<table>
<thead>
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<th>Topic</th>
<th>Reading</th>
<th>Assignment Due - Date</th>
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<td>(Lesson 1) Classes and methods</td>
<td>Chapters 5, 6</td>
<td>9/10 -- 12 Questions 9/12 -- Lab file upload and post 9/14 -- Lab follow-up post</td>
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<td>Chapters 5, 6</td>
<td>9/17 -- 5 Questions 9/19 -- Lab file upload and post 9/21 -- Lab follow-up post</td>
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<td>10/22 -- 5 Questions 10/24 -- Lab file upload and post 10/26 -- Lab follow-up post</td>
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<td>(Lesson 4) GUI applications and events</td>
<td>Chapter 7</td>
<td>11/5 -- 5 Questions 11/7 -- Lab file upload and post 11/9 -- Lab follow-up post</td>
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<td>Chapter 13</td>
<td>11/23 -- Assignment 4</td>
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<td>Assignment 3</td>
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<td>(Lesson 6) Array concepts and algorithms</td>
<td>Chapter 8</td>
<td>11/5 -- 5 Questions 11/7 -- Lab file upload and post 11/9 -- Lab follow-up post</td>
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<td>(Lesson 7) Text processing and wrappers</td>
<td>Chapter 10</td>
<td>11/12 -- 5 Questions 11/14 -- Lab file upload and post 11/16 -- Lab follow-up post</td>
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<td>11/17</td>
<td>Assignment 4</td>
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<td>12/7 -- Assignment 5</td>
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<td>(Lesson 8) Recursion</td>
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<td>12/1</td>
<td>Assignment 5</td>
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<td>(Lesson 9) Algorithms and analysis</td>
<td>Chapter 16</td>
<td>12/10 -- 5 Questions 12/12 -- Lab file upload and post 12/14 -- Lab follow-up post</td>
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<td>12/15</td>
<td>(Lesson 10) Exception Handling</td>
<td>Chapter 12</td>
<td>12/17 -- 5 Questions</td>
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**Important dates (mostly for on-campus classes):**
- Mid-term grades are due: October 22 at noon
- Holidays: October 13 (M), November 4 (T), November 11 (T), November 27 (R), November 28 (F)
- Wednesday, November 12, is a Tuesday schedule
- Last day to withdraw with a W: Monday, November 10
General course information for COMI 2510
This syllabus is intended to provide an overview of course requirements and expectations. It is subject to change.

Course: COMI 2510, Advanced Programming and Design (Online)
Professor: Maggie Burke
Preferred pronouns: She, her, hers
Text: Starting out with Java, from Control Structures Through Data Structures, by Tony Gaddis & Godfrey Muganda, 2nd ed.
Office hours: (on campus) see http://faculty.wp.ccri.edu/mburke1/
Contact: Knight 2168, 401.825.2058, mburke1@ccri.edu
Departmental Secretary: Donna Scattone, 401-825-2155, dscattone@ccri.edu
Other materials: Eclipse Classic development environment, Access code to Pearson materials (included with text)

Course description:
This course introduces the student to advanced topics in programming and software design such as graphical modeling techniques and algorithms and analysis as well as current techniques in interface design and user interaction. Specific topics will reflect current technologies and might include inheritance and polymorphism in object-oriented design and graphical user interfaces and the event loop.

Prerequisites:
There are no formal prerequisites for the course, but COMI 1510, Java Programming, or equivalent experience with the Java language is strongly recommended.

Course outcomes:
Advanced topics in programming and design will be covered. Upon successful completion of this course, students will be able to:

- Design and program a human-computer interface using current HCI technologies.
- Write a computer program that responds to user input using current HCI technologies according to software specifications.
- Use current software modeling techniques to design software.
- Read modeling diagrams created with current software modeling techniques in order to understand software design specifications, and write a computer program that meets specifications.
- Document code with descriptive block comments.
- Use current software modeling techniques to document software.
- Design and program software using advanced programming techniques such as inheritance and polymorphism.
- Design and program software that uses an appropriate algorithm from the field of Computer Science, such as a searching or sorting algorithm.
- Analyze the run-time complexity of a few simple algorithms.
- Write robust code using appropriate error-handling techniques such as exceptions.
- Design and program software that appropriately uses a multi-dimensional array structure.
- Communicate design and programming intentions using appropriate terminology during class discussion.

