CS 121: Computer Science I
Spring 2015

Department of Computer Science
College of Engineering
Boise State University
Today’s Objectives

▶ Who am I?
▶ Course Syllabus
▶ Intro to Team-Based Learning (TBL)
▶ Chapter 1: Introduction to Computer Science
About Me

- **Instructor**: Amit Jain [http://cs.boisestate.edu/~amit](http://cs.boisestate.edu/~amit)
- **Email**: ajain@boisestate.edu
- **Office**: MEC 302E
- **Office hours**: Check class website
Learning Objectives

At the end of this course, we want you to be able to:

▶ design object-oriented solutions to programming problems,
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▶ implement working solutions to programming problems using **good coding and documentation** styles,
▶ explain basic concepts of computer science such as **algorithms**, **abstraction**, and **encapsulation**,
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▶ design **object-oriented** solutions to programming problems,
▶ implement working solutions to programming problems using good coding and documentation styles,
▶ explain basic concepts of computer science such as **algorithms**, abstraction, and encapsulation,
▶ use an **integrated development environment** that is specialized for program development with reasonable proficiency, and
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▶ design object-oriented solutions to programming problems,
▶ implement working solutions to programming problems using good coding and documentation styles,
▶ explain basic concepts of computer science such as algorithms, abstraction, and encapsulation,
▶ use an integrated development environment that is specialized for program development with reasonable proficiency, and
▶ effectively discuss, challenge, and support diverse ideas when working in a team environment.
Syllabus, notes, assignments and other course information are available on the class website.

http://cs.boisestate.edu/~amit/121
Class Resources

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- Class discussion, announcements, and polls will be available via Piazza (phone app available).
  https://piazza.com/boisestate/spring2015/cs121/home
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▶ Make sure you check these resources often. All class updates will be posted on these sites.
CS Tutoring Center

- Located on the first floor of the engineering building in room ENGR 111.
- Staffed by CS 121 Teaching Assistants.
- Great source of help when you’re on campus.
- Access to the center is via card swipe. You should already have access.
Tutors

- Undergraduate and Graduate Tutors.
- Check tutoring center website for 121 tutors and their hours.
  
  http://coen.boisestate.edu/cs/computer-science-tutoring-center-cstc/
Piazza

“Piazza is a free online gathering place where students can ask, answer, and explore 24/7, under the guidance of their instructors.”

- Piazza invite sent out
- Use Piazza to help each other
- Ask questions anonymously
- Answer questions and doubts that everyone seems to be having
Assignments

- **Homework:**
  - Reading assignments and pre-quiz exercises
  - Pre-lab work due prior to labs to learn skills needed in the lab

- **Lab:**
  - Self-contained, focused exercises
  - Learn skills needed for projects

- **Programming Projects**
  - Significant programming projects completed outside of class/lab
  - Learn skills needed for real-world/future courses
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- In-class quizzes and exercises:
  - Individual and team-based
  - Assess understanding of assigned reading

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Grading

- Programming Projects (60%)
- In-class quizzes (20%)
  - Individual quiz (65%)
  - Team quiz (35%)
- Final exam (20%)
- Extra Credit Opportunities

- The lab credit is graded separately from the lecture. The lab will be graded based on attendance, preparation, and participation.
Academic Honesty

▶ http://registrar.boisestate.edu/general-information-and-policies/academic-integrity/

▶ It sounds simple.

▶ It’s not!
Unacceptable Collaboration

- Outsource an assignment to someone you hire.

- Submit an assignment substantially created by another student, friend, co-worker, relative, stranger, internet user...

- Provide a copy of a substantial portion of an assignment to another student.

- Posting a copy of a substantial portion of an assignment to an Internet server.
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Acceptable Collaboration

- All classroom and Tutoring Center (with Tutors) discussions.

- Helping someone install/use the development tools/environment.

- Helping someone debug a program they wrote.

- Sharing and explaining short snippets (a few lines) of code to someone.
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Team-Based Learning

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- Our class discussion is based on what you need.
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- We make sure you have a basic understanding before we jump into more complicated material.
- You get instant feedback.
- Our class discussion is based on what you need.
- And it's just more fun!
Team-Based Learning (2)

- “Random” teams of 3-4 students.
- Only in-class team work (quizzes, exercises).
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▶ TBL quizzes
  ▶ Quiz over reading assignments.
  ▶ Every week unless specified otherwise.
  ▶ Each quiz will be taken first as an individual.
  ▶ Same quiz will be taken as a team.
    ▶ Instant feedback, partial credit for the team.
▶ Keep track of individual vs team performance.
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In-class exercises

Team exercises to make sure you are absorbing material.
Give you a break from listening to me talk ;)

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- In-class exercises
  - Team exercises to make sure you are absorbing material.
  - Give you a break from listening to me talk ;)
- Let’s make some teams...
Prioritized Sorting Criteria:

- Do you have any experience programming in Java?
Build Teams

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- Do you have any experience programming in any language?
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Prioritized Sorting Criteria:

- Do you have any experience programming in Java?
- Do you have any experience programming in any language?
- Are you a second degree seeking student?
- Is your major in Electrical Engineering?
- Is your major in Computer Science?
- ...something else?
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- ...something else?
- Are you excited to take this class?
Meet team members and introduce yourself!
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- Read the syllabus.
Meet team members and introduce yourself!

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- Write your team number and the names and student ID numbers of all team members on your team quiz.