CSC 2201: Computer Science II-Lab
Fall 2017
W 7:00-8:40 pm, 0073 SCLB

Instructor contact information:
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Course Description:
This lab course presents a hands-on introduction to the design and implementation of fundamental abstract data types of computer science (e.g., stacks, queues, trees, lists, hashing, graphs, etc.) using an object-oriented programming language (C++). Programming requirements include the implementation of abstract data types using arrays and dynamic links, sorting and searching, hashing, and string processing.

Credit Hours: 1 Credit Hour (Lab)

Prerequisite:
CSC 1500, CSC 1501, CSC 2110 and CSC 2111 all with grade of C or better.

Co-requisites:
CSC 2200 [NOTE: check with a CS Advisor before dropping the lab or the course]

Text(s) Book:
Student Materials: http://www.jbpub.com/catalog/9780763755645

Computer Programs:
The software is Microsoft Visual Studio Express 2013 and it is freely available online from Microsoft. http://www.visualstudio.com/en-us/downloads
Course Learning Objectives

Upon successful completion of this class, the student will be able to:

1. Implement the fundamental data structures and their associated algorithms;
2. Develop programs using the fundamental data structures;
3. Apply design skills when developing a program.

Course contents:

Lab work will be divided into two activities:

- Basic Implementation
- Programming Exercises

The class will cover the following topics:

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<th>Week</th>
<th>Lab</th>
<th>Topic</th>
<th>Assignment Out</th>
<th>Assignment Deadline</th>
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<td>1</td>
<td>Lab 1</td>
<td>Text ADT</td>
<td>August 30</td>
<td>September 6</td>
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<td>Lab 3</td>
<td>List ADT (Array)</td>
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<td>September 13</td>
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<td>3</td>
<td>Lab 5</td>
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<td>Lab 6</td>
<td>Stack ADT</td>
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<td>5</td>
<td>Lab 7</td>
<td>Queue ADT</td>
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<td>October 4</td>
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<td>Lab 9-1</td>
<td>Binary Search Tree ADT-Part 1</td>
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<td>Binary Search Tree ADT- Part 2</td>
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<td>Expression Tree- Part 1</td>
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<td>Heap ADT-Part2</td>
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<td>14</td>
<td>Lab 12-2</td>
<td>Graph ADT-Part2</td>
<td>December 6</td>
<td>December 13</td>
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</table>

*This schedule may be subject to change.
**The number of assignments is subject to change.

Assessment:

Each lab work is worth 100 points.
The final grade on the course will be the average of all lab works.
The lab works are chosen from the lab manual or other sources, and will be posted on Blackboard before each lab session.
Grading Scale:

The preliminary grading scale is as follows:

A (100-95), A- (94-90), B+ (89-85), B (84-80), B- (79-75), C+ (74-70), C (69-65), C- (64-60), D+ (59-57), D (56-54), D- (53-50), F (below 50).

Grading Policies:

**Format**: Each lab work is to be completed using Visual Studio 2013 or later. Assignments in other formats will not be graded and will receive 0 (zero) grade.

**Compilation and Execution errors**: Assignments must compile and run successfully without errors. Always be sure that a turned in lab compiles without errors even if it is not complete. Assignments that do not compile will receive 0 (zero) grade. It is your responsibility to completely test your lab assignment and check the file PRIOR to the submission.

**Lab work submission**: Each lab works must be submitted via Blackboard, unless otherwise specified. No email is accepted.

**Multiple attempts**: For every lab work, Blackboard will allow multiple attempts. We will grade only the last attempt. So be careful when you upload multiple attempts.

**Late policy**: Lab works must be uploaded to Blackboard by the due date and time. For every 24-hour period the student is late, a 10% penalty will be deducted of the assignment's full grade, unless compelling reasons can be supplied and verified.

**Attendance**: Student attendance at all lab sessions is mandatory and tracked. Some labs will involve reviewing concepts from the course, going over homework solutions, etc. So lab attendance will improve your performance in CSC 2200 as well.

**One-Time Exception**: You are free to skip one Lab attendance with or without a valid reason. If you skip more than one Lab attendance, a 25% penalty will be deducted of the assignment's full grade even if you have a valid reason. So try to use this option wisely.

**Grades**: You are responsible to check your grades after each assignment and report an inconsistent grade to the instructor no later than 7 days after the grade was assigned. Two weeks from completion the grade will become final.

