

# **CSCI 428: Introduction to Object Oriented Programming**

COURSE SYLLABUS: Fall – 2018

#### INSTRUCTOR INFORMATION

**Instructor:** Dr. Bilal Abu Bakr

Office Location: JOUR212

Office Hours: TR 11:30pm-2:00pm
University Email Address: Bilal.Abu.Bakr@tamuc.edu

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Preferred Form of Communication: Bilal.Abu.Bakr@tamuc.edu

**Communication Response Time: 24 hours** 

**Fall 2018:** Meets 8/27/2018 through 12/14/2018

Class Schedule: Web Based Class

Final Exam: Saturday, December 8, 2018 at 10:00 a.m.

#### **COURSE INFORMATION**

## Textbook(s)

Required Text:

Java How To Program (Early Objects)

Publisher: Pearson; 10 edition (March 6, 2014)

ISBN-10: 0133807800 ISBN-13: 978-0133807806

## Course Description

This course emphasizes current techniques in object oriented design, analysis, and programming. Such topics as encapsulation, information hiding, inheritance and polymorphism are studied in class assignments and programming exercises. The C++ programming language is utilized along with the UML modeling language. Prerequisites: CSCI 270 or permission of instructor.

Note: we are currently in the process of updating the above course description. The following is the updated version of CSCI 428 course description.

This course introduces the basic concepts and terminology of object technology. It emphasizes current techniques in object oriented design, analysis, and programming. In particular, we will study the concepts of Exception Handling, Encapsulation and Data Hiding, Inheritance, Polymorphism, Arrays and ArrayList.

Prerequisites: CSCI 270 or permission of instructor.

### **Student Learning Outcomes**

- (c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- (i) An ability to use current techniques, skills, and tools necessary for computing practice.

### **COURSE REQUIREMENTS**

Minimal Technical Skills Needed

Prerequisite: CSCI 270 or permission of instructor.

#### **Instructional Methods**

If this course is Face to Face (Lecture), then factual material is presented in a direct, logical manner to motivate the student.

### Late Policy

The deadline for any assignment can be extended with a 15% penalty per day. No deadline can be extended by more than two days. Assignments will NOT be accepted 48 hours after the due date. No technical excuse (e.g., eCollege technical problem).

### Makeup Policy

There will be no makeup exams in general. Makeup exams may be given to students under extreme circumstances, such as hospitalization, serious injury, death in the family etc., with prior notification and official documents. Students are expected to do the readings, attend class, and participate in class discussions.

If this course is Face to Face (Lecture), then I <u>Do Not</u> share my PowerPoint slides and class notes, except under extenuating circumstances. You are responsible for the content of all classes, including issues raised in the spontaneous class discussions. If you must miss a class, please request notes from your classmates prior to contacting me. Attendance may be checked at random throughout the semester.

#### Collaboration Policy

Students are encouraged to talk to each other, to the instructor, or to anyone else about any of the assignments. Any assistance, though, must be limited to discussion of the problem and sketching general approaches to a solution. Each student must write out his or her own solutions to the homework. Consulting another student's or group's solution is prohibited, and submitted solutions may not be copied from any source. These and any other form of collaboration on assignments constitute cheating. If you have any question about whether some activity would constitute cheating, please feel free to ask.

### Academic Integrity

Your commitment as a student to learning is evidenced by your enrollment at Texas A &M University-Commerce. "All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (See Student's Guide Handbook, Policies and Procedure, Conduct). All phones, pagers, and other communication devices are to be turned off or place on silent mode during class. Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. Anyone cheating will receive a zero on the work they are doing, and subsequent cheating will result in a failing grade.

#### **Basic Tenets Of Common Decency**

"All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (Student's Guide Handbook, Policies and Procedures, Conduct.) This means that rude and/or disruptive behavior will not be tolerated.

#### Smoke, Vapor & Tobacco Free Environment

University Procedure 34.05.99.R1 now prohibits the use of vapor/electronic cigarettes, smokeless tobacco, snuff and chewing tobacco inside and adjacent to any building owned, leased, or operated by A&M – Commerce.

### Disclaimer

This syllabus is meant to provide general guidance of what to expect from this course. The instructor reserves the right to make changes as appropriate based on the progress of the class. All changes made to this syllabus during the semester will be announced. This document has been posted electronically. If you print a copy of it, please be sure to consult the last modified date of the online version to verify that your printed copy is current.

