

Computers and Society
Computer Science 101
Syllabus Summer 2018
MTWR 10:00-11:50 am Grue 401
Lecturer: joe dart

Welcome to CS101. All the material for this course will be available at the class website which is:

<http://dartwerks.com/summer101.html>

There will be no official textbook. Instead, readings, videos and assignments will be posted on the above website weekly.

Use of the Chrome browser is required as we will be using browser programs that are still under development and are currently only implemented by Google (in Chrome). However, most of the programs we write will run equally well in IE and Firefox.

You'll need access to a PC computer.

You will need access to a PC computer that can connect to the web.

If you have a Macintosh, I strongly advise you to do your work at the Library 24 hour computer lab which has PC computers. Unless you are very Mac experienced, you will have difficulty navigating this course because we use specific software that is not available on the Mac.

Either a laptop or a desktop is ok and it should have sound and a microphone. A web cam is not necessary but could be useful. You can't work with a cell phone. Debugging is just too hard to do on a cell. The 24 hour computer lab on the main floor of the library are available if you need a computer to do your homework. The access that room you will need a student id card that opens the door.

Attendance

Although I don't officially take attendance, attendance is beneficial in this summer course because watching online two hours per day of class videos is much too gruelling. And the applause and laughter and cheering sometimes makes it hard to hear what I am saying. So I recommend attending class, which is much more relaxed, and you can ask questions and get immediate answers. If you should miss a class, be sure to keep up with the home assignments that are online.

Programming assignments

Beginning the first week there are weekly program writing assignments that you will have to upload to your web host (I'll explain that the first day of class) and then you will need to send me a link to the assignment by email. I will exchange emails with you to help you get them running. We will develop these programs incrementally, one step at a time during classes each week.

Final project

There will be a final project due by the last day of class, no later. We will begin discussing it about the third week of classes.

Beginning about the middle of the summer semester we will start discussing your **programming project**. This will be a program that relates to one of your interests or your school studies that you will design and write. **This project will be due Thursday, June 28, 2018 (the last day of class). All homework and the project must be completed by this date.**

Grading:

5 Homework assignments 15 points each or	75 points
Final project	<u>25 points</u>
total points =	100 for course

What are we going to cover?

Let me begin by saying what this course is not. It is not a professional level programming course. You will be completely safe from Microsoft, Apple or Google breaking your door down to recruit you as a programmer in the spring. It is not an overview of computing with a fat expensive book, wide margins, a high price tag and a lot of busy work.

Hopefully, it's something much more useful to you, that gives you your money's worth where you least expected it, in a required course (that you dreaded taking) not in your major. It is very likely that something in this course will be useful to you as an innovative person. The web is ubiquitous and has made itself useful in every profession on earth. And we will be programming some of the latest and most interesting elements of the web.

The programming languages we will be using are **HTML**(HyperText Markup Language), **CSS** (cascading style sheets) and **Javascript**.

We will also be using **Paint**, **Xnview**, **Screencast-o-matic**, uploading files to **Altervista**, and the online 3d 'language' **ThreeJS**.

Programming light. The plan for this course is to give you the ability to access the most recent developments in web technology without having to get a degree in computer science. Nor will you have to purchase any software whatsoever. That's because you are going to write the code yourself. That means you'll be able to put useful programs together that might have seemed technically out of your reach.

To do that I've built libraries of the technical stuff which your programs will access... sound... voice recognition.. interactive graphics... webcams... .. two and three dimensional graphics... and animations.. mouse and keyboard control.... And it will all be available on the web.

That means, if you have a project that is going to be on the web and you want to incorporate any of these advanced tools, you will be able to use them directly with the only limitation being how much time you want to spend writing/copying the code. I want to put emphasis on your applying

what you learn here to your own web page ideas. Again, you supply the creativity and I supply the technical tools.

Students with disabilities are welcome in this course. We will make whatever reasonable accommodation is possible to ensure you have an opportunity to successfully pursue your education here. You can also contact the **Office of Disabilities Services (208 WHIT, 494-5655)** for more information on equal access to the campus and course.

My e-mail address is jjdart@alaska.edu

Finally, this is a technical class so do not bring small children, pets, sheep goats or and other domestic or wild animals to class. If you have a friend of family member who wants to sit in to see what's going on just bring them along.