Class attendance:
There is no attendance in the online section.

For the purpose of determining attendance in the course in order to comply with financial aid regulations (whether you personally are receiving financial aid or not), you must complete the 12 Questions about Java Classes and Methods no later than 9/12/2014. If you do not complete this assignment by this deadline, then you will be dropped from the class for non-attendance. Logging into Blackboard is not enough. You must complete an academic assignment to be considered enrolled in the course. Email me if there are issues with completing this assignment by the deadline.

Grading:
Your final grade will be composed as follows:

<table>
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<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Programming Projects</td>
<td>50%</td>
</tr>
<tr>
<td>Team Lab Work</td>
<td>25%</td>
</tr>
<tr>
<td>Questions</td>
<td>25%</td>
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</tbody>
</table>

I reserve the right to adjust your grade based on extreme subjective measures such as academic honesty. If I adjust your grade down I will retain documentation of my reasons.

Assignments must be submitted on time. No graded assignments are accepted after the due date. If there is a "Late work" link on the class website, then I will accept a maximum of one programming project late. I will grade this at the end of the semester if you have completed the course.

Incomplete grades will be assigned only to students who have turned in at least four programming projects and completed all lab work and questions up to the due date of the fourth programming project. If you do not complete your labs and your questions
then you are not eligible for an incomplete -- no exceptions. In order to receive an incomplete grade the student must give documented evidence that the course cannot be completed during the semester and must submit a plan for completing the course in writing to the instructor.

Requirements for submitting programming assignments:
Programming assignments will be submitted electronically, for obvious reasons. For electronic submissions, follow the very specific instructions in the assignment. These include how to name and zip your files and folder. Use the zip format. Do not use another compression format.

What is individual work?
Projects and questions are individual work and are to be completed by the individual alone. You may solicit help on general topics, examples from the text, and examples on the class website from the instructor or other individuals. All work produced on an assigned problem must be your own.

Labs are an opportunity to work on a problem on your own but solicit help from the instructor or other students on your team as needed. Use your discretion and attempt the work yourself first, as labs are good practice for graded assignments.

Work that is clearly not your own work will be handled according to the college's academic integrity policy. Retain all notes and earlier versions of your assignments so that you can demonstrate the work is your own, should a question arise. Please reference the following portion of the student handbook regarding the academic integrity policy:
http://www.ccri.edu/advising/new_students/student_handbook/handbook.html#dishonesty

Soliciting help from me
I want to help you with labs and examples and general concepts. I cannot help you with assignments. It is when you do an assignment by yourself that you learn what you are capable of doing on your own. It is not a failure if you can't do an assignment; it's an experience that teaches you where your strengths and weaknesses are. When you overcome your weaknesses, you know you have learned.

I absolutely will not proofread anything for you. Please don't send me code that you've copied from an example I've given or you've seen in the book, and tell me you can't get it to work. Examples that I give you are correct. If you can't get it to work, you've typed it in wrong.

Debugging is a critical programming skill. I enjoy debugging as much as I enjoy programming, but I can't do either for you. If you have a bug you can't find, I'll be very happy to make suggestions regarding how to debug the problem. However, I will not debug for you.

In General
Check you email and the class website every day. Send me email if you're having trouble with the reading or a project, and I will respond to you as quickly as possible. (Please see the class email policy for details on email correspondence.)

Email Policy
Although you can send email from the Blackboard environment, class email will be sent to your CCRI account. All group messages will be posted in the Announcements area and will be available all semester.

1. You can expect me to read and acknowledge your email once per day during the week.

2. I expect you to read your email at least once per day during the week. I sometimes send important group messages about the class (such as a change in the syllabus, or information helpful to accomplishing a homework or project). I sometimes send individual messages about your progress.

3. Please acknowledge receipt of an individual email from me. You do not need to acknowledge group messages (which usually begin "Dear Students"). Acknowledgement can be as simple as, "Thank you,“ or “I received your message and will reply in detail by Tuesday,” or it can be a detailed response.

