Course Syllabus

CS3270 Syllabus

(Subject to Change)

Instructor: Rob Hilton

E-Mail: cs.rbhilton@gmail.com
(always use this email to communicate with me. Canvas messaging will likely go unanswered)

Office Hours: Office: TE110G
Monday 2:30pm - 4:00pm
Tuesday 9:30am - 11:30am
Wednesday 2:30pm - 4:00pm

Textbook: No textbook is required.
Various online textbooks, videos and websites will be recommended within the course and in some weekly modules.

Android Device: (Suggested)
It is STRONGLY suggested that each student participating in the course has an Android smartphone and/or tablet.

Software: Java JDK 8
Android Studio 2.2.3
Android SDK (API 21 - 24)
(All Android development tools are freely downloadable)

Course Objectives: Introduction to developing applications for Android mobile devices. Students will use the Android Studio IDE in conjunction with the Android SDK. Students will gain advanced experience in Java and XML as they develop mobile applications.

Prerequisites: CS2350, CS2550 and CS3230

Students with Disabilities: Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Services Center. SSD can also arrange to provide course materials (including this syllabus) in alternative formats if necessary.

Course Fees: Course fees for the Computer Science major are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.
Allocated Time: You should anticipate spending two to four hours of study per week for each credit hour of a university course. Computer and programming classes typically require time in the upper range. This is a 4 credit hour class, so you should expect to spend 12-16 hours toward this class each defined section.

Assignments: There are 9 planned individual Android programming assignments. Students will develop one personal Android App.

Late Policy: Late assignments will be accepted with the following penalties: 1st Late - No Penalty, 2nd Late - 75% credit, 3rd Late - 50% credit, no credit will be given for any other late assignments.

Exams and quizzes MAY NOT be taken after the scheduled time, but may possibly be taken early if circumstances warrant and arrangements are made.

System Accounts: No specific student accounts are necessary for this course unless students require the use of CS lab computers and software.

Grading:

<table>
<thead>
<tr>
<th>Points</th>
<th>Approximate Contribution</th>
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<tbody>
<tr>
<td>200 - 400 pts</td>
<td>45%</td>
</tr>
<tr>
<td>2800 pts</td>
<td>45%</td>
</tr>
<tr>
<td>900</td>
<td>15%</td>
</tr>
<tr>
<td>1200</td>
<td>20%</td>
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<tr>
<td>1200</td>
<td>20%</td>
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</tbody>
</table>

Online Participation: Each student will be encouraged to participate regularly in the Canvas Discussion threads. An active discussion board will make the class more successful and less frustrating to all. Many of the online helps such as stackoverflow.com contain much information that is incorrect and that can lead to many frustrating hours spent trying to get things to work. If questions are instead posted on the class discussion, faculty and students can help each other to more quickly find the solution.

Topics and threads may be started by both students and the instructor. These
discussions can often serve the same purpose as classroom discussions, but are available anytime. Students can both ask and answer questions, respond to discussion topics and especially give insight based on personal experience.

**Quizzes:**
The course will have one midterm exam. The format of this exam will be explained just prior to the exam.

The exam is open book and notes, but is not to be shared or discussed with other individuals.

Cheating on a exam is defined as ANY COMMUNICATION with any other individual, either verbally or electronically or any other means. It is also cheating to obtain copies of prior quizzes for this course.

Exams are independent tests. Any cheating will result in an automatic failure for the course and possible expulsion from the CS program!

**Cheating Policy:**
CS policy dictates that any verifiable evidence of student academic cheating, as defined and determined by the instructor, will result in: 1) an automatic failing grade for the class and 2) a report to the Dean of Students that will include the student's name and a description of the student's dishonest conduct.

Open collaboration on assignments is allowed in this course. Currently enrolled students may converse and work together on assignments in person or electronically, but each student should turn in his/her own version of the assignment.

It WILL NOT be considered cheating if CURRENT students share information about the assignments.

It WILL be considered cheating if CURRENT students obtain information about assignments or quizzes from PAST students.

Exams must be a solo effort. ANY communication with other individuals, students or otherwise, in person or electronically IS CHEATING and appropriate severe penalties will apply.

Plagiarism (representing someone else's work as your own) is cheating. If a student knowingly allows another student to copy their work, they will both be guilty of cheating. Make sure that you indicate if you have collaborated with another student on an assignment.

**Course Fees**
Course fees for the Computer Science major are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

You will be responsible for all material in the Reading Assignment Chapters.
Letter Grades:

\[
\begin{align*}
&\text{Total} \geq 94\% & \quad A \quad 74\% \leq \text{Total} < 77\% & \quad C \\
&90\% \leq \text{Total} < 94\% & \quad A- \quad 70\% \leq \text{Total} < 74\% & \quad C-
\\
&87\% \leq \text{Total} < 90\% & \quad B+ \quad 67\% \leq \text{Total} < 70\% & \quad D+
\\
&84\% \leq \text{Total} < 87\% & \quad B \quad 64\% \leq \text{Total} < 67\% & \quad D
\\
&80\% \leq \text{Total} < 84\% & \quad B- \quad 60\% \leq \text{Total} < 64\% & \quad D-
\\
&77\% \leq \text{Total} < 80\% & \quad C+ \quad \text{Total} < 60\% & \quad E
\end{align*}
\]

An "Incomplete" grade can only be given in extraordinary circumstances.

Schedule: Subject to Change

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading Assignments</th>
<th>Topics</th>
<th>Assignments/Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Online and other resources</td>
<td>Course Introduction</td>
<td>Assignment #1</td>
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<tr>
<td></td>
<td></td>
<td>Setting up the development environment</td>
<td></td>
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<tr>
<td>2</td>
<td>Online and other resources</td>
<td>Android Studio, Application Structure Activities and the Activity Life Cycle</td>
<td>Assignment #2</td>
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<tr>
<td>3</td>
<td>Online and other resources</td>
<td>User Interface Fragments</td>
<td>Assignment #3</td>
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<tr>
<td>4</td>
<td>Online and other resources</td>
<td>Listeners Fragment Communication</td>
<td>Assignment #4</td>
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<tr>
<td>5</td>
<td>Online and other resources</td>
<td>Fragment Communication</td>
<td>Assignment #5</td>
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<tr>
<td>6</td>
<td>Online and other resources</td>
<td>Menus &amp; Shared Preferences</td>
<td>Assignment #6</td>
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<tr>
<td>7</td>
<td>Online and other resources</td>
<td>Async Tasks SQLite</td>
<td>Assignment #7 Midterm Exam</td>
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<tr>
<td>8</td>
<td>Online and other resources</td>
<td>HTTP &amp; JSON</td>
<td>Assignment #8</td>
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<tr>
<td>9</td>
<td>Online and other resources</td>
<td>JSON and REST API</td>
<td>Assignment #9</td>
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<tr>
<td>10</td>
<td>Online and other resources</td>
<td>Individual Projects</td>
<td>Project Proposal</td>
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<tr>
<td>11</td>
<td>Online and other resources</td>
<td>Individual Projects</td>
<td>Project Plan</td>
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<tr>
<td>12</td>
<td>Online and other resources</td>
<td>Individual Projects</td>
<td>Status Report</td>
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<tr>
<td>13</td>
<td>Online and other resources</td>
<td>Individual Projects</td>
<td>Status Report</td>
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<tr>
<td>14</td>
<td></td>
<td>Individual Project</td>
<td>Personal Project Learning Review</td>
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