Rhodes College

Senior Seminar
COMP 485

Syllabus
Fall 2012
CRN: 13343

Basic Info:
- Meeting times: Tuesday 3:30 in Olendorf 225
- Olendorf 419

Instructor:
- Betsy Williams Sanders
  - Office: Olendorf 419
  - Office Phone: 901.843.3791
  - Email*: sandersb@rhodes.edu

Office Hours:
- **MW 1:30 pm - 3:00 pm**
- By appointment

Book and Resources:
- You can use this link to find some of the important publications in CS:
  - http://en.wikipedia.org/wiki/List_of_important_publications_in_computer_science
- We have access to the ACM (Association for Computing Machinery) Digital Library
  - This should be extremely helpful in finding CS articles
- Google Scholar is helpful.
- If there is a journal article or other paper that you are interested in reading and cannot access, please let me know and I will see if I can make it available to you.
- I encourage you to stop by my office at any time and chat.

Prerequisites:
- The course is for senior Computer Science majors.

Course Description:
- The Senior Seminar is the culmination of the Computer Science major's experience in the department. In this class and the related COMP 486 in the Spring, we will work together to solve a research question and contribute to the field of computer science.
- One of the primary goals of this seminar is to clearly define a research agenda for the following Spring semester.
- Another goal of this seminar is to expose you to state-of-the-art research in computer science and to explore issues related to ethics and professionalism in computer science.
- Senior Seminar is an integrative course. It draws on all of the courses that you have had so far, including both general education and major courses.
- Senior Seminar is a seminar. We each come to each class prepared to contribute what we have learned.
- You will be expected to work together as a group outside of this class time.
- You will also be tasked with created a simple as a group using some sort of version control of your choosing.

Weekly Assignments:
- Every week you will do the following:
  - Clearly present a computer science research article to the group in 1 minutes or less. WE call this "ONE Minute Madness". You should make sure that you have read this article thoroughly and you should be able to answer questions about it. If you want to use powerpoint slides, you will need to get your presentation on the computer BEFORE class. This article should something that you are particularly interested in and you have found yourself. IT MUST BE a paper published in a good journal or conference. If it's associated with the ACM or IEEE, it will probably be good. Check with me if you are

unsure. As the semester, comes closer to an end, these articles should be more closely related to the next semester's agenda.
- o Produced a typed a summary of the article you presented in the One Minute Madness and post it to our google doc.
- o Post 2 project ideas in the "project ideas section" of the google doc.
- o During the first part of the semester, you will also read a research article that will be presented in depth by one of your peers. The goal of these papers is to get a taste for the different research areas in computer science. Each of you will take turns picking out the article that the class will read. . You will be allowed to pick a topic or the particular discipline from which the paper comes form, but I ask that it be different from your classmates. When it's your turn to pick the article, you are in charge of presenting the article. Your presentation should be around 20 minutes long. You should also come up with a few questions to get a lively discussion started.

  - ▪ Betsy Sanders **9/4/2012**
  - ▪ Jeremey Key **9/11/2012** (paper selected and approved by 9/4/2012)
  - ▪ Rui Lui **9/18/2012** (paper selected and approved by 9/11/2012)
  - ▪ Sydney Howard **9/25/2012** (paper selected and approved by 9/18/2012)
  - ▪ Matt Isom **10/2/2012** (paper selected and approved by 9/25/2012)
  - ▪ Ye Zheng **10/9/2012** (paper selected and approved by 10/2/2012)
  - ▪ Clayton Moore **10/23/2012** (paper selected and approved by 10/9/2012)

  - o After these presentations are complete, we will select a specific area (that our Spring semester project will contribute to) and read papers related to this area together as a group.
- • You will also work on a group project. Each week you will create weekly goals that each of you will accomplish. At the beginning of class, you will elect a project manager (or project manager) that will lead those discussions and come up with clear ideas on where the project is heading. The goal of this project is to get used to manipulating the same piece of software and programming as a group.

Project Proposal:
- • Individually (due: 10/31/2012)
  - o You will write a brief concise project proposal idea to submit before the group on 10/31/2012. We'll talk more about this in class closer to the date it is due.
- • As a Group due at the end of the semester:
  - o You will create senior research project proposal provides an overview of your proposed plan of work, including the general scope of your project, your basic research questions, research methodology, and the overall significance of your study. In short, your proposal explains what you want to study, how you will study this topic, why this topic needs to be studied, and (generally) when you intend to do this work.
  - o Your work should have the following parts/sections:
    - ▪ Title, Abstract, Introduction (Problem Statement, Purpose/Aims) , Related Work, Methodology, Conclusion (Significance), Timeline/Plan of work
    - ▪ Reference section (citing at least 15 sources the majority being research articles)
  - o This paper MUST be written in latex and must be in the SIGGRAPH ACM style.
  - o Your project proposal will be due the final day of class and will be a group effort. You will also lead a 20-30 minute discussion on your proposal on the final day of class.

Grade Breakdown:
- • 30 % Participation
- • 30 % Assignments
- • 40 % Final Written Assignment and Presentation

Grade Assignments:
- • Grading is based on the below scale:
  - o **A : [93%, 100%]**
  - o **A- : [90%, 93%)**

- B+ : [87%, 90%)
- B : [83%, 87%)
- B- : [80%, 83%)
- C+ : [77%, 80%)
- C : [73%, 77%)
- C - : [70%, 73%)
- D : [65%, 70%)
- D- : [60%, 65%)
- F : [0%, 60%)

Attendance:
- Attendance is expected, please let me know if you have specific problems.

Special Accommodation:
- If you are in need of special accommodations, please register with the Office of Student Disability Services (http://www.rhodes.edu/disability) as soon as possible so that all necessary arrangements can be made.

Scholastic Behavior
- Plagiarism, cheating, and similar anti-intellectual behavior are serious violations of academic ethics and will be correspondingly penalized. If you are concerned about a possible violation of this kind, please talk with me. I understand the pressure that students may experience while at Rhodes, and I will try to help as best as I can.
- In this course you are encouraged to look online and use all available resources. However, when you write your final paper, you must site related work.

The instructor reserves the right to alter this syllabus as necessary.