

Computer Science 475  
Seminar in Computer Science  
Spring 2021

Instructor: Dr. Chris Healy

My office is in room 200-I Riley Hall. My office hours are MWF 9:00 – 10:00 and also by appointment. Please see me if you ever have any questions or need advice during the course. I can be reached by phone (294-2233) and e-mail (chris.healy@furman.edu).

Class meetings:

MWF 10:20 – 11:10 a.m. in Room 204, Riley Hall

The last class is Saturday, May 1, 8:30 – 11:00 a.m.

If it is necessary for you to attend class remotely (e.g. dean's permission or winter storm), then you must join our class' Zoom meeting. In addition, you need to be visible throughout the class period. A separate Zoom meeting is available for remote office hours. The Zoom codes have been sent to you via e-mail.

Web site: Announcements about the schedule, reading material and homework will be posted here:  
<http://cs.furman.edu/~chealy/cs475>

There is no textbook for this course. All reading material will be provided to you. In this seminar, we will examine some of the major ideas in computer science. For example, the history of the discipline, the constituent sub-areas that make up computer science, some important research areas, and the impact of computing on society.

Grades will be calculated as follows:

25% class participation

5% ability to lead/moderate discussion

10% short written homework

10% Furman Engaged poster

35% research paper (2500 words)

15% oral presentation of your research topic

Our class meetings will occur in three phases. The course will begin with general topics about computer science. During the bulk of the course, from mid-February to mid-April, we will read and discuss journal articles. Finally, we will wrap up the course with your research oral presentations.

On most days, each seminar will have a specific subject theme, and you will need to read 1 or more articles for that class day. You will need to be prepared to discuss what you have read. Often, one student will be chosen in advance to be the moderator of the discussion. Each student will have a turn to be a moderator during the term. If you are the moderator, you will need to e-mail the rest of the

class a short list of discussion questions the day before class.

All students will do a research project during the term. The subject of your project may be in any area of computer science. According to departmental regulations, if you are an IT major, then the topic of your project must have an application to your cognate discipline. Your research project is not simply a report like a biography or historical sketch. It must include a significant element of implementation, analysis or problem solving. There are three events tied to your research project:

1. You will present a poster at Furman Engaged on Tuesday, April 13.
2. You will give an oral presentation of your work to the class sometime during April 19 – May 1. The presentation will last 20 minutes plus 5 minutes for questions.
3. The final draft of your paper is due on Tuesday, April 27.

For written work in this course, I do accept late submissions, but you will be penalized one letter grade (or 10 percentage points) per weekday (Monday-Friday) that it is late.

All homework that you submit must represent your own work. Copying someone else's work or asking someone (such as a tutor) to help you solve assigned work represents a serious act of academic dishonesty and will not be tolerated. If you have any question regarding what is and what is not allowed, please don't hesitate to ask me. For students involved in cheating, penalties will be substantial, up to and including an automatic failing grade in the course. On the other hand, I encourage you to discuss unassigned problems among yourselves. Also, you are to avoid self-plagiarism. There is to be no repetition of work with other classes. For this course (especially the term project), please avoid repeating work that you have done for another course or prior research program.

Class attendance is required. One percentage point will be deducted from your final grade for each unexcused absence. Excused absences include illness (doctor's note required), circumstances beyond your control, or a required extra-curricular activity in which you are an official representative of the university. In any case, you need to submit written documentation to excuse an absence.

As you know, successful completion of a college course usually requires about two hours of study for each hour in class. In this course, about half of your study time will be spent preparing for the next class, and the other half would be spent on your term project and other homework. I want you to do well in this class. Please let me know how I can help you.