All students are requested to access their Wayne State e-mail account regularly. You may be contacted when important matters arise.
Course Drops and Withdrawals:
In the first two weeks of the (full) term, students can drop this class and receive 100% tuition and course fee cancellation. After the end of the second week there is no tuition or fee cancellation. Students who wish to withdraw from the class can initiate a withdrawal request on Pipeline. You will receive a transcript notation of WP (passing), WF (failing), or WN (no graded work) at the time of withdrawal. No withdrawals can be initiated after the end of the tenth week. Students enrolled in the 10th week and beyond will receive a grade. Because withdrawing from courses may have negative academic and financial consequences, students considering course withdrawal should make sure they fully understand all the consequences before taking this step. More information on this can be found at: http://reg.wayne.edu/pdf-policies/students.pdf

Academic Dishonesty - Plagiarism and Cheating:

Academic misbehavior means any activity that tends to compromise the academic integrity of the institution or subvert the education process. All forms of academic misbehavior are prohibited at Wayne State University, as outlined in the Student Code of Conduct (http://www.doso.wayne.edu/student-conduct-services.html).

Students who commit or assist in committing dishonest acts are subject to downgrading (to a failing grade for the test, paper, or other course-related activity in question, or for the entire course) and/or additional sanctions as described in the Student Code of Conduct.

• Cheating: Intentionally using or attempting to use, or intentionally providing or attempting to provide, unauthorized materials, information or assistance in any academic exercise. Examples include: (a) copying from another student’s code or program; (b) allowing another student to copy from your code or program; (c) using unauthorized material such as a "cheat sheet" during an exam.

• Fabrication: Intentional and unauthorized falsification of any information or citation. Examples include: (a) citation of information not taken from the source indicated; (b) listing sources in a bibliography not used in a research paper.

• Plagiarism: To take and use another’s words or ideas as one’s own. Examples include: (a) failure to use appropriate referencing when using the words or ideas of other persons; (b) altering the language, paraphrasing, omitting, rearranging, or forming new combinations of words in an attempt to make the thoughts of another appear as your own.

• Other forms of academic misbehavior include, but are not limited to: (a) unauthorized use of resources, or any attempt to limit another student’s access to educational resources, or any attempt to alter equipment so as to lead to an incorrect answer for subsequent users; (b) enlisting the assistance of a substitute in the taking of examinations; (c) violating course rules as defined in the course syllabus or other written information provided to the student; (d) selling, buying or stealing all or part of an un-administered test or answers to the
test; (e) changing or altering a grade on a test or other academic grade records.

Student services:

- The Academic Success Center (1600 Undergraduate Library) assists students with content in select courses and in strengthening study skills. Visit [www.success.wayne.edu](http://www.success.wayne.edu) for schedules and information on study skills workshops, tutoring and supplemental instruction (primarily in 1000 and 2000 level courses).
- The Writing Center is located on the 2nd floor of the Undergraduate Library and provides individual tutoring consultations free of charge. Visit [http://clasweb.clas.wayne.edu/](http://clasweb.clas.wayne.edu/) writing to obtain information on tutors, appointments, and the type of help they can provide.

Religious Holidays:

Because of the extraordinary variety of religious affiliations of the University student body and staff, the Academic Calendar makes no provisions for religious holidays. However, it is University policy to respect the faith and religious obligations of the individual. Students with classes or examinations that conflict with their religious observances are expected to notify their instructors well in advance so that mutually agreeable alternatives may be worked out.

Student Disabilities Services:

- If you have a documented disability that requires accommodations, you will need to register with Student Disability Services for coordination of your academic accommodations. The Student Disability Services (SDS) office is located in the Adamaney Undergraduate Library. The SDS telephone number is 313-577-1851 or 313-202-4216 (Videophone use only). Once your accommodation is in place, someone can meet with you privately to discuss your special needs. Student Disability Services' mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to fully participate in their educational experience at Wayne State University.
- Students who are registered with Student Disability Services and who are eligible for alternate testing accommodations such as extended test time and/or a distraction-reduced environment should present the required test permit to the professor at least one week in advance of the exam. Federal law requires that a student registered with SDS is entitled to the reasonable accommodations specified in the student’s accommodation letter, which might include allowing the student to take the final exam on a day different than the rest of the class.

Class recordings:

Students need prior written permission from the instructor before recording any portion of this class. If permission is granted, the audio and/or video recording is to be used only for the student’s personal instructional use. Such recordings are not intended for a wider public audience, such as postings to the internet or sharing with others. Students registered with Student Disabilities Services (SDS) who wish to record class materials must present their specific accommodation to the instructor, who will
subsequently comply with the request unless there is some specific reason why s/he cannot, such as discussion of confidential or protected information.

Disclaimer: The instructor reserves the right to alter this syllabus as necessary.