Introduction to CS2:
Data Structures and Algorithms

Instructor
Cole Frederick
- cs165, Section 001, MTWR 3-4:15pm
- Office: COMCS 415
- Email: u0xee@rams.colostate.edu
- Help Desk: MTWR(F) 12-3pm
See the syllabus on the course web page.

Curriculum
- Review of CS1
- Supplemental: Program Verification
- C11: Inheritance, Abstract Classes, and Polymorphism
- C20: List, Stacks, Queues, Priority Queues
- C23: Advanced Sorting: Merge, Quick, Heap
- Supplemental: Grammars, Expressions, Parsing
- C25: Binary Search Trees
- C26: Balanced Search Trees
- C24: Implementing Data Structures
- C27: Hashing
- C28: Graphs
- C29: Weighted Graphs
- Misc: Problem Solving, Testing, Debugging, Graphics

Java Programming

Resources: Java Textbook
Introduction to Java Programming – Daniel Liang, 10th Edition, Revel License (license from last semester should still be current!)

Resources: iClickers
- Register your clicker on Canvas by June 19
- Bring your clicker to every lecture!
Grading Criteria

- Your grade will be based on:
  - In-Class Exams: 50%
    - 1st midterm: 15%
    - 2nd midterm: 15%
    - Final exam: 20%
  - Programming Assignments: 20%
  - Programming Quizzes: 10%
  - Labs: 10%
  - Quizzes (online, Canvas): 5%
  - Peer Instruction (in class, iClicker): 5%

Communications

- Talk with your teaching assistant before or after labs, at help desk, or during lab hours.
- Talk with your instructor before or after lectures or during office hours.
- Email your instructor directly only if privacy is needed (health issue, staff complaint, etc.)
- Don’t use Canvas to send messages, use the Piazza bulletin board instead.
  - Piazza is in Canvas modules.
  - Topics for assignments, grading concerns, ...

Late Policy

- Every assignment lists a due date
  - Almost always on Mondays and Thursdays at 10pm
  - Full credit requires meeting this deadline
- Every assignment lists a late date
  - Late submissions have 20% penalty
  - After this deadline, no credit is given
- Exceptions only for emergencies
  - Medical emergencies, family emergencies, with documentation
  - If an emergency happens, email your instructor right away
- Do not miss in-class quizzes!
  - Can submit via email with excused absence
  - Very hard to get right without group help

Getting Help

- Web Site:
  - www.cs.colostate.edu/~cs165
- Lectures, Recitations, Lab Hours, Help Desk
- Office Hours (see syllabus)
- Tutors, Friends, Consultants (be careful)
- Online Textbook, Internet

Academic Integrity

- All assignments, labs, quizzes, exams are solo
  - Unless otherwise specified
  - No notes, books, internet, other people
  - You may get help from course instructors and TAs
  - You may discuss concepts with other students, but:
    - Never share code with another student
    - Never copy code from another student
    - Never let anyone else type in code for you
  - Know the department academic honesty code!
Lab Expectations

- Use the Linux Lab – COMSC 120
  - Not the Windows Lab – COMSC 110
  - No uncovered drinks and no food
- Treat the lab as a professional workplace
  - No disparaging comments
  - No loud/rude/disturbing behavior
  - Professional comportment at all time
  - No sexual harassment of any sort, not ever!

Diversity

- Foster a culture of respect between students, faculty, and staff in Computer Science.
- Eliminate discrimination and inequality based on gender, race, age, religion, etc.
- Increase participation by groups that have been persistently underrepresented in our field.
- Avoid Title IX issues arising sex-based discrimination, sexual harassment and sexual misconduct.
- Provide a congenial working atmosphere conducive to creative and productive research and teaching.

Increased Expectations

- Program copying will be monitored and students who plagiarize will be prosecuted – resulting in a negative score!
- Late submissions will not be accepted without documentation of illness, injury, or emergency.
- Help desk will show you how to debug and test your programs, they will not give you code!
- Peer instruction quizzes will be given every week, and lab scores will be based in part on attendance.