

Origin

Pillar: Foundation

The Raspberry Pi platform

Living *with* Cyber makes use of a unique computing platform that you will use throughout the curriculum. It consists of a Raspberry Pi computer (yes, it's a computer), an LCD touchscreen, a wireless keyboard and mouse, and USB-powered speakers. With this platform, you will complete a variety of cool activities. We will try to tie them all to *cyber* in some way (this is why we call this curriculum Living *with* Cyber). We'll explain what *cyber* is later.

Puzzle-based learning

The curriculum also makes use of puzzle-based learning. The idea behind this learning approach is to utilize puzzles to cultivate problem solving and critical thinking skills. Puzzles are fun, and if we can think of large, complicated problems as puzzles, then perhaps we can actually have fun solving them. Throughout the curriculum, we will discuss (and solve) various puzzles. By doing this, we will try to identify certain tactics that can be used to approach problem solving. You will also be assigned some to do on your own, and they will be graded. It is understandable that, particularly at first, you may have a hard time solving the puzzles. We hope that, over time, you will become better at solving them. Therefore, the puzzle grade will be pass or fail. So long as you reasonably attempt to solve each puzzle and show your work, then you should earn a pass.

Videos

The curriculum also makes use of videos that are shown in class. They are intended to be thought-provoking and cover a wide range of topics. Some relate to interesting applications of computer science; others cover more philosophical points about learning.

Interactive modules

To help clarify some of the material covered in the curriculum, a few interactive modules have been designed. These are web-based *presentations* (in HTML5 based on impress.js) that can be opened in a web browser such as Google Chrome, Mozilla Firefox, or Internet Explorer. They are localized on your machine (i.e., they do not require Internet access); however, dynamic web content can be pulled in if a working Internet connection is present. The interactive modules are usually non-linear in that they allow you to select where to go and what to see. Although few exist at this time, we plan to add more as the curriculum progresses.

Rules when taking exams

Here are a few rules to keep in mind when taking exams:

1. *No cheating*. It's sad that this has to be mentioned; however, it does occur. At the least, you will earn an F on the exam. At the most, you will earn an F in the course and will be recommended for expulsion from the university.
2. *Cell phones must be turned off*. They can't even be used as a watch.
3. *No reference material can be used*. Exams are closed book and closed notes.
4. *No sharing of anything*. Work the exam on your own. This is your time to show what you (and only you) have learned and can do.

Completing homework and exams

Here are a few suggestions when completing homework assignments and exams:

1. *Be clear and concise*. Don't vomit words on the page.

2. *Write legibly.* If the prof can't read your writing, it will most likely be marked wrong.
3. *Doodle to elaborate.* This is useful to clarify your words. It also helps you to problem solve.
4. *Format source code properly.* On homework, consider taking screenshots of source code.

Proper email etiquette

The art of *good emailing* is unfortunately not widespread. Here are a few things to keep in mind when drafting an email to your prof:

1. *Make your subjects short and meaningful.* We should be able easily prioritize it by the subject.
2. *Make your message short and meaningful.* Be concise but also clear. Please provide adequate detail to get your message across without inducing a puzzled look on your prof's face.
3. *Don't use ALL CAPS.* This is rude and quite annoying. It is usually taken as yelling.
4. *Don't abbreviate.* Be formal when you write. The prof is not your best buddy that you text your latest bowel movement to.
5. *Write properly.* Use proper spelling, grammar, punctuation, and capitalization. Email is not texting.
6. *Sign your name.* Do this at the bottom of your message. Please. Sign. Your. Name. The prof can't (and shouldn't) try to figure out who you are by looking at your email address. Note that you can automatically sign each email by adding a signature.

Please make sure to check your @latech.edu email **daily**. There are times when your prof needs to communicate important things to you with urgency.

Make the most of your time in class

Here are a few things that can help you perform well in class and make it better for all of us:

1. *Listen.* Don't chitchat with your classmates. This can disrupt the prof and your classmates.
2. *Be active.* Take notes, ask questions, work class problems, and help others when allowed.
3. *Turn your cell phone off.* Or at least set it on vibrate. Don't answer it in class. If you must answer, please leave the room before doing so.
4. *Use laptops for class activities.* Please don't check Facebook, email, the news, play games, etc.
5. *Take responsibility for your area of the room.* Throw away trash around you, wipe off dirty tables, tuck your chair in, etc.