# ECE 155: Course Summary

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ECE 155 Winter 2015 1/26

## Exam Coverage

The exam is based on material we have covered in the lectures & labs.

The exam is cumulative: covers from the first lecture to the last.

Lab material you are expected to know covers Labs 0 through Lab 4.

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Lecture 1: Introduction, Sensors & Actuators

Lecture 2: Introduction to Java

Lecture 3: Java II

Lecture 4: Java III

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Lecture 5: XML, Android, Eclipse

Lecture 6: Events, Polling, Interrupts

Lecture 7: Android II

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Lecture 8: Software Design Patterns

Lecture 9: Version Control

Lecture 10: Engineering Design & Analysis

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Lecture 11: Multithreading

Lecture 12: Dev Planning / Comp. Decision

Lecture 13: Android III

Lecture 14: UML

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Lecture 15: Testing / JUnit

Lecture 16: Testing / Coverage

Lecture 17: More on Testing

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Lecture 18: Requirements, Specifications

Lecture 19: Debugging

Lecture 20: Debugging II

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Lecture 21: Planning

Lecture 22: Debugging III

Lecture 23: Debugging IV

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Lecture 24: Software Lifecycle Models

Lecture 25: Code Reviews

Lecture 26: Refactoring

Lecture 27: V&V, Maintenance

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Lecture 28: Timers

Lecture 29: Simulation

Lecture 30: Bricolage, Licenses

Lecture 31: Android IV

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Lecture 32: Software Architecture

Lecture 33: Software Communication

Lecture 34: Security

Lecture 35: Library Card

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# The #1 Most Frequently Asked Question

Will we have to write code?!?

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## The #1 Most Frequently Asked Question

Will we have to write code?!? Yes.

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# The #2 Most Frequently Asked Question

Will there be more code on the final than there was on the midterm?

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# The #2 Most Frequently Asked Question

Will there be more code on the final than there was on the midterm? Yes.

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#### **Basic Exam Information**

Date of Exam: Thursday, 7 August 2014
Time Period: Start: 09:00. End: 11:30

Duration of Exam: 150 minutes

Number of Pages (incl. cover): 11

Exam Type: Closed Book

Additional Materials: No Additional Materials Allowed

We are writing in: PAC 7,8 It does not matter where you sit.

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#### **Exam Instructions**

- 1 No aids are permitted. No calculators of any type are permitted.
- 2 Turn off all communication devices.
- There are eight (8) questions, some with multiple parts. Not all are equally difficult.
- 4 The exam lasts 150 minutes and there are 120 marks.
- If you feel like you need to ask a question, know that the most likely answer is "Read the Question". No questions are permitted. If you find that a question requires clarification, proceed by clearly stating any reasonable assumptions necessary to complete the question. If your assumptions are reasonable, they will be taken into account during grading.

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#### How to Prepare

How to prepare for the final exam:

- 1 Review lecture notes and slides.
- 2 Review the tutorial slides.
- Understand your lab solutions.
- 4 Try old assignments and old exams.
- Ask for extra help if you need it (we have many TAs + 2 instructors).

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#### Tips for the Exam:

- 1 Take the time to read the question carefully.
- 2 You can use point form instead of full sentences.
- 3 Don't leave questions blank Nothing on the page = 0 marks.
- 4 Do the questions you know (or find easy) first, then move on to more challenging ones.
- 5 Keep an eye on the time.
- 6 Sleep the night before (all nighters are bad).

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#### **About Grades**

No grades can be released until after the end of exams.

You'll see them in Quest when grades for the term become available.

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## Tips for Work Term Reports

You have to write work term reports in the upcoming co-op term.

A subject I know lots about...

I wrote 4 reports (we had to do 4 instead of 3).

I also marked about 100 of them.

Some basic tips will help you avoid the dreaded resubmission.

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### Work Report Tips

Spelling, grammar and formatting count as well.

You can ask someone to proofread, but acknowledge their help.

Follow the checklist (Appendix C in the guidelines).

The Contributions section is boring to write, but it's mandatory.

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#### Work Report Tips

You need technical content. This also means you need numbers. Describing things in qualitative terms is not enough.

Figures and tables are valuable tools. "A picture is worth a thousand words".

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## #1 Reason Why Work Reports Fail

They look like documentation or story-telling. Documentation: Clicking the "report" button produces a CSV file... Storytelling: First we did x, then we did y, and then...

The key question: is there a decision in this report? No decision-making means a failing grade.

You can use a Computational Decision-Making Chart in your report.

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#### The End

That's all for ECE 155. Thanks for a great term!

I wish you success on the exam.

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