**TROY UNIVERSITY**

**CS 360**

**Concepts of Object Oriented Programming I**

**COURSE SYLLABUS**

**Spring 2023**

**PRE-REQUISITES:**

CS2255 or permission of instructor

**INSTRUCTOR INFORMATION:**

Dinh-Van nguyen, Ph.D

Dept. of Communication Engineering, SEEE, Hanoi University of Science and Technology

Phone : 0912751310

Email: van.nguyendinh@hust.edu.vn

**INSTRUCTOR EDUCATION:**

Ph.D. in Computer Science, 2018, Mines ParisTech University, France

M.S. in Computer Science, 2015, Hanoi University of Science and Technology, Vietnam

B.S., in Computer Science, 2012, Korea Advanced Institute of Science and Technology

**CATALOG DESCRIPTION:**

Provides students the opportunity to gain experience and training in an additional high level language. The course focuses on advanced topics including classes, objects, interfaces, applications, encapsulation, exceptions, multithreading, graphics, exception handling, files, and streaming.

**STUDENT OUTCOMES:**

* Understanding the concept of Object-Oriented Programing
* Differentiate between Object Oriented Programing and Procedural Programing
* Understand the process of modeling classes and objects in programing
* Plan and write code using the OOP paradigm
* Describe the Java classes and objects
* Analyze and implement specific problems and develop Java solutions using Object-Oriented Programing concept.

Students will demonstrate the above through their performance on the assigned programming projects, exams and discussion Black Board exercises.

**GRADING**

Midterm Exam - 30%

Final Exam - 30%

Programming Projects - 30%

Participation – 10%

**GRADING SCALE:**

Grades will be assigned according to the following scale:

A 90 - 100

B 80 - 89

C 70 – 79

D 60 – 69

F below 60

**TEXTBOOK**

Core Java - Volume I—Fundamentals, 10th Ed., Cay S. Horstmann, 2015.

**METHODS OF INSTRUCTION**:  In-Classroom Lectures, Labs, Tests, Handouts/Homework, Class Participation and Reading assignments.

**HONESTY AND PLAGIARISM**

**\***Plagiarism is defined as submitting anything for credit in one course that has already been submitted for credit in another course, or copying any part of someone else’s intellectual work – their ideas and/or words – published or unpublished, including that of other students, and portraying it as one’s ownAll students are required to read the material presented at:

http://troy.troy.edu/writingcenter/research.html

All material submitted for grade must be the student’s own work.

Anyone found cheating and/or copying will receive an automatic 0 for that assignment or exam or dismissal from the course. This goes for the person who copies as well as the person who allows their work to be copied. A serious penalty (e.g: one lower letter grade) will be given for cheating and plagiarism and students will be required to retake a course if they get D or worse for that course.

**OTHER POLICY**

There will be no make up test. A missed test or exam will result in 0 points. Contact me in advance in case of emergency such as illness. An original letter addressed to me on a letterhead paper from a physician or hospital stating that you could not take the test or exam as scheduled is necessary for me to consider your case.

**PROJECTS**

Students are required to submit their source code file(s) as email attachments prior to the project deadline. In the event you are unable to complete a project or make it work correctly, be sure to email your latest source code to receive partial credit. Students failing to submit projects within the allotted time will receive a project grade of zero and will not be allowed to make late submissions. Exceptions will be made ONLY under extenuating circumstances and ONLY with prior approval by the instructor. To receive full credit, projects must be submitted on or before the due date.

**TENTATIVE SCHEDULE**

| Lecture 1 | Introduction to Java & setup | Chapter 1 & 2 |
| --- | --- | --- |
| Lecture 2 | Fundamentals programming in Java | Chapter 3 |
| Lecture 3 | Objects and Classes | Chapter 4 |
| Lecture 4 | Objects and Classes Practice |  |
| Lecture 5 | More about Classes | Chapter 5&6 |
| Lecture 6 | More about Classes | Chapter 5&6 |
| Lecture 7 | Collection | Chapter 9 |
| Lecture 8 | Exception | Chapter 7 |
| Lecture 9 | Midterm Exams |  |
| Lecture 10 | Team Project Idea Presentation |  |
| Lecture 11 | Graphics and Multimedia | Chapter 10 |
| Lecture 12 | GUI programming & Internationalization | Chapter 10 |
| Lecture 13 | Deployment & Debugging | Chapter 13 |
| Lecture 14 | Team Project Evaluation |  |
| Lecture 15 | Final Exam |  |