### Student Responsibilities or Tips for Success in the Course

From the Students' Handbook: "Students are expected to be present for all class meetings of any course for which they are enrolled. Per University Procedure A13.02, effective September 1, 1996, students are responsible for learning about and complying with the attendance policy stated in the catalog, Student's Guidebook, and/or faculty syllabus. It is the prerogative of the faculty to drop students from courses in which they have accrued excessive absences as defined in the course syllabus."

The instructor will take the attendance at the beginning of each lecture and only once.

If a student misses 3 or more lectures without legitimate reasons, the instructor will make the student drop the course. If this is not possible, the letter grade of 'F' will be assigned to the student.

Lateness and leaving class early may count as an absence and are not acceptable unless you are ill or a family emergency exists. If you miss a lecture, it is your responsibility to obtain notes from a fellow student. Office hours are not meant for individual lectures. Any class material missed by the student is the student's responsibility to acquire.

#### **GRADING**

Assignments	20%
Quizzes	20%
Mid Term	20%
Final Project	20%
Final Exam	20%

#### Project

Students will be responsible for creating an original software project that integrates object oriented design principles. More information will be provided regarding the project later in the semester.

## Program Evaluation: Programs will be graded on a scale of 0 through 100.

- 0 Nothing was turned in.
- 10-50 For programs that don't compile or run and have major problems and/or very little completion of program requirements. The score will be determined by how many problems there are.
- A good attempt has been made but program has several problems causing compile and/or run time errors.
- The program is correct but has a very small amount of easily fixed errors. (This is the highest you can get if your program will not compile.)
- The program compiles and runs but doesn't meet several requirements.
- The program compiles and runs but doesn't meet a very minor number of requirements.
- The program compiles and runs and meets all program requirements.

## 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

#### **TECHNOLOGY REQUIREMENTS**

- To fully participate in online courses you will need to use a current Flash enabled internet browser. For PC and Mac users the suggested browser is Mozilla Firefox.
- 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
  - 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: JAVA web site <a href="http://www.java.com/en/download/manual.jsp">http://www.java.com/en/download/manual.jsp</a>
- Current anti-virus software must be installed and kept up to date.
- \* Run a browser check through the Pearson LearningStudio Technical Requirements website. Browser Check

http://help.ecollege.com/LS Tech Req WebHelp/en-us/#LS Technical Requirements.htm#Browset

- 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:
  - ➤ Adobe Reader https://get.adobe.com/reader/
  - Adobe Flash Player (version 17 or later) https://get.adobe.com/flashplayer/
  - > o Adobe Shockwave Player https://get.adobe.com/shockwave/
  - > o Apple Quick Time http://www.apple.com/quicktime/download/
- ❖ 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.
- ❖ For additional information about system requirements, please see: System Requirements for LearningStudio https://secure.ecollege.com/tamuc/index.learn?action=technical

## ACCESS AND NAVIGATION

### Pearson LearningStudio (eCollege) Access and Log in Information

This course will be facilitated using Pearson LearningStudio, the learning management system used by Texas A&M University-Commerce. To get started with the course, go to myLeo and from the top menu ribbon select eCollege. Then on the upper left side of the screen click on the My Courses tab. <a href="http://www.tamuc.edu/myleo.aspx">http://www.tamuc.edu/myleo.aspx</a>

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 helpdesk@tamuc.edu.

**Note**: It is strongly recommended you perform a "Browser Test" prior to the start of your course. To launch a browser test login to Pearson LearningStudio, click on the My Courses tab, and then select the Browser Test link under Support Services.

#### Pearson LearningStudio Student Technical Support

Texas A&M University-Commerce provides students technical support for the use of Pearson LearningStudio.

Technical assistance is available 24/7 (24 hours, 7 days a week).

If you experience LearningStudio (eCollege) technical problems, contact the LearningStudio helpdesk at 1-866-656-5511 (toll free) or visit Pearson 24/7 Customer Support Site http://247support.custhelp.com/

The student help desk may be reached in the following ways:

- **Chat Support:** Click on *'Live Support'* on the tool bar within your course to chat with a Pearson LearningStudio Representative.
- **Phone:** 1-866-656-5511 (Toll Free) to speak with Pearson LearningStudio Technical Support Representative.

**Accessing Help from within Your Course:** Click on the 'Tech Support' icon on the upper left side of the screen inside the course. Then you will be able to get assistance via online chat or by phone.

