

COSC 1337.01W Programming Fundamentals II

COURSE SYLLABUS: Fall 2018

INSTRUCTOR INFORMATION

Instructor: Dongeun Lee, Ph.D., Assistant Professor, Department of Computer Science Office Location: JOUR 213 Office Hours: Tue 2:00~4:30PM, Wed 1:00~3:30PM, other times by appointment only via e-mail University Email Address: Dongeun.Lee@tamuc.edu Preferred Form of Communication: Discussion Board and Email Communication Response Time: 48 hours

COURSE INFORMATION

Lecture: Web Based Class (myLeoOnline)

Text book: None required. Use any text book of your choice for reference or look up information on about C/C++ languages on internet.

Software: C++ compiler of your choice. For instance, Windows users might consider Bloodshed Dev-C++ or MS Visual Studio; Mac users Xcode; Linux users gcc/g++.

Course Description

Student Learning Outcomes

- 1. to understand the basic elements of a computer program including documentation, data declaration, and procedural operations
- 2. to edit, translate, and execute a computer program
- 3. to write programs that input data from keyboard/file and output to the console/file
- 4. to apply control structures to alter the sequential flow of execution of program statements including selection and iteration structures

- 5. to create user-defined functions, develop programs consisting of multiple functions, and master function parameter passing
- 6. to define and manipulate arrays
- 7. to create and access structures composed of heterogeneous items
- 8. to understand the basic elements of a class

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students should be able to use C++ compiler.

Instructional Methods

Lectures will be given every week on myLeoOnline in the form of power point presentations with voice-over and scripts. Students are supposed to download the files and study each week. Each week will have a discussion board for Q&A.

Student Responsibilities or Tips for Success in the Course

Assignments and quizzes will be announced on myLeoOnline. Quizzes will be given on Saturday evening. It is students' responsibility to keep up with the schedule. No makeup quizzes or assignments.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100% B = 80%-89% C = 70%-79% D = 60%-69% F = 59% or Below

Assessments

Basis for Evaluation: Assignments 70% Quizzes 30%

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter

any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

Desktop Support

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest

Device	Operating System	Browser	Supported Browser Version(s)
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - 512 MB of RAM, 1 GB or more preferred
 - o Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
 - Sound card, which is usually integrated into your desktop or laptop computer
 - Speakers or headphones.
 - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: <u>JAVA web site</u> <u>http://www.java.com/en/download/manual.jsp</u>
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported. Pop-ups are allowed.

JavaScript is enabled. Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - o Adobe Reader https://get.adobe.com/reader/
 - o Adobe Flash Player (version 17 or later) https://get.adobe.com/flashplayer/
 - o Adobe Shockwave Player https://get.adobe.com/shockwave/
 - o <u>Apple Quick Time</u> <u>http://www.apple.com/quicktime/download/</u>
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or <u>helpdesk@tamuc.edu</u>.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Brightspace Support

Need Help?

Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words "click here" to submit an issue via email.



System Maintenance

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

Interaction with Instructor Statement

The instructor will make an effort to answer questions in a timely manner.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

You should do your own work on quizzes and for computer assignments. Copying another student's work is not acceptable. Any indication of cheating or plagiarism on a quiz/assignment will result in an automatic 0 (zero) for the quiz/assignment for all students involved. Yet, based on cheating and plagiarism activity in any section of class, instructor holds the right to give F grade to the identified student(s). Regarding codes in assignments, you may be required to explain the code you submitted. In case of discursive explanation, the instructor holds the right to lower your grade. No makeup quizzes or assignments unless documents explaining emergency are provided.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the <u>Student Guidebook</u>. <u>http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as</u> <u>px</u> Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <u>Netiquette</u> <u>http://www.albion.com/netiquette/corerules.html</u>

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>. <u>http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx</u>

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce Gee Library- Room 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 Email: <u>studentdisabilityservices@tamuc.edu</u>

Website: Office of Student Disability Resources and Services http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ ices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web

url: <u>http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf</u>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

COURSE OUTLINE / CALENDAR

Week 1: introduction, comments, data types

Week 2: cin, cout, operators and operator precedence

Week 3: relational operators, control structures: selection

Week 4: control structures: selection, control structures: repetition

Week 5: control structures: repetition

Week 6: input/output revisited, functions: pass by value

Week 7: functions: pass by value

Week 8: functions: pass by reference

Week 9: functions: pass by reference, scope, static variables, function overloading, default arguments

Week 10: scope, static variables, function overloading, default arguments

Week 11: arrays with different data types, index and access to arrays

- Week 12: array operations, C-strings (char arrays), multi-dimensional arrays
- Week 13: application of arrays: searching and sorting
- Week 14: application of arrays: searching and sorting
- Week 15: records (struct): memory status of structs, arrays in structs, functions with structs, structs in structs
- Week 16: classes: private, public, protected access, functions as members