4. All email correspondence related to this class should take place in Blackboard and/or the CCRI email system. Your CCRI email account is an official communications medium at CCRI and you are responsible for the consequences of not reading your email.

5. I recommend that you do not forward your email to an off-campus account, or if you do, do not rely on receiving your email in that way. Forwarding off-campus can lead to lost messages. You are responsible for reading email that is sent to your CCRI account. If you forward it and it gets lost, you are responsible for the consequences. If you follow these guidelines, you will always get my email. It is your responsibility to follow these guidelines, and failure to do so might affect your grade.

6. The subject line of your message should contain the name of the class and a meaningful summary of the contents of the message, such as "AdvProgDes PROBLEM with lab #3." If you use the subject line "Lab #3" and you have a problem or question, I may not read your email immediately. Therefore, be sure to put the word "QUESTION" or "PROBLEM" in the subject line if you urgently need a response.
7. Please be polite and respectful in your messages to me, and I will be polite and respectful in my messages to you.

8. All messages should strongly relate to the course materials and assignments. Under no circumstances should you send me a forwarded message.

9. Spend time composing messages to me. Proofread. Rewrite. Spend time reading messages from me. Do you understand every point, if I’m answering a question? If not, re-read before you ask another question.

10. Before you compose your message, think about how it will be received by me. Will it be perceived as intelligent, professional, and thoughtful? If you are asking me a question about the material, please tell me what you know and what you've tried. Remember that you may receive only one response from me within a 24-hour period, so you must make every message count!

11. Unless another faculty member has provided an email policy, please use these guidelines to send email to other faculty members and college staff. Polite, respectful, carefully worded messages are always appreciated by everyone.

Helpful Links
You are responsible for following the policies set forth in the Student Handbook:
http://www.ccri.edu/advising/new_students/student_handbook/
and College Catalog:
http://www.ccri.edu/catalog/
CCRI's Electronic Communications Policy:
http://www.ccri.edu/it/policy/electroniccomm.html
CCRI’s Computer Network and Usage Policy, from the Student Handbook:
http://www.ccri.edu/advising/new_students/student_handbook/policies.html#computer_network
Email for students, from IT:
http://www.ccri.edu/it/documentation/myccri-tutorials/email_students.html
Distance Learning Communication with email:
http://www.ccri.edu/distance/communicating.html

Computer down time and emergencies
We are computer professionals and should have strategies for down time. There is always the possibility of a system failure at CCRI or with the computer you use to access the course. I recommend the following:

- Back your work up regularly. Ideally this is to a system that is off site from the source.
- Print the syllabus and printable course materials such as programming assignments and code examples so that you can work from your text and by hand until systems are restored;
- Print your own work so that you have a hardcopy of your own work;
- Store as much work as possible (course materials and your own work) on both your hard drive and portable media such as a flash drive;
- Store as much work as possible on the cloud (for example your free SkyDrive account through CCRI);
- Plan to complete assignments at least 24 hours before the due date, so that if there is a system problem that lasts 24 hours or less, you will still be able to complete and upload on time;
- If possible, use your smart phone (if available) in an emergency to alert the professor to your situation.

You should also check the IT pages at CCRI for scheduled down times and plan your work accordingly.
http://webfor.ccri.edu/systemstatus/systemstatus.cfm?StartRow=1&endrow=5

Accommodations
We are all individuals, with individual learning abilities, life situations, and backgrounds. My goal is success in this course for every individual. Although I specifically mention two student groups here, all students are welcome to approach me with concerns about how their learning might be negatively impacted in this class. All students may petition me for learning accommodations in my class, and I will do my best to accommodate you within reason and fairness to everyone.

Any student with a documented disability is invited and encouraged to contact me early in the semester so that we may work out reasonable accommodations to support your success in this course. If you have not already done so, you should begin by contacting the Disability Services for Students Coordinator on this campus.

Welcome to all veterans. If you would like to identify yourself to me as a veteran, please do so with the utmost confidence that I will do my best to support you. If you know now or if you discover during the semester that you require accommodations or are uncomfortable for any portion of the class, please contact me to discuss accommodations.