

## **CSE 1325 Object-Oriented Programming (Section 002)**

**Department of Computer Science and Engineering**

**The University of Texas at Arlington**

**Offering: Spring 2014**

**Time: Tuesday/Thursday 2:00 to 3:20pm**

**Place: NH 106 (Nedderman Hall)**

**Instructor: Sharma Chakravarthy**, 632 ERB

**Phone: 272-2082, email: [sharma@cse.uta.edu](mailto:sharma@cse.uta.edu),**

**Course URL: <https://www.wweb.uta.edu/faculty/sharmac/>**

**Black board url: <https://elearn.uta.edu>**

**Research URL: <http://itlab.uta.edu/sharma>**

**Instructor Office Hours: Tu/Th 10am to noon + by appointment**

**TA: TBD**

**TA Office hours: TBD**

**Prerequisites:** CSE 1320

**Catalog Description:** Advanced program design and implementation in the Java programming language. Object-oriented and event-driven concepts including the Java API, classes and objects, applications, applets, regular expressions, strings, inheritance, polymorphism, graphics and graphical user interfaces, layout managers, exception handling, collections, generics and multithreading. Windows operating system is used.

**Objective:** This is a course on problem solving using object-oriented and event-driven programming concepts. Java will be used as a vehicle for introducing the OO and event-driven features for solving problems. The emphasis will be on understanding the concepts and mapping them to features available in a programming language (Java will be used as an example). There will be several hands-on projects to understand the usage of OO and event-driven concepts.

**Course Outline:** The course will cover the fundamentals as part of three modules.

- *Module I:* OO concepts, language features used for OO programming (classes, methods, inheritance, polymorphism, ...)
- *Module II:* Event-driven applications (exception handling, using event-driven programming for GUI development)
- *Module III:* Advanced features of problem solving (recursion, generic classes, multi-threading, applets, ...)

**Textbook:**

1. JAVA: How to Program, 9<sup>th</sup> Edition by Paul Deitel and Harvey Deitel, Pearson Publishers, ISBN-13: 978-013-257566-9, ISBN-10: 0-13-257566-3 **OR**
2. JAVA: How to Program, 8<sup>th</sup> Edition by Paul Deitel and Harvey Deitel, Pearson Publishers, ISBN-13: 978-0-13-605306-4, ISBN-10: 0-13-605-306-8.

**References:** Lectures slides provided by the instructor

**Project:** Since the emphasis of this course is on learning problem solving using object-oriented design and Java as the language, there will be several hands-on programming projects throughout the semester. Typically, these projects **build upon each other**. So, it is important that you

complete all projects on time. The complexity of projects will increase as the semester progresses and you gain experience in using advanced features of Java. You may be asked to demonstrate the project and answer questions on the design and implementation of your project.

**Grading:** There will be 5 programming assignments emphasizing different aspects of OO design learned in the class. These hands-on projects will constitute approximately 45% of the total grade. There will be at most 2 in-class quizzes and 2 tests that will constitute approximately 55% of the total grade (6% for quizzes and 18% for test1 and 25% for test2). This is an initial proposal. The instructor reserves the right to re-distribute the percentages if deemed necessary. Students may be asked to make an in-class presentation on the project experiences. Class participation and attendance which includes how often you come and see the instructor and/or the GTA for help on class material and project is very important. Attendance and class participation is important for doing well in the course. **Grade earned in the class will be based on the class average and standard deviation. Based on past observations, typically, one standard deviation above the class average is likely to earn an A; the class average is likely to be a B grade. Overall grade lower than 50% will be an F. Note that you have to do consistently well on all projects and exams to earn an A grade.**

**Academic Honesty:** I strictly adhere to The University of Texas at Arlington rules and guidelines for handling violations of academic dishonesty. Please refer to the pamphlet "CHEATING: Definitions and Consequences" for additional information. You are required to sign and return **two statements** about academic dishonesty. **If anyone is caught for cheating, plagiarism or collusion either on the project or on the quiz/exam, the grade for the course will be an automatic Fail grade (F) and will be reported. For projects, all members of the team will receive the same penalty; so make sure you are aware of what your partner is doing! Projects can be checked for cheating/plagiarism at *any time* during the semester and brought to trial.**

**How to Do Well in This Course:** Students who get the most out of this course will be the ones who follow the material taught and ask a lot of questions. If you want to do well, attend all the lectures, read the assigned sections of the book/papers, and **start early** on your projects. Working out the assigned sample questions and questions from book chapters will immensely help in doing well on quizzes/exams. If you are having difficulty, you owe it to yourself to get help. We will be more than happy to help you. Don't be afraid to come and see us. Please make use of the office hours which are meant to help you. If you can't make it to office hours but really need help, contact one of us for an appointment. I sincerely want all of you to do well. **It is your responsibility to check the course web site and the black board at least twice a week.**

**NOTE 1:** The class schedule, exam, and project due dates are tentative. Test 2 may be scheduled on the day of the final exam. Project deadlines and exam dates may be changed (with sufficient notice) based on the progress made in the class. The course officially ends on the day of the final exam. No makeup quizzes or exams will be given unless there is a justifiable documented reason.

**NOTE 2:** Once the grade of a quiz/exam/project is distributed, you will have 5 business days to dispute it and get it re-evaluated. No re-evaluation will be entertained after the 5 day period. For projects, as part of the document, what has been designed and implemented by each partner (if it is done as a team) should be clearly stated and documented. All team members will get the same grade on the project.