CMSC 132:
OBJECT-ORIENTED PROGRAMMING II

Course Introduction

Department of Computer Science

University of Maryland, College Park

Course Catalog Description

- Introduction to use of computers to solve problems using software engineering principles
- Design, build, test, and debug medium-size software systems. Learn to use relevant tools
- Use object-oriented methods to create effective and efficient problem solutions
- Use and implement application programming interfaces (APIs)
- Programming done in Java

Things You Will Learn

- Object-oriented software development
  - Modern software development techniques
  - Object-oriented design

- Algorithms & data structures
  - Lists, trees, graphs

- Programming skills
  - Java API, IDE, testing, debugging

Course Is Not Just About Java

- May seem to focus on Java
    - All programming in Java
    - Many interesting Java language features

- Lessons intended to be general
    - Principles should apply to all languages
        - Ways of thinking about design
        - General ideas about software
    - Can translate skills to other languages

Assume You Already Know

- Coding
  - Variables, operators, loops, arrays
- Basic object-oriented programming
  - Classes, methods
- Java
  - Class libraries, exceptions
- Tools
  - Eclipse IDE, debugger

Organization

- Class Web Page
  - We have e-mailed you and posted in Piazza in the class web page.
  - Make sure you go over the syllabus
  - Some sections are password-protected (information sent already via e-mail)
- Class Components
  - Lectures
  - Labs

Class Schedule

- The class schedule is available in the **Schedule** section of thee class web page

- Please make sure you know the date this class ends and when the final takes place. The final exam date is on the schedule

- Dates for quizzes and semester exams (not the final exam) are tentative and may change

Projects

- Around 9 projects
  - Evaluate design, coding, testing skills
  - Tries to involve interesting application areas
    - Networking, user interfaces, data compression
- Late policy
  - Projects due at 11:55 pm
  - Late submission with 12% penalty if submitted by 11:55 pm of next day
  - No project accepted afterwards
  - Plan to complete all projects on time

Projects (cont.)

- Environment
    - Eclipse IDE
        - http://www.cs.umd.edu/eclipse/
    - Please install the version you see in the above link
    - Do not use your cmsc131 workspace (Create a new one)
        - In Eclipse select "File"→"Switch Workspace"
- Automated submission & testing
    - Submit server
    - Different tests types
        - http://www.cs.umd.edu/~nelson/classes/resources/testtypes/

Grading

- Based on
  - Projects, quizzes/lab exercises, midterms, final
- Point distribution (Check Syllabus)
- Available on-line
  - https://grades.cs.umd.edu

Academic Honesty

- All individual assignments & exams must be done individually (except specified otherwise)
- Do not copy (or allow others to copy) your work in any way
- Submissions will be compared to submissions from current and previous semesters
- Cases of academic dishonesty will be referred to the University's Office of Student Conduct
- Visit Student Honor Council website for more detailed explanation of academic dishonesty
- Please carefully read
  - http://www.cs.umd.edu/class/resources/academicIntegrity.html

Class Concerns

- If there is a problem with the course (e.g., TAs are not performing their duties, problems in lab with classmates, etc.) please contact us immediately

- If you or your parents have any class concerns, feel free to contact the instructor. If an issue arises with the instructor, report it using the form available at https://www.cs.umd.edu/classconcern.

Course Advice

- Read the syllabus
- Start projects early
  - Make use of release testing if offered
- Ask questions
- Attend labs
- Attend office hours
- Pay attention to deadlines

Miscellaneous

- Regarding deadline to address grading concerns
  - It will be strictly enforced
  - At the end of the semester we will not address grading concerns for assignments/material already graded
- Due to the large number of students we have, please use e-mail only for emergencies. Thank you ☺

Miscellaneous

- If you are experiencing any problems that affect your performance in this class, please contact us immediately. Usually, students wait until the end of the semester when probably nothing could be done
- If for some reason you are considering dropping this course, see us first before making this decision
- Do you have difficulties taking exams? Check:
  - http://www.cs.umd.edu/~nelson/classes/utilities/TakingExams.html
- Work hard from the beginning of the semester in order to avoid the following type of messages at the end of the semester:
  - Is there any extra credit so I can boost my grade?
  - I am .1 from an A; can something be done?

Miscellaneous

- Some links of interest
  - Important (Learning How to Learn)
    - https://www.coursera.org/learn/learning-how-to-learn