Course Information

CS 1337-502 Computer Science 1 Fall 2022 Modality: Face-to-Face, In Person Room: ECSS 2.412

Professor Contact Information

Dr. Eric William Becker Telephone: (972) 883-3862 MS-Teams: Becker, Eric Email: Eric.Becker@utdallas.edu Office: ECSS 3.407 Office Hours: Monday: 4:00pm to 5:00 pm Tuesday: 10:00 am to 11:00 am Thursday: 10:00am to 11:00 am

Please, if you are sending Dr. Becker an e-mail, please start the subject line with the *course number* and *section*.

Example:

To: Eric.Becker@utdallas.edu Subject: CS 1337: When are your office hours?

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

Prerequisite: CS 1336 with a grade of C or better or equivalent (placement test).

Course Description

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 Objectives/Outcomes

- CLO 1. Ability to implement pointers and perform simple memory management
- CLO 2. Ability to implement structured data types
- CLO 3. Ability to define and implement a class
- CLO 4. Ability to use fundamentals of object-oriented design
- CLO 5. Ability to use single and multi-dimension arrays
- CLO 6. Ability to implement simple searching and sorting algorithms

Required Textbooks and Materials

• Gaddis, Tony, Starting out with C++ from Control Structors to Objects, Ninth Edition, New York, New York, Pearson, 2018

Suggested Course Materials

Software:

• Some form of C++ Compiler. GNU, Xcode, Visual Studio

Additional Course Materials

If a student programs for a hobby or for industry, and they have their own favorite interactive development environment or command line editor that is fine. **But any programs submitted must be able to be run by the grader.**

Assignments & Academic Calendar

As Instructor for this course, I reserve the right to change this schedule as I see fit. – Dr. Becker

Week	Week	Chapter	Торіс	Assignments
Aug 22	1		Syllabus, Setup, and Getting Started	
Aug 29	2	8	Searching and Sorting Arrays	Program 1 Assigned
Sep 5	3	9	Pointers!	Program 2 Assigned/
				Program 1 Due
Sep 12	4	10	Characters, C-Strings, and the string Class	
Sep 19	5	11	Structured Data	Program 3 Assigned/
				Program 2 Due
Sep 26	6		Review and Exam 1	Exam 1
Oct 3	7	11	Structured Data	
Oct 10	8	12	Advanced File Operations	Program 4 Assigned/
				Program 3 Due
Oct 17	9	12	Advanced File Operations	
Oct 24	10	20	Recursion	Program 4 Due
Oct 31	11		Review and Exam 2	Exam 2
Nov 7	12	13	Introduction to Classes	Program 5 Assigned
Nov 14	13	14	More about Clases	
Nov 21	N/A		Fall Break	
Nov 28	14	15	Inheritance, Polymorphism, and Virutal Functions	Program 5 Due
Dec 5	15		Review for Exam 3	

Grading Policy

The semester will be scored on a scale from 0 to 100 points. Dr. Becker does not curve. Do not bother to ask

Assignment	Weight
Program 1	5%
Program 2	5%
Program 3	5%
Program 4	5%
Program 5	5%
Exam 1	25%
Exam 2	25%
Exam 3	25%
Total	100

Score	Grade
97-100	A+
93-96	А
90-92	A-
87-89	B+
83-86	В
80-82	В-
70-79	С
60-69	D
0-59	F

Key Grade Dates

September 29 nd	Exam 1
November 3 rd	Exam 2
To Be Announced	Exam 3

Course & Instructor Policies

Expectations of Student Skills

All students are expected to be aware of how to:

- read a problem
- connect to the network
- log on into Blackboard
- Download files from Blackboard
- Upload files from Blackbaord
- Read a PDF
- Create a PDF
- Download and install software on a computer

Late work

If a situation occurs on campus, such as bad weather, power outage, or network outage, or server problems, then assignments will be extended at the discretion of the instructor. All assignments may be turned in one class period late for a flat 15-point penalty. After that, the grade will be a zero.

Make-up Exams:

- If a student sits any exam, this means the student accepts the responsibility for that exam. Once taken, the exam will not be given again, and no make-up will be scheduled.
- If a student cannot make the midterm exam, and the student brings adequate documentation of why they did not attend, (such as a doctor's note), then the Final Exam score will be substituted for the midterm.
- If a student informs the instructor they cannot make the Final Exam before it is given, then a make-up exam will be scheduled. This includes the University's 3 Final Exam in a Day policy. End of semester travel arrangements are not an acceptable reason for missing the Final Exam.
- If the student does miss the Final Exam, and the student brings adequate documentation of why they did not attend, (such as a doctor's note), a grade of Incomplete will be given and a make-up exam will be scheduled. If neither action is taken, the Final Exam will be a zero.

A dental appointment or other non-emergency health situation is not an acceptable excuse for missing an examination you know about months in advance.

