation – 15%.
- Team topic essay (5 pages) – 30%.
- Team topic presentation – 15%.
- See Syllabus for more details.
- English majors are available to help with written assignments – you are highly encouraged to use them.

Peer Mentors

- Nicholas Rosato: rosatonj@gmail.com .
- Anthony Reid: Anthony.Reid99@gmail.com .
- Location: Unix lab. Office hours: By appointment.
- They are here for you!
- They assigned to our class to help you with any questions regarding CS187, any other coursework, and administrative matters.
- For example, if you have a question about Calculus or CS110 or a difficulty elsewhere on campus, they can help you out.
- They will also deliver several subjects.

- The CSM Student Success Center was established in Sep. 2008 to promote student success.
- Webpage: http://www.umb.edu/academics/csm/student_success_center
- It houses 13 Freshman Success Communities, CS is one of them.
- A brief history of the FSC...

Seminar Objectives

1. Critical reading: Careful and critical reading skills: determining truth from fantasy in popular articles about CS, math, and science in general.

2. Critical thinking: We will formulate our own opinions in our papers, our classroom discussions and our oral presentations. Our discussions in class and in writing should promote clearer thinking in all of us.

3. Clear writing: We will be writing essays that go through two drafts in both semesters. After the first draft is collected, your peers and I will make comments and you will submit a second, final draft. This will be a 3 page essay for individual writing assignment and a 5-page essay for team writing assignment. Help will also be available through English majors.

Seminar Objectives

4. Academic self-assessment: we will respond and constructively criticize each other's writing (mine included). This should promote cross discussion among teams and permit suggestions of additional material the teams might consider, highlight deficiencies in a group's choices of source material, and/or guide us about our critical reading of the source material. Also, our peers will comment on the two drafts of our essays (before the instructor does); we will get both sets of comments to work from when making our revisions.

5. Collaborative learning: both in face-to-face meetings and using collaborative tools on the web. We will be doing research, writing articles and making oral presentations, both in teams and individually.

6. Information technology: We will learn how we can use information technology in our own class work. Representatives will visit us from both the Library and the IT department, who will demonstrate available (electronic library) research and collaboration (e.g. Wiki, google docs) tools. As a CS course, IT will definitely be a large part of the course material.

7. Oral presentation: We want to be able to effectively speak about CS and Math. Students will give both a team presentation and an individual presentation (based on their formal writing topics)

Seminar Objectives (CS-Math specific)

8. We wish to understand several fundamental aspects of Computer Science/Math and how they are used in science, technology and everyday lives. This will be addressed in the topics we study and some of the presentations given by the instructor, peer mentors and guest speakers.

9. We wish to use these two semesters to build a community of fellow learners. You will be working with classmates and teammates on various topics, doing on-line research, posting findings and your opinions on the seminar's materials and papers.