The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel



CSCI 428, Object Oriented Programming

COURSE SYLLABUS: Spring 2024

INSTRUCTOR INFORMATION

| Instructor | Shreyas Kumar |
|-----------------|---|
| Office Location | ACB2 - #208 |
| Office Hours | TBD |
| Email | Shreyas.kumar at tamu dot edu |

COURSE INFORMATION

Lectures (Time/Location):

• Monday/Wednesday 4:15 PM - 5:30 PM, ACB2-316

• Delivery Format: in-person

Textbook(s) Required:

• Java How to Program (Early Objects), Paul J. Deitel, Harvey Deitel, 11th Edition, Pearson.

Software Required:

- Java JDK SE
- Any Java IDE. We will align in class on expectations from any tool chosen.

Course Description

This course introduces fundamental concepts, terminology and methodology of object oriented programming. Further emphasis will be given on current techniques in object oriented analysis, design and applications programming. In particular, the concepts of exception handling, encapsulation, data hiding, inheritance, polymorphism, arrays and arraylist will be introduced in greater detail.

Student Learning Outcomes

Upon completing this course students should be able to:

- · Analyze and solve problems using appropriate computing requirements including Java tools and library features
- Understand and utilize Object Oriented concepts to develop reusable, reliable, and maintainable software
- Design, implement and evaluate a solution to satisfy problem requirements using concepts taught in the course

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Prerequisites: CSCI 270 or permission of instructor

Instructional Methods

During this course, we will be using traditional and active learning methods, and work together using:

- Lectures: using slides, supplementary materials, and hands-on exercises.
- · Assignments that will be released via the Learning Management Systems.
- Individual projects: details of the project will be released during weeks 4.

Student Responsibilities and Tips for Success in the Course

- 1. It is expected that you are the owner of your success in this course, including ensuring you understand the expectations, timelines, policies and learning objectives.
- 2. Baseline expectations:
 - a. Check LMS frequently (at least on alternate days).
 - b. Follow the material in the textbook frequently and use the slides as your guideline.
 - c. Start your homework assignments early.
 - d. Check the feedback on homework assignments.
 - e. Do your work independently: collaboration and participation in study groups is encouraged to improve your understanding and to develop problem-solving strategies. However, cheating and plagiarism will not be tolerated, i.e. do not copy other people's work.
 - f. Communicate with the instructor when you are confused, or having difficulties with the course material / assignment / project.

GRADING

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

A = 90%-100%, B = 80%-89.9%, C = 70%-79.9%, D = 60%-69.0%, F = 59.9% or Below

Assessments

| Assessment Type | Weight of Final Grade | Learning Objectives |
|--------------------------|-----------------------|--|
| Assignments | 30 % | Understanding of concepts and |
| Mid-term Exam | 20% | problem solving |
| Project and presentation | 40% | