CSCI 180-1S Computer Science II

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CSCI 180, Summer 2014 Syllabus

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Course Objectives

The goal of Computer Science II is to help students develop problem solving skills and express those skills in reasonably efficient, well-structured computer programs automating the solutions to problems.

At the conclusion of the course it is our objective that you will be able to:

- read and analyze text, including: explaining code; using documentation to determine what code does; analyzing problem descriptions to determine the tasks necessary for solution.
- design solutions to problems, implement them in java, document the solution at a level that beginning programmers would understand your solution, and develop test cases to provide evidence your solution is correct.
- conduct independent explorations into the course material, including development of plans for exploring possible solutions and acting independently on that plan.
- identify possible extensions to problems you work on, exploratory questions about the topics in the course, and multiple methods for solutions.

A note on accessibility for all

Any student who feels s/he may need an accommodation based on the impact of a documented disability should contact the Learning Assistance Center at 513-745-3280 on the Fifth Floor of the Conaton Learning Commons, Room 514, to coordinate reasonable accommodations.

What it means to be an online course

This course is run online. We believe you can be successful in the course partly because the textbook for this course is excellent and working through this text will bring you great understanding. This course requires you to read carefully, to work on exercises in the book, and to be reflective about your own learning. You either need to already be good at independently motivating yourself to think slowly and carefully or ready to become good at independently motivating yourself to think slowly and carefully.

It is important that you understand an online course is not a work-at-your-own-pace course. We have only six weeks to complete all of the material. You will probably need to work almost every single day of these six weeks.

Modules. The modules each present one thematically connected set of material. The modules are not all the same length. Most are three or four days but the second module is seven days. The current schedule of modules is the following:

<table>
<thead>
<tr>
<th>Module</th>
<th>Topic</th>
<th>Days in Module</th>
<th>Calendar Days in Module</th>
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<tr>
<td>1</td>
<td>Objects and Classes</td>
<td>4</td>
<td>May 27 - May 30</td>
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<td>2</td>
<td>Interactions between Objects, Collections</td>
<td>7</td>
<td>June 2 - June 10</td>
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<tr>
<td>3</td>
<td>Java Class Libraries for Clever Tricks</td>
<td>3</td>
<td>June 11 - June 13</td>
</tr>
<tr>
<td>4</td>
<td>Design</td>
<td>3</td>
<td>June 16 - June 18</td>
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<tr>
<td></td>
<td><em>Catch-up Days: no new material</em></td>
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<td></td>
</tr>
<tr>
<td>5</td>
<td>Testing and Debugging</td>
<td>3</td>
<td>June 25 - June 27</td>
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You will be assigned homework nearly every day of the course and should aim for 48 hours or less to submit it. Some of the homework will require participation on the Discussion board. Some of the homework will require you to work with a partner. You must connect to this course no less than once every 24 hours in order to stay current.

Some homework will get a longer deadline and projects will generally have a seven-ten day window for completion. We will have a 4-day "dead day" stretch after module 4 to provide concentrated time for completing project 2 and hitting the homework deadlines (this is based on previous runs of this course online and I think you'll find it useful).

I am happy to answer questions via the discussion board as well as email. I will also try to organize office hours through either the conference tool on Canvas or Skype. If you are in Cincinnati and want to meet in person, contact me in email to arrange a time.

**Grading**

Assessment will be based on three tools: Homework (35%), three projects (40%), final exam (15%), and participation (10%).

The Mathematics and Computer Science Department has a uniform Grading Standard and you should also check out my position on plus/minus grading and Academic Integrity.

**Cooperating with others**

Projects can be difficult. Programming can be tricky and nasty bugs can creep in. It helps to talk to others. You are encouraged to do so. BUT, you must also make sure the work you turn in is your own. Here are some guidelines to help you use the cooperative spirit of our program without harming your own intellectual growth or inadvertently committing plagiarism.

- Take a break after having a discussion then come back to the work and try it again. If you still know what to do, then you know the work and it represents your understanding.
- Make a list of the people you talked to and include it in your notes on the project so we can tell who and what may have influenced you.
- If you need to show your program to somebody, make sure you are the only one who modifies it. If you show a hard copy, you must be the one who writes on the paper. Never write anything you do not understand.

**Late Policy**

Labs and projects will be due at particular times, typically 23:59 pm on the due date. Late work is generally not accepted because the assignments are designed to recognize that we may not always achieve total success. You should hand in as complete a product as possible.

Extenuating circumstances may arise that prevent you from getting a fair chance to complete the assignment. If you believe this is the case, and notify me at least 24 hours in advance, I will consider your circumstances and grant any extension I deem necessary. An extension for one person does not imply an extension for all.