Homework 1: Welcome to ECE 111
Matthew Shuman, Change this to your name

1 Introduction

Welcome to ECE 111 my name is Matt Shuman and I lived in Madras, Oregon before coming to OSU to start my undergraduate ECE degree in Fall 2001, but now Corvallis is home. I am teaching three ECE courses (ECE 111, 271, and 507) and coaching the Crescent Valley High School robotics team, Team 955\(^1\). I also used to teach a woodworking class at the OSU Craft Center\(^2\). Another passion of mine is travel, and my blog lists some of my recent trips and woodworking projects. I’m a 3rd generation Beaver, so OSU is important to me. My grandfather studied soils and helped Oregon farmers grow crops in the 40’s - 70’s. My dad studied civil engineering and helped design roads and small bridges in Central Oregon in the 80’s-2013. I like engineering because it is learning how to overcome any obstacle to take an idea and make it a fully functional product. Hopefully you learn how to overcome challenges and learn new skills in the ECE program at OSU.

Change this paragraph to reflect your background, and insert your image into figure 1.

Figure 1: This is during my summer 2015 adventure to Colorado.

2 Defining Success

Success is the achievement of something desired, planned, or attempted. After you put years and thousands of dollars into your college education, what do you want from your ECE degree?

\(^1\)http://team955.org/
\(^2\)http://mu.oregonstate.edu/craftcenter/
Write answer here

3  Word Processing

This homework assignment focuses on using Latex or another processor to create a professional looking .pdf for each assignment. What are the advantages of Latex compared to traditional WYSIWYG word processors? What are the disadvantages of using Latex?

Write Answer Here

4  Microcontrollers

Atmel Microcontrollers are a very inexpensive way to develop projects. Every future project in ECE 111 will use an Atmel Microcontroller, the Atmel Mega32.  
Lookup the cost of the Teensy 2.0 microcontroller board  
Lookup the cost of a Atmel Mega 32 microcontroller on Digikey. It doesn’t have to be the one used on the Teensy 2.0.  
http://www.digikey.com/?curr=USD

Compare the cost of the microcontroller and the cost of the Teensy 2.0 board here. What does the difference in this cost provide?

Look up a project on Youtube that uses an Atmel Microcontroller  
What does the Atmel Microcontroller do for the project you researched?

5  Microcontroller Packages

Integrated Circuits, ICs, are made using many different types of packages. The Mega32 in lab is a 44-VFQFN.  
Insert a picture for the DIP, TO-92, QFP, VFQFN, and BGA package types

This link might be helpful


6  ECE 111 Binder

Professionalism is important as you start your education at OSU. Every student is given a binder as part of their ECE 111 lab kit. Create a cover and spine insert for your ECE 111 binder. Attach a picture to this document that shows your binder with a cover and spine.  
http://oregonstate.edu/brand/print-downloads  
This link is really helpful for making professional documents. Use these templates for every course you take at OSU, and try to use official OSU colors from this color swatch.