Syllabus
COSC 052 – Computer Science II - Summer 2016

Instructor: J. Montgomery, Ph.D.

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Office Hours: Daily hours will be entered on Blackboard calendar (or by appointment)

TAs: TBD (see Blackboard calendar for office hours)

Course Description:

This course covers advanced topics of C++ programming and introductory data structure concepts. It is intended for computer science majors, minors, and other students with a serious interest in learning C++ programming. The course includes the following topics: program organization, pointers, self-referential classes, dynamic object creation and destruction, linked lists, recursion, inheritance, abstract base classes, virtual functions, polymorphism, template classes, exception handling, C-style arrays, random file access, Big-Oh notation, abstract data types, stacks, queues, deques, lists, vectors, sequences, priority queues, binary trees, binary search trees, elementary graphs, searching, and sorting. This course satisfies the college science requirement.

Prerequisites: COSC-051

Required Text: Starting out with C++, Early Objects, 8th Edition by Tony Gaddis, Judy Walters, and Godfrey Muganda

Recommended Text: C++ Primer Plus, 6th Edition by Stephen Prata

Grading: Exams (45%)
Programming Projects (40%) Homework/Quizzes/Class participation (15%)

Grading Scale:

Grade	*Range*
A	94 and up
A-	90-93
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	74-76
C-	70-73
D	61-69
F	60 and below

Submitting Assignments: Assignments will be posted on Blackboard. All electronic submission requirements (source code, reports, conclusions, etc.) must be posted to Blackboard prior to the due date and time. Source code should be text files with the appropriate extension. Other file formats will be specified in the project description if applicable, naming conventions will be specified in the project description.

Additionally, please note:

- Unless otherwise specified, all assignments are due before class begins (11:00 am) on the due date.
- A 2.5% penalty will be deducted per quarter-hour for any programming assignment that is submitted late. Late homework assignments will receive a grade of zero.
- No make-up exams or early exams will be provided.
- If you miss a pop quiz or in-class graded exercise, no make-up will be provided (see below for possible exceptions).
- In general requests for due date extensions will not be considered. If you have a personal or family emergency that affects your schoolwork, I expect you to notify me immediately. Your notification to me must include contact information for your academic advisor. After discussing your emergency situation with your academic advisor and/or dean's office; I will determine if an accommodation is justified. If you have a medical issue or emergency notify me immediately. Once the medical situation is under control I will need a copy of a doctor's note explaining any missed class time or inability to work on assignments. Your doctor's note must be acquired **prior to** the missed requirement and must **clearly and definitively state** that you were unable to complete schoolwork during the time of the missed requirement.

  Programming Environment: This class is about the use of computer programming to solve problems. You will do a lot of C++ programming. There

are several Integrated Development Environments (IDEs) that you can use to create C++ programs. I will provide links to some of these options separately. Installation and use of any such third party application is optional, is your responsibility, and will not be covered during class. ALL graded projects and homework assignments **must** compile on XCODE (Macs) or Visual Studio 2015 (Microsoft).

Attendance and Expectations: Attendance is required. Not attending lectures will have an adverse effect on your class participation score. Further, you will be responsible for everything covered in class even if it is not in the textbook. Class participation could include pop quizzes and if you miss one of those there will be no makeup. If you need to leave the classroom during a lecture feel free to do so as quietly as possible. Please turn off cell phones or set them to vibrate prior to the start of class. Food and drinks are not allowed in the classroom.

Academic Honesty: I am required to report any suspicion of academic dishonesty to the Honor Council.

Exams must be entirely your own work. During exams, you are not allowed to view any other students work, show any other student your work, or engage in any discussion unless you need to ask **me** to clarify something regarding an exam question. Exams will be closed book and closed notes unless otherwise specified.

All homework assignments and individual projects must be the result your own effort. You may use outside resources such as research papers and books from the library but any solution techniques taken from outside sources must be properly documented. In the case of computer code submissions, these references should be cited in the program comments. Material from web sites should be cited with a url and adequate information to determine what was used from that site.

You are permitted to have conversations and interactions with other students concerning general programming techniques. This means the type of discussions one would reasonably expect to occur standing in front of a whiteboard. This **explicitly precludes** the detailed discussion of your program code or other assignment products. You are **strictly prohibited** from discussing the specific details of your project or homework solution. You are **strictly prohibited** from viewing or copying someone else's source code. You are **strictly prohibited** from allowing someone else to view or copy your source code. You may not email or otherwise provide to someone else the files associated with your programming project or other assignment documents. You may not submit someone else's file or files as your own.

Course topics, administrative guidelines, and other specifics discussed in this syllabus are subject to change. Notice of any changes will be provided in class.