Extraneous Material

Any topic covered in class is fair game for exams, including this syllabus.

Science is Dispassionate

Science, Engineering, and Mathematics are dignified disciplines. Pleading for grades is unacceptable for this course. Bargaining for grades is unacceptable for this course.

Inappropriate behavior is not acceptable

This course is a lecture course at a branch of the University of Texas. The instructor does not care about the policies of previous courses, previous universities, or previous nations. The argument that a student's behavior was acceptable in another instructor's course or institution does not apply to the current course.

Formal Notice: No form of bias is permitted in this course, including the use of crude humor. Anyone harassing the instructor, grader, or fellow student with inappropriate comments will fail the course. This includes references written into computer programs, answering "joke" emails in class, or playing inappropriate videos. The instructor will decide what is inappropriate.

Class Materials

The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the <u>Student Code of Conduct</u>.

From Dr. Becker

Dr. Becker intends to upload his slides to the Blackboard System before each class lecture. And when we do practice code in the class, then the sample code will also be uploaded at the end of class, time permitting.

Class Attendance

The University's attendance policy requirement is that individual faculty set their course attendance requirements. Regular and punctual class attendance is expected. Students who fail to attend class regularly are inviting scholastic difficulty. In some courses, instructors may have special attendance requirements; these should be made known to students during the first week of classes.

From Dr. Becker

The Stick

Attendance is required for the course...but life happens. After some deliberations, Dr. Becker has come up with the following plan.

Between August 22nd and September 7th, Dr. Becker will begin class with a roll call. When the roll call ends, the roll call is done. Dr. Becker will not re-open the roll.

After September 7th, students will be expected to log into Blackboard and confirm their location on a seating chart. This confirmation will have to be exactly correct. If two students claim they are sitting in the same seat, neither student will get credit for being present that day.

If necessary, for example a student always claims they are in a seat and it is very obvious they are never in the classroom, Dr. Becker will start dismissing class with a roll call at the end of a lesson. Tedious, but sometimes required

The Carrot

If you have good attendance, that is, less than three absences the semester, your lowest programming assignment will be scored as a 100 and put into the semester average.

Excused Absence Policy

Dr. Becker does not have an army of robots to track the activities of every student and whether or not their absence is excused. If you are sick, see the doctor, and obtain a doctor's note to get an excused absence. An email of the PDF is sufficient. Other events show that life is unfair, but cannot be documented and checked. Use your three absences wisely. No, I will not accept a copy of a speeding ticket as an excused absence.

Class Participation

Regular class participation is expected. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the <u>Student</u> <u>Code of Conduct</u>.

From Dr. Becker

I try to set aside time to do sample code in class when covering new topics, and when time permits, allow students to ask for examples and include the examples in the code that is uploaded later to Blackboard.

Class Recordings

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the <u>Student Code of Conduct</u>.

From Dr. Becker:

I do not intend to record the lecture this semester. And as with the constraints above, live recordings cannot be made without a Student Access letter. However, I do not mind students photographing the results off the white board to assist in the learning process.

Academic Dishonesty

From "conduct.utdallas.edu/honesty"

Yes...I cited my source...like a good academic. - Dr. Becker

Cheating

Attempting to or succeeding in gaining an unfair advantage in the academic arena is an act of academic dishonesty. Plagiarism, Collusion, and Fabrication are three examples of cheating.

Plagiarism

"To submit to your instructor a paper or comparable assignment that is not truly the product of your own mind and skill is to commit plagiarism." The most obvious is quoting entire sections of a text or research paper and claiming it is original work. Be sure to cite your sources, and acknowledge the work of others, or learn how to paraphrase but do not forget to footnote.

Collusion

Giving your work out to another source, even if its "Please let me see your code. I promise I won't copy.." is collusion. This includes email, securing cloud services such as BOX or GitHub, even just handing off a thumbdrive. Sometimes this is deliberate...sometimes one student has stolen another's work. Sitting down together with different machines and talking and discussing and comparing output is not collusion. Handing off entire completed assignments is collusion.

Fabrication

Submitting a result for a grade, and it turns out the references do not exist. Or writing a program that generates an output without performing any algorithm. For example, turning in a computer program with nothing but output statements while ignoring all the inputs and configurations required by the project is fabrication.

Continued on next page.

From Dr. Becker.

When Academic Dishonesty occurs, I ask the students involved to see me. Depending on the outcome of that interview, I proceed to the next step and submit the forms to the university. If a student is found in violation of academic conduct, the result will be a -100 (not a 0) on the entire assignment.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

Academic Support Resources

The information contained in the following link lists the University's academic support resources for all students.

Please see <u>http://go.utdallas.edu/academic-support-resources</u>.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please review the catalog sections regarding the <u>credit/no credit</u> or <u>pass/fail</u> grading option and withdrawal from class.

Please go to <u>http://go.utdallas.edu/syllabus-policies</u> for these policies.

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