**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.

Policy for Reporting Problems with Pearson LearningStudio

Should students encounter Pearson LearningStudio based problems while submitting assignments/discussions/comments/exams, the following procedure must be followed:

- Students must report the problem to the help desk. You may reach the helpdesk at 1-866-656-5511.
- Students must file their problem with the helpdesk and obtain a helpdesk ticket number
- Once a helpdesk ticket number is in your possession, students should email me to advise me of the problem and provide me with the helpdesk ticket number.
- ❖ I will call the helpdesk to confirm your problem and follow up with you

**PLEASE NOTE:** Your personal computer and internet access problems are not a legitimate excuses for filing a ticket with the Pearson LearningStudio Help Desk. Only Pearson LearningStudio based problems are legitimate reasons to contact the Help Desk.

You strongly are encouraged to check for your internet browser compatibility **BEFORE** the course begins and take the Pearson LearningStudio tutorial offered for students who may require some extra assistance in navigating the Pearson LearningStudio platform.

### myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email helpdesk@tamuc.edu or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at myLeo. https://leo.tamuc.edu

### **Learner Support**

The One Stop Shop was created to serve you by providing as many resources as possible in one location. http://www.tamuc.edu/admissions/onestopshop/

The Academic Success Center provides academic resources to help you achieve academic success. http://www.tamuc.edu/campusLife/campusServices/academicSuccessCenter/

#### FREE MobilE APPS

The Courses apps for phones have been adapted to support the tasks students can easily complete on a smaller device. Due to the smaller screen size course content is not presented.

The Courses app is free of charge. The mobile Courses Apps are designed and adapted for different devices.

PEARSON	App Title:	iPhone – Pearson LearningStudio Courses for iPhone Android – LearningStudio Courses - Phone
	Operating System:	iPhone - OS 6 and above Android – Jelly Bean, Kitkat, and Lollipop OS
	iPhone App URL:	https://itunes.apple.com/us/app/pearson-learningstudio-courses/id977280011?mt=8
	Android App URL:	https://play.google.com/store/apps/details?id=com.pearson.lsphone

Once downloaded, search for Texas A&M University-Commerce, and it should appear on the list. Then you will need to sign into the myLeo Mobile portal.

The Courses App for Android and iPhone contain the following feature set:

❖ View titles/code/Instructor of all Courses enrolled in online

- View and respond to all discussions in individual Courses
- ❖ View Instructor Announcements in individual Courses
- View Graded items. Grades and comments in individual Courses
- Grade to Date
- ❖ View Events (assignments) and Calendar in individual Courses
- View Activity Feed for all courses
- View course filters on activities
- View link to Privacy Policy
- ❖ Ability to Sign out
- Send Feedback

#### **LearningStudio Notifications**

Students can be alerted to course activities via text on their mobile phones or up to two email addresses.

Based on their preferences, students can automatically receive a push notification with every new: course announcement, threaded discussion post, grade, and/or assignment without having to login to the course. Enrolled students will automatically receive email notifications for announcements and can opt out of this feature. To receive text notifications, students must opt in.

To begin setting up notifications, go into your course in LearningStudio and click on the bell-shaped Notifications icon on the main menu ribbon.

By default the student's university email address will appear. This cannot be changed in LearningStudio. Additional email addresses may be added by clicking the Add button. After all of the other selections are completed be sure to click the Save and Finish button.

### COMMUNICATION AND SUPPORT

### Interaction with Instructor Statement

The instructor's communication response time and feedback on assessments are stated clearly.

## COURSE AND UNIVERSITY PROCEDURES/POLICIES

### Course Specific Procedures/Policies

Attendance/Lateness, Late Work, Missed Exams and Quizzes and Extra Credit

### **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 Student Guidebook. http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette http://www.albion.com/netiquette/corerules.html

### TAMUC Attendance

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

 $\underline{\text{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.}\\99.R0.01.pdf$ 

#### 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 132

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: Rebecca.Tuerk@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

#### 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 Carrying Concealed Handguns On Campus document and/or consult your event organizer.

### Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

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	Topic
1 - 3	Introduction to Java Applications

4 - 6	Introduction to Classes, Objects, Methods and Strings
7	Methods: A Deeper Look
8	Midterm Exam
9 – 11	Classes and Objects: A Deeper Look
12 - 13	Object-Oriented Programming: Inheritance
14 - 15	Object-Oriented Programming: Polymorphism
16	Final Exam