

# Course Information & Syllabus

Tamara Blain

## 1 Course Details

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## 2 Course Description

We live in (what is referred to as) ‘the digital age’. Because of their accuracy and speed, computers help us to accomplish tasks that would take a great deal of time to do manually. They also help us to organize, store, and share information more easily. They are used in just about any professional field you can think of, as well as in daily life. You may be surprised by the places in which they can be found.

This course aims to increase your knowledge of computers and computing. We will focus, primarily, on desktop computers and applications that are commonly used in universities. You will also be exposed to basic computer programming and electronics. By the end of this course, you should be a much more proficient and savvy computer user.

## 3 Requirements & Expectations

- Each of you has varying levels of familiarity with PC use. I expect those of you who know more to assist those who are less familiar with anything we’re working on.
- There will be surprise quizzes, so pay attention and ask questions if you don’t understand something.
- You will be given quizzams EVERY Monday, unless I’m feeling particularly generous.
- You will need a notebook for the first part of the course.

## 4 Rules

- There will be 5 minute break in the middle of class during which you can stretch, drink water, or go to the bathroom.
- Use of ANY gadgets is not permitted during class time. This includes cell phones, mp3 players, PDAs, etc.
- During class time, use of the computer is limited only to what I direct you to. This means NO web browsing, playing video games, chatting, etc.
- No food or drink of any kind is allowed during computer use. That includes chewing gum.

- Breaking any of the above rules will earn you either a punishment assignment or points deducted from your final grade. In the case of multiple infractions, you may be expelled from the program.

## 5 Safety

- Do not plug or unplug any devices in the computer room. Notify me if any machine does not work properly.
- In case of an earthquake, DO NOT go underneath a table or desk. Crouch down in front of (or beside) a desk, table, or the nearest heavy object.
- Make sure you know where the nearest exit is in case of a fire. Wait in front of the building for further instructions.

## 6 Notebook

You should have a notebook to take notes on anything discussed during class. At the back of the notebook, you will maintain a glossary of terms or concepts defined during class. Later in the course, notes should be taken solely on the computer. Your paper notebook will be turned in at that point. Your digital notebook should be sent to my email on the last day of classes. Both the paper and digital notebooks will be graded on organization and completeness. *Any word or term you come across and don't know* should go in the glossary.

## 7 Labs and Projects

Labs and projects will be assigned and completed during class time. They will count as % of your final grade.

## 8 Quizzams & pop quizzes

Every Monday, we will have a 30-minute quizz/exam on the previous week's material. *If you are late to class*, you will receive a zero on the quizzam.

Surprise quizzes consisting of 3-4 questions on any topic previously covered will also be given.

## 9 Grading Breakdown

- Paper and digital notebook containing class notes and a glossary of terms: 20%.
- Weekly quizzams (at the beginning of each week): 25%.
- Pop quizzes: 10%
- Final exam (July 21<sup>st</sup>): 25%.
- Class participation: 20%.

## 10 Revisions to the Syllabus

This syllabus may be revised depending on the pace at which we cover the material. If any revisions are made, you will receive a new syllabus.

## 11 Course Calendar

### Week 1

#### Desktop Computer Basics

- ergonomics
- computers
- parts of a desktop computer
- simple concepts
- peripherals
- software

#### Advanced Desktop Computer

- memory
- computers' guts
- lab

#### Software

- files
- operating system
- applications

### Week 2

#### Keyboard commands

#### Productivity Tools

- word processing
- excel
- photoshop
- power point

## **Week 3**

### **Networking**

- modems
- broadband
- router
- hub

### **Internet Basics**

- definition
- ISP
- browsers
- email
- search engines
- cookies
- http / www

### **Web as a Research Tool**

- google searches
- getting info from a web page
- how to use library web sites
- scholar.google

### **Security**

- constructing a safe password
- phishing scams
- infections
- protections
- pop-ups
- email attachments
- secure sites

## **Week 4**

### **Programming**

- basics
- python
- web page creation

**Week 5****Basic Electronics**

- definition
- circuit elements
- bread boards
- schematics
- lab

**Robotics**

- definition
- lab