

CSCE 2110 Syllabus

Spring, 2016

Instructor: Philip Sweany

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Office Hours: Tuesday and Thursday from 9:00am to 11:30am; Wednesday from 9:00am to 10:50 am;

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Peer Mentors: Loc Huynh; <mailto:LocHuynh@my.unt.edu>

Monday, Wednesday 4:00 .. 5:30pm; Friday 2:30 .. 4:30pm all in DP Library

Gary Johnson; <mailto:GaryJohnson@my.unt.edu>

Tuesday, Thursday 2:00 .. 6:00pm in DP Library

Textbook: (Available on line)

Foundation of Computer Science, Aho and Ullman

Course Description:

Continuation of Computing Foundations I. Further introduces students to both data structures and formalisms used in computer science including 1) asymptotic behavior of algorithms, 2) sets, relations and functions, 3) relational data structures, 4) regular expressions and context-free grammar and 5) graphs.

Course Outcomes:

Course outcomes are measurable achievements to be accomplished [by the student] by the completion of a course. Outcomes are evaluated in ABET's accreditation process.

1. Use of graph data structures in design of software.
2. Use of relational data structures in design of software.
3. Use of set data structures in design of software.
4. Use of C++ classes to implement graphs, sets and relational data structures.

5. Use of regular expressions to describe patterns.
6. The ability to describe assertions in propositional logic form.

Policies:

- All of your programs (three of them) will be written in C++. In addition, you should use a C++ that is compatible with that compiled on the “CSE” machines within the CSE department. If your program does not compile with the CSE g++ and without any special flags, it will be counted as a program that has compile errors (which it does).
EXCEPTION: You can, if you choose, submit a makefile with your program, in which case your program will be “compiled” using the makefile. It still needs to be written in C++ but it can use whatever compile flags you like, as long as it works. But be warned. If your makefile doesn’t work properly with whatever code you submit, your program will be considered to have compiler error(s).
- You will **NOT** use the Standard Template Library in your programs this term in 2110. Failure to follow this “guideline” will result in a 0 for the program.
- Most programs are due at 11:59pm on the due date.
- No late programs will be graded
- All programs will be submitted to Blackboard.
- Except for the start of the term, attendance will not be taken in lecture. However, your attendance is strongly recommended to improve your opportunity to meet course outcomes.

Grading: The components of your grade will be weighted as follows:

- Recitation Quizzes, 10%
- In-class Exercises (including re-entrance exam), 10%
- Midterm exam, 30% : **3/22/16**
- 1 final exam, 30%
- Three C++ programs, 20%

Often students assume that I grade on a 90/80/70/60 scale. That is NOT the case. I will guarantee that if your overall average is 90% or higher you’ll receive an ‘A’. If it is 80% or higher you’ll receive at least a “B”. If it is 70% or higher you’ll receive at least a “C”. Beyond that I give no guarantees.

Make-Up Policy:

There will be no make-up exams, recitations, or programs given in this class. However, for documented *excused absences* or *emergencies* on a day of an exam or a recitation the exam and/or recitation grades will be replaced by an average of the other exams or recitation scores. There is one exception to this rule. Under NO circumstances will more than one exam or recitation score be replaced by an average of the other scores. For a second (and subsequent) missed exam or lab, even if all are excused, students will receive a 0 for the missed work.

Excused Absences

Students are expected to schedule routine appointments and activities to not conflict with attending class. However, some absences cannot be prevented. In the event of a medical *emergency* or *family* death, students must request an excused absence as quickly as feasible following the emergency. Use common sense. Students must provide documentation to verify the emergency.

Emergencies

By definition, emergencies cannot be planned for. Your instructor attempts to make accommodations in these instances that allow for making up missed work and completion of the course in a timely manner. Among these emergencies are

- A death in your *immediate* family
- An accident or illness requiring immediate medical treatment and where a doctor has indicated attending class is impossible or inadvisable.
- Employees on call 24/7 must document that they were called during class time.

Collaboration and Cheating:

On minor programs assigned in lecture, you should work alone. Do **NOT** work with other students on shared program solutions. Do **NOT** get help with algorithms or coding from anyone other than Dr. Sweany or the 2110 TA, or peer mentor. Do **NOT** use even partial program solutions from the internet unless those partial solutions are provided to you by Dr. Sweany as part of the assignment description. Failure to adhere to these strict standards will be cause for disciplinary action that could be as severe as expulsion from the university.

It **IS** permissible to obtain help from whoever you wish to fix **syntax errors**. But remember, for anything but syntax errors, getting programming assistance from any source other than Dr. Sweany or the 2110 grader or peer mentor will be considered cheating and dealt with harshly.

And, of course you need to do your own work on quizzes and exams as well. Here there should be no ambiguity at all.

In case the above description, and in-class discussion of my views on appropriate and inappropriate collaboration does not answer all of your questions, please look at the university Student Rights and Responsibilities web page.

SPOT

The Student of Teaching (SPOT) survey is a requirement for all organized undergraduate classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SPOT to be an important part of your participation in this class.

ADA

UNT complies with all federal and state laws and regulations regarding discrimination, including the Americans with Disability Act of 1990 (ADA). If you have a disability and need a reasonable accommodation for equal access to education or services please contact the Office of Disability Accommodation.

Tentative Schedule

Week	Topic	Reading	Due
1/19/16	Introduction	Tea leaves	“Minor Assignment 1”
1/26/16	Sets	7.1-7.3; 7.4 -7.6	
2/2/16	Functions, Relations	7.7-7.9; 7.10,7.11	
2/9/16	Sets		Program 1, 2/12/16
2/16/16	Sets		
2/23/16	Sets		
3/1/16	Relational Data Model	8.1 – 8.4	
3/8/16	Relational Data Model	8.7, 8.9, 8.10	
3/22/16	Graphs	9.1-9.3; 9.4-9.5	Midterm, 3/22/16
3/29/16	Graphs	9.6-9.7; 9.8-9.9	Program 2, 4/1/16
4/5/16	Formal Languages	10.1-3; 10.4-5	
4/12/16	Formal Languages	10.6-7, 11.1-3	
4/19/16	Catch up as needed		Reentrance Exam 4/21
4/26/16	Propositional Logic	12.1-3; 12.4-5	Program 3, 4/29/16
5/3/16	Computability	2 B provided	
5/7/16	Finals	Course Objectives	Final Exam