

## *Course Syllabus*

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### **Course Information**

Course Number/Section: CS 1337.501  
Course Title: Computer Science I  
Term: Fall 2016  
Days & Times: Mon / Wed 7:00 – 8:15 PM

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### **Professor Contact Information**

Dr. Ranran Feng  
Office: ECS 4.209  
Email: rrfeng@utdallas.edu  
Office Hours: Mon/Wed 1:00-3:00PM (Or email me for specific appointment)

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### **Course Pre-requisites, Co-requisites, and/or Other Restrictions**

Prerequisite: CS 1336 with a grade of C or better or equivalent.

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### **Course Description**

**CS 1324** - Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on the definition and use of classes along with the fundamentals of object-oriented design. Includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering.

**Student Learning Outcomes:** After successful completion of this course, the student should have an:

- Ability to use single and multi-dimension arrays.
  - Ability to implement linear and binary searches.
  - Ability to implement simple sorting algorithms.
  - Ability to implement structured data types.
  - Ability to define and implement a class.
  - Ability to use fundamentals of object-oriented design.
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### **Required Textbooks and Materials**

- Starting Out with C++, From Control Structures through Objects (8th edition – orange slice) Gaddis, Tony; Pearson Publishing ISBN 0-13-376939-9
  - As you read the text, watch the corresponding VideoNotes. The VideoNotes are available at <http://www.pearsonhighered.com/gaddis/>.
    - NOTE: VideoNotes are only available if your book comes with an access code. If your book does not have an access code, you can buy one online at the above address. **The access code is not required for class**, but some of you may find the material accessible with this code to be a good resource.

Students may use the 7th edition of the book. In doing so, students accept the responsibility of verifying page numbers for assignments as well as learning the C++ 11 topics not present in the 7th edition. I will not copy any

information from the 8th edition for students, although you are free to take pictures of pages from my book during office hours.

## **Assignments & Academic Calendar**

### ***Important Dates:***

Classes start - Aug 22 (Monday)

Census day, last day to drop w/o W - Sep 9 (Wednesday)

Exam 1 - Oct 12<sup>th</sup> (Wednesday)

Exam 2 - Dec 7<sup>th</sup> (Wednesday)

University Closings:

Labor Day – Sep 7 (Monday)

Fall Break – Nov 23 - 28

### **Class Topics:**

Introduction & Reviews

Search and Sorting Arrays

Advanced File I/O

Recursion

Pointers

Structured Data

Class & Objects

Inheritance, Polymorphism & Virtual Functions

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## **Assignment and Grading Policy**

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|------------------------------------------|-----|
| <i>Homework (Programming) Assignment</i> | 40% |
| <i>Exam 1</i>                            | 20% |
| <i>Exam 2</i>                            | 25% |
| <i>Quizzes</i>                           | 10% |
| <i>Attendance</i>                        | 5%  |

**Department Policy on Attendance: Three consecutive absences leads to one letter grade drop. Four consecutive absences leads to an F.**

Assignment due dates: Assignments are due by **11:59pm** on the due date.

Late Penalties for Assignments: For each day late, including weekends, 20 percent of the total possible points will be deducted. No work will be accepted if it is more than three days.

**Grade Dispute: All grade disputes must be reported within 1 week and resolved within 2 weeks of the grade in question being posted in eLearning.**

I am responsible for grading your exams and project. If you have questions regarding your exams and project, please contact me.

Everything else will be graded by TA. Please address any grading concerns you have regarding these grades with the TA. When you email the TA with questions about your grade, please copy me on the email so that I am aware of the situation and can make sure it is resolved.

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## Course Tools

**C Compiler:** All of the programs we write this semester will be in C. It is not essential that you use a particular C compiler. However, it is essential that your programs can be compiled and run by the TA's on their systems. Few options will be provided through eLearning, for example, every student has access to a free student version of MicroSoft's Visual C compiler, and there are some free downloadable compilers available as well.

**Help Desk:** For help with issues regarding your computer, UTD maintains a walk-in help desk. Visit their Web site for details: <http://www.utdallas.edu/ir/helpdesk/>

**Tutoring:** For programming assistance in CS1325, a tutoring lab will be maintained. The schedule usually comes out a couple of weeks after the semester begins. Once the tutoring schedule for this semester has been released, an announcement will be posted on eLearning. In addition, it is part of the TA's job to help you, so please feel free to engage with him/her at any time. And, of course, I'll be happy to help as well..

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## What I Expect of Each Student

- **Ask for help.** Email me or stop by during office hours. I want you to succeed. I would rather point you in the right direction so that you can complete an assignment instead of you remaining quiet and failing an assignment.
- **Ask questions any time!** During lecture, before/after class, during office hours, etc. I will respond as soon as I can.
- **Take responsibility for your education.**
- **Attend every class.**
- **Practice time management skills.** All assignments (homework and projects) are designed to be worked on over a period of days or weeks. I expect that you will work on the assignment a little at a time rather than waiting until a day or two before it is due. Those that procrastinate will find this class to be much harder than it should be and will face the risk of below average grades.
- **No Cellphones/Smartphone in class.**

**All Other Policies** Please visit <http://go.utdallas.edu/syllabus-policies> for other policies.

*The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.*