CS 1336 PROGRAMMING FUNDAMENTALS COURSE SYLLABUS

COURSE INFORMATION:

Course Number:	CS 1336, Section 013 (Tues. & Thurs. 11:30am. – 12:45pm.) Fall 2016
Course Title:	Programming Fundamentals
Credit Hours:	3

INSTRUCTOR CONTACT INFORMATION:

Name:	Laurie Thompson
Office:	ECSS 3.701
Telephone Number:	(972) 883-6326
Office Hours:	Mondays 1:30pm. – 3:30pm., Tuesdays 2:45pm. – 3:45pm., and Wednesdays 2:30pm. –
	3:30pm.
Email Address:	Laurie.Thompson@utdallas.edu or select Laurie Thompson from the UT Dallas Email in
	eLearning. Emails must have a Subject that begins with "CS1336.013:".

GRADER:

Name:	Sonali Mishra	
Office:	ECSS 2.103B1	
Office Hours:	Wednesdays 1:00pm. – 2:30pm. and Fridays 10:00am. – 11:30am.	
Email Address:	sxm161931@utdallas.edu or select Sonali Mishra from the UT Dallas Email in eLearning.	
	Emails must have a Subject that begins with "CS1336.013:".	

COURSE PREREQUISITES AND COREQUISITES:

Prerequisite:NoneCorequisite:CS 1136

A sequence of labs will be assigned and graded for CS 1136, these are separate from the assignments made in CS 1336. Students earn separate grades for CS 1336 and CS 1136.

DESCRIPTION:

CS 1336 - Programming Fundamentals (3 semester credit hours) Introduces the fundamental concepts of structured programming. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. Programming language of choice is C. The class is open to students in the School of Engineering and Computer Science only. May not be used to satisfy degree requirements for majors in the School of Engineering and Computer Science. Note that a grade of C- or better in this class is required in order to register for (CS 1324 or CS 1325); a grade of C or better in this class is required to register for (CE 1337 or CS 1337 or TE 1337). Corequisite: CS 1136. (3-0) S

STUDENT LEARNING OBJECTIVES/OUTCOMES:

- 1. Ability to develop algorithmic solutions for use on computers
- 2. Ability to perform console input and output, utilize basic operators, and perform sequential processing
- 3. Ability to utilize the basic control structures for selection
- 4. Ability to utilize the basic control structures for repetition logic
- 5. Ability to perform sequential file input and output
- 6. Ability to develop programs in a functional form
- 7. Ability to process data in arrays

REQUIRED TEXTBOOK AND MATERIALS:

<u>Starting Out With C++:</u> From Control Structures Through Objects, Eighth Edition, by Tony Gaddis, Pearson Education. ISBN: 978-0-13-376939-5.

Other materials including the syllabus, assignments, and slides will be posted on eLearning.

https://elearning.utdallas.edu

C++ COMPILER:

All programs you submit will be compiled with MinGW 4.9.2 with the Code::Blocks IDE.

Information on downloading Code::Blocks and the MinGW compiler will be provided in another document.

For Mac users, I recommend using XCode or creating a Windows partition to install MinGW and the Code::Blocks IDE. Be advised that there is a Mac version of Code::Blocks, but it has been reported it doesn't work with newer versions of the OS X operating system.

If a student uses something other than Code::Blocks with the MinGW 4.9.2 compiler for development, he/she is responsible for verifying prior to submission that the code compiles properly with the stated compiler. No compiler is perfect and each one has its own quirks. It is the student's responsibility to make sure that the program functions as expected with the compiler that will be used for grading.

If you intend to use your own computer to write your programs, it is important that you get a compiler installed and functioning as quickly as possible. If you don't have a computer or if you are having problems installing a compiler, you can write your program in the computer labs. Problems with your personal machine will not be accepted as an excuse for missing or late submissions.

SCANTRON FORMS:

You will need approximately eight Scantron Form No. 19641 for quizzes. Bring these to every lecture for a possible quiz.

TENTATIVE COURSE CALENDAR:

Date	Lecture Material	Reading Assignment Due
August 23	Review of syllabus, eLearning Access, and Introduction to	
	Computers and Programming	
August 25	Introduction to Computers and Programming	Chapter 1 and Appendix D of the
		textbook
August 30	Introduction to C++	Chapter 2 of the textbook
September 1	Introduction to C++	
September 6	Introduction to C++	
September 8	Expressions and Interactivity	Chapter 3 of the textbook
September 13	Expressions and Interactivity	
September 15	Expressions and Interactivity	
September 20	Expressions and Interactivity	
September 22	Making Decisions	Chapter 4 of the textbook
September 27	Making Decisions	
September 29	Making Decisions	
October 4, 11:00am-1:30pm.	Exam #1 – Reserve seat for a 1 hour and 15 minute	
In the Testing Center, MC 1.401	timeslot in the window given immediately at	
	http://registerblast.com/utdallas/exam	
October 6	Making Decisions	
October 11	Loops and Files	Chapter 5 of the textbook
October 13	Loops and Files	
October 18	Loops and Files	
October 20	Loops and Files	
October 25	Loops and Files and Functions	Chapter 6 of the textbook
October 27	Functions	
November 1	Functions	
November 3, 11:00am1:00pm.	Exam #2 – Reserve seat for a 1 hour and 15 minute	
In the Testing Center, MC 1.401	timeslot in the window given immediately at	
	http://registerblast.com/utdallas/exam	
November 8	Functions	
November 10	Functions	
November 15	Arrays	Chapter 7 of the textbook
November 17	Arrays	
November 22	Fall Break – No Class	
November 24	Fall Break – No Class	
November 29	Arrays	
December 1	Arrays	
December 6	Arrays	
December 13, 11:00am3:00pm	,	
In the Testing Center, MC 1.401	timeslot in the window given immediately at	
	http://registerblast.com/utdallas/exam	

The instructor reserves the right to modify this calendar as she deems necessary. Please see eLearning for discussions/announcements regarding changes to the calendar.

GRADING POLICY:

Your course average will be calculated as follows:

Exam #1 – 20%

Exam #2 – 20%

Exam #3 – 20%

Quizzes – 10%

Quizzes many be given at any time. **Make-ups will not be given for missed quizzes.** Your lowest quiz grade will be dropped. Bring a Scantron Form No. 19641 to every lecture for quiz.

Programming Assignments – 30%

The instructor will drop your lowest assignment grade if you submit all assignments as required and receive a grade of 60 or higher on each of the assignments.

Historically students who skip programming assignments, do not put much effort into their programming assignments, or get a lot of help from classmates, mentors, or others do not perform well on quiz and exam questions testing the material covered by the assignment.

Departmental Attendance Policy:

The Computer Science Department has adopted the following attendance policy for all CS/SE courses:

- Three consecutive absences will result in a reduction of your course grade by one letter grade. (A goes to B, B+ goes to C+, etc.).
- Four consecutive absences will result in the recording of an F for the course.

Attendance will be taken each lecture. You will be considered absent if you are not present when attendance is taken or if you leave before the end of lecture. If you need to leave lecture early or arrive late for a legitimate reason, please notify the instructor by email before class.

Conduct in Lecture:

Professional conduct is expected during lecture. Deductions of one point (per violation) on your final course average may be made for:

- Disruptive behavior in lecture
- Failure to adhere to the instructor's no devices policy
- Sleeping during lecture
- Repeatedly coming to lecture late or leaving early

The instructor intends to assign letter grades as shown below. An average with a fractional portion of five tenths or above will be rounded up to the next whole number for determining the letter grade.

Averages	Letter grade	
97+	A+	
93-96	А	
90-92	A-	
87-89	B+	
83-86	В	
80-82	В-	
77-79	C+	
73-76	С	
70-72	C-	
67-69	D+	
63-66	D	
60-62	D-	
Below 60	F	

CS 1337, CE 1337, TE 1337, CS 1325, etc. have a minimum grade requirement for CS 1336. Make sure you know what grade you need in CS 1336 to matriculate to your next programming course.

What you need to do to be successful in this course:

- Attend every lecture and pay close attention to lecture (don't let yourself be distracted).
- Dedicate 9-10 hours per week <u>outside of lecture</u> to CS 1336 (separate from CS 1136) for reading, practicing writing code, completing assignments, and studying for quizzes and exams.
- Read your assigned reading <u>before</u> the lecture. You are expected to have a basic understanding of the assigned textbook material before lecture. The focus of lecture will be program development.
 - As you read individual sections of the textbook, answer the Checkpoint Questions and check your answers against Appendix L. Optional: Watch the VideoNotes for sections as you encounter them.
 - At the end of each chapter, answer the odd numbered Review Questions and Exercises and check your answers against Appendix M.
- Start your assignment immediately. All assignments 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.
- Ask for help!
 - The instructor is available to help during office hours.
 - The Computer Science Mentor Center (CSMC) offers both review sessions and walk-in tutoring.
 - Be proactive.
 - Don't wait till the day an assignment is due to seek help.
 - Don't wait till the end of the semester to seek help.

Important note: The Appendices and VideoNotes are available on the companion website of the text at <u>www.pearsonhighered.com/gaddis</u>. The VideoNotes are behind an access code, viewing them for CS 1336 is recommended, but not required.

UT DALLAS POLICIES AND PROCEDURES:

For information on University Policies on Student Conduct and Discipline, Academic Integrity, Copyrights, Email Use, Class Attendance, Withdrawal from Class, Student Grievance Procedures, Incomplete Grade Policy, AccessAbility Services, Religious Holy Days, and information about technical support and other student assistance resources please go to http://go.utdallas.edu/syllabus-policies.

