

CMPSC 580

Junior Seminar

Syllabus

Spring 2019

Course Instructor

Dr. Oliver BONHAM-CARTER

Classroom: Alden Hall 109

Office Location: Alden Hall 104

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Web Site: <http://www.cs.allegheny.edu/sites/obonhamcarter/>

Instructor's Office Hours

- Monday: 2:00pm – 4:00pm (10 minute time slots)
- Tuesday: 11:00am – 12pm *and* 2:30am – 4:30pm (10 minute time slots)
- Thursday 11:00pm – 12:00pm (10 minute time slots)

To schedule a meeting with me during my office hours, please visit my Web site and click the “Schedule” link in the top right-hand corner. Now, you can view my calendar or by clicking “schedule an appointment” link browse my office hours and schedule an appointment by clicking the correct link to reserve an open time slot.

Course Meeting Schedule

Lecture, Discussion, Presentations, and Group Work:

Tuesdays and Thursdays, 9:30 am – 10:45 pm, Alden Hall, Room 109

Laboratory Session:

Wednesday, 2:30 pm – 4:20 pm, Alden Hall, Room 109

Academic Bulletin Description

An advanced treatment of selected topics from various areas of computer science with an emphasis on appropriate research methods. Practical skills

are acquired in technical writing, critical reading, and presentation of technical literature in preparation for the senior project. One laboratory per week. Prerequisite: Completion of the computer science core or permission of the instructor.

To improve their technical writing skills and to learn about conducting research in computer science responsibly students should consult the following books.

- *BUGS in Writing: A Guide to Debugging Your Prose*. Lyn Dupré. Second Edition, ISBN-10: 020137921X, ISBN-13: 978-0201379211, 704 pages, 1998.
- *Writing for Computer Science*. Justin Zobel. Second Edition, ISBN-10: 1852338024, ISBN-13: 978-1852338022, 270 pages, 2004.
- *On Being a Scientist: A Guide to Responsible Conduct in Research (Third Edition)*. Committee on Science, Engineering, and Public Policy, National Academy of Sciences, National Academy of Engineering, and Institute of Medicine. ISBN: 0309119715, 82 pages, 2009. References to the textbook are abbreviated as “OBAS”.
- Along with reading the required books, you will be asked to study many additional articles from a wide variety of conference proceedings, journals, and the popular press.

Class Policies

Grading

The grade that a student receives in this class will be based on the following categories. All percentages are approximate and, if the need to do so presents itself, it is possible for the assigned percentages to change during the academic semester.

Class Participation	50%
Proposal Deliverables	50%

Each of the above grading categories has the following definition:

- *Class Participation*: All students are required to actively participate during all of the class sessions. Your participation will take a form of participating in the in-class workshops, peer editing, and presentations.
- *Proposal Deliverables and a Final Proposal*: Each student must complete several proposal deliverables, including writing drafts of certain sections of the proposal, revising their drafts, and peer editing drafts of others. At the end of the semester students must present their proposal and submit a final proposal document that has gone through multiple revisions.

Assignment Submission

All assignments will have a stated due date. Late assignments will be accepted for up to one week past the assigned due date with a 15% penalty. All late work must be submitted at the beginning of the session that is scheduled one week after the due date. Unless special arrangements are made with the course instructor, no assignments will be accepted after the late deadline.

Class Attendance

It is mandatory for all students to attend all of the class and laboratory sessions. If you will not be able to attend a session, then please see the course instructor at least one week in advance to describe your situation. Students who miss more than two unexcused classes or group project meetings will have their final grade in the course reduced by one letter grade. Students who miss more than four of the aforementioned events will automatically fail the course.

Laboratory Attendance

In order to acquire the proper skills in technical writing, critical reading, and the presentation and evaluation of technical material, it is essential for students to have hands-on experience in a laboratory. Therefore, it is mandatory for all students to attend the laboratory sessions. If you will not be able to attend a laboratory, then please see the one of the course instructor at least one week in advance in order to explain your situation. Students who miss more than two unexcused laboratories will have their final grade in the course reduced by one letter grade. Students who miss more than four unexcused laboratories will automatically fail the course.

Use of Laboratory Facilities

Throughout the semester, we will investigate many different software tools that computer scientists use to perform, write about, and present research in the field. The course instructor and the department's systems administrator have invested a considerable amount of time to ensure that our laboratories support the completion of both the laboratory assignments and the final project. To this end, students are required to complete all assignments and the final project while using the department's laboratory facilities. The course instructor and the systems administrator normally do not assist students in configuring their personal computers.

Email

It is necessary that you check your Allegheny College email account regularly to be able to receive important announcements concerning our course. Using your Allegheny College email address, the course instructor will likely send out announcements about matters such as assignment clarifications, schedule changes or other concerns.

Disability Services

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. Students with disabilities who believe they may need accommodations in this class are encouraged to contact Disability Services at 332-2898. Disability Services is part of the Learning Commons and is located in Pelletier Library. Please do this as soon as possible to ensure that approved accommodations are implemented in a timely fashion.

Honor Code

The Academic Honor Program that governs the entire academic program at Allegheny College is described in the Allegheny Course Catalogue. The Honor Program applies to all work that is submitted for academic credit or to meet non-credit requirements for graduation at Allegheny College. This includes all work assigned for this class (e.g., examinations, laboratory assignments, and the final project). All students who have enrolled in the College will work under the Honor Program. Each student who has matriculated at the College has acknowledged the following pledge:

I hereby recognize and pledge to fulfill my responsibilities, as defined in the Honor Code, and to maintain the integrity of both myself and the College community as a whole.

It is recognized that an important part of the learning process in any course, and particularly one in computer science, derives from thoughtful discussions with teachers and fellow students. Such dialogue is encouraged. However, it is necessary to distinguish carefully between the student who discusses the principles underlying a problem with others and the student who produces assignments that are identical to, or merely variations on, someone else's work. While it is acceptable for students in this class to discuss their programs, technical diagrams, proposals, paper reviews, presentations, and other items with their classmates or other individuals, deliverables that are nearly identical to the work of others will be taken as evidence of violating the Honor Code.

Course Schedule

The course schedule will be made available on the course website (<http://www.cs.allegheny.edu/sites/obonhamcarter/>).

Welcome to Computer Science Research!

Computer hardware and software are everywhere! Conducting research in computer science is a challenging and rewarding activity that leads to the production of hardware, software, and scientific insights that have the potential to positively influence the lives of many people. As you learn more about research methods in computer science you will

also enhance your ability to effectively write and speak about a wide range of topics in computer science. I ask that you bring your best effort and highest enthusiasm as you pursue research in computer science this semester.