

Texas Wesleyan University Course Syllabus

Spring 2019

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| Course: CSC1321-01 (Programming in C++) | Meet: STC111, MWF 12:00 |
| Instructor: Yukong Zhang | Office: McFadden 103 |
| Phone: (817) 531-4885 | Office Hours: TTH:3-3:30, MWF:2-3 |
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Course Description

Prerequisite: MAT1302 (or higher level mathematics with MAT1302 as prerequisite)

A study of problem-solving techniques, algorithms, object-oriented principles and programming using C++ including an introduction to computer history, hardware and systems software, software engineering and modular programming methods, control structures, data types, arrays, and files.

Learning Objectives

This course is intended for students who are majored in computer science or interested in computer programming. Students completing this course will *a*) become familiar with the modern object-oriented programming language C++ including its syntax and semantics, and program development process, data types, input and output, conditions, looping, functions, and arrays, *b*) be able to develop efficient computer algorithms and implement them for real-world problems using computing techniques and tools.

Required Materials

- **Programming and Problem Solving with C++** by Nell Dale and Chip Weems, sixth edition, Jones and Bartlett Publishers, 2014. (ISBN-13: 9781284028768)

Instructional Methods

The instructions will be conducted through classroom lectures and discussion. Students will be assigned programming assignments, homework and quizzes.

Class Schedule ¹

| Week | Topic |
|-------------|--|
| Week 1: | Introduction to programming language and compiling process |
| Week 2-3 : | Data types and expressions |
| Week 4-5: | Program input/output |
| Week 6-8: | Conditions and logical expression |
| Week 9-11: | Looping |
| Week 12-14: | Functions |
| Week 15: | Scope and Lifetime |
| Final Exam | |

Evaluation and Grading

| Category | Weight |
|-------------------------|--------|
| Programming Assignments | 45% |
| Quizzes | 30% |
| Final | 25% |

Absence Policy

The absence policy specified in the current Texas Wesleyan University Catalog and Student Handbook will be used. Regular and punctual attendance at all scheduled classes is expected of all students. University regulations authorize absences of students when representing the University (e.g. at athletic, student government, student development, or fine arts events). Other authorized absences are those that may be necessary to fulfill course requirements. Unless otherwise specified by the instructor in the course syllabus, **the maximum number of authorized absences during one semester is five for a Monday-Wednesday-Friday class, three for a Tuesday-Thursday class, and two for a class or laboratory meeting once a week.** Unauthorized absences may be excused when caused by illness or other emergencies and should be reported promptly to the instructor. A student is held responsible for all class assignments. When a student has a number of unauthorized absences equal to the number of hours the class meets per week, the student may be dropped from the class roll by the instructor of the class. (page 101 in 2012-13 Undergraduate Catalog)

Academic Integrity

You are allowed and encouraged to study in groups, provided that it is done in a way that benefit all students involved. However, if one person simply tells another how to do a problem or gives another a copy of his/her program, it totally defeats the purpose

¹This is a tentative schedule. It is subject to change as the class progresses

of the assignment. You will get maximum benefit from an assignment if you work hard on it alone before discussing with others. In any case, the assignment you turn in with your name on it should be written in your own words and represent your own effort. Sharing homework solutions and program code is not allowed. It will be treated as a violation of the University's Academic Integrity Code. All students involved will be reported and recorded. In addition, copying solutions from the Internet or other source is illegal. Please see the University Catalog and Student Handbook regarding appropriate standards of conduct in courses at Texas Wesleyan University.

Texas Wesleyan University Policies

- Students should read the current Texas Wesleyan University Catalog and Student Handbook to become familiar with University policies. These policies include but are not limited to grade appeal, sexual harassment, student access to records, and others; policies specified in the current catalog are applicable unless otherwise stated in this syllabus.
- Texas Wesleyan University adheres to a disability policy which is in keeping with relevant federal law. The University will provide appropriate accommodation as determined by the Director of the Counseling Center, Dr. Michael Ellison. Students must notify instructors of any permanent or temporary disabilities and must provide documentation regarding those disabilities prior to the granting of an accommodation. For assistance, students should consult with Dr. Ellison at mellison@txwes.edu or (817) 531-7565.
- Course syllabi are intended to provide students with basic information concerning the course. The syllabus can be viewed as a 'blueprint' for the course; changes in the syllabus can be made and students will be informed of any substantive changes concerning examinations, the grading or attendance policies and changes in project assignments.
- Any course taken at Texas Wesleyan University and repeated for a grade must be repeated at Texas Wesleyan University. Any course taken at another university may be repeated at Texas Wesleyan, and the most recent grade on the course will be counted. When a course is repeated, the grade point average will be computed using the most recent grade achieved.
- As noted in the catalog under the Unified Discrimination and Harassment Policy, Texas Wesleyan University is committed to providing an environment free of all forms of prohibited discrimination and sexual harassment. If you have experienced any such discrimination or harassment, including gender- or sex-based forms, know that help and support are available from the following resources:
 - Complete online incident report at <https://txwes.edu/student-life/report-a-concern/>
 - Contact Campus Conduct Hotline (24 hours a day): (866) 943-5787

- Campus security (24 hours a day): (817) 531-4911
 - Dean of Students: deanofstudents@txwes.edu OR (817) 531-4872
 - Please be aware that all Texas Wesleyan University employees, other than designated confidential resources (i.e., Community Counseling Center) are required to report credible evidence of prohibited discrimination or harassment to the University's Title IX Coordinator, or to one of the Title IX Assistant Coordinators. If you wish to speak to someone confidentially, please contact the Community Counseling Center at (817) 531-4859 to schedule an appointment.
- Due to the limitless variety of potentially hazardous chemicals that may be found in a scientific or other laboratory environment, students having known, or potential, health-related concerns, such as allergies, asthma, contact dermatitis, pregnancy, or other physiological sensitivities should check with their physician on the advisability of laboratory work. The instructor and/or chair of the teaching department will provide, upon request, a list of chemicals that will be used in experiments during the semester. More detailed information (that is, Materials Safety Data Sheets) will be furnished by the deans upon written request.

Syllabus is subject to change