COURSE & INSTRUCTOR POLICIES:

Academic Integrity:

All assignments, quizzes, and exams for this course are to be individual efforts. You are not to collaborate with other students. Prior to the assignment due date you are not to: discuss assignment solutions with other students, distribute your code to others, or publish your code. Copying of programming assignments, quizzes, or exams, in whole or in part, from other students will be considered an act of scholastic dishonesty. Copying of assignments from previous semesters will be considered an act of scholastic dishonesty.

For programming assignments, you may use source code provided by the instructor. You are not to view, copy, or distribute code from any other sources, including code from other students, code from assignments submitted in past semesters, or code from the Internet. Plagiarism detection software will be employed to detect copying of code.

Course Assignments:

All assignments will be announced and submitted using eLearning. You will be given at least one week to complete each assignment. Each assignment will include a due date and time. You may submit an assignment up to 24 hours after the due date and time with a 20 point penalty. **No excuses will be entertained for late assignments.**

Attendance:

The instructor expects you to attend the lectures for this course. Attendance will be taken each lecture.

There is a strong, direct correlation between class attendance and class performance. Students who regularly attend class and pay attention to the lecture tend to make significantly higher grades than those who do not.

See the GRADING POLICY section above for information on the Departmental Attendance Policy.

Assigned Seating in Lecture:

To facilitate classroom management seating will be assigned. The student will have some input as to where they will sit during lectures. Seat assignments are subject to change (Students who do not behave in a professional manner will be moved.)

No Devices Policy:

This instructor has a strict no devices policy. You may not use your cell phone, laptop, tablet, PDA, music device, etc. during lecture without prior permission from the instructor.

If it appears that you are looking at your cell phone in your lap, etc. The instructor will warn you of the policy violation. Subsequent violations in same or subsequent lectures will result in a 1 point reduction of your course average (per violation).

Student Responsibilities:

You are responsible for all material discussed in lecture whether you are present for lecture or not.

Students are expected to be respectful to each other and to the course instructor. Disruptive behavior in the classroom will not be tolerated.

- Please make every effort to be on time to lecture. Do not begin packing up to leave before lecture has ended.
- You may not use electronic devices or phones in lecture without prior permission from this instructor.
- Raise your hand if you have a question or a comment to make about the material presented. The instructor may ask you to bring your question to office hours if it cannot be entertained in lecture.

You are responsible for all material supplied on eLearning (including announcements and discussion postings) whether you choose to read them or not.

You may not send your source code to the grader or instructor unsolicited by email expecting us to debug it. This is not reasonable. There are just too many of you for us to do this. Also, part of learning to program is developing your own debugging skills. It is your responsibility to develop your code in a manner that minimizes errors. You should only ask for help with debugging as a last resort. We will help you find errors in person during office hours, but you should have narrowed down the problem before coming to see us. When coming in for help, bring your source code or put them out on the network so you can access them from our computer.

Grading Concerns:

If you think there is a mistake in the grading of your assignment and would like to request that it be regraded, you must notify **both the grader and the instructor of this in writing** within **two weeks** after the date the grade is posted in the grade book on eLearning. Before you request a regrade of an assignment, first run the tests used by the grader in the grading of your assignment (see the grading file attached to your graded assignment on eLearning).

If you think there is a mistake in the grading of your quiz or exam and would like to request that it be regraded, you must notify the **instructor of this in writing** within **two weeks** after the date the grade is posted in the grade book on eLearning.

Your request for regrade may be sent using email. Your request must describe in detail what you perceive as the problem with the grading. For assignments please email the grader and copy the instructor, so that the instructor can the monitor the progress towards a resolution of the issue.

Quiz and Exam Policies:

All exams and quizzes are closed book and closed notes.

You will be required to present a photo ID at each examination.

PDAs, computers, cell phones, other electronic devices, backpacks, and books will not be allowed at the desks during examinations.

Make-up examinations will be administered **only for well-documented emergencies**. A student must make every attempt possible, via telephone and email, to notify the instructor that he/she will miss a scheduled exam **prior** to the scheduled date and time or **immediately** thereafter. **If notification is not received in a timely manner, no make-up will be given.** See the information below for the instructor's policy regarding religious holy days.

Make-ups will not be given for quizzes.

Religious Holy Days:

You must notify this instructor in writing of any religious holy days that will prevent you from attending class as scheduled by census day **(September 7, 2016)**. If the holy day coincides with a scheduled quiz or examination, you must request a make-up quiz or examination in writing, this exam will be scheduled before the original quiz or exam date. If the holy day coincides with an unannounced quiz, you will be given an opportunity to make up the quiz provided that you have previously notified the instructor as required above. Students will be informed on eLearning of the due date of all assignments at least one week in advance. If a religious holy day will prevent you from submitting an assignment on the due date, you must submit the assignment early via eLearning.

Other:

Extra credit work will not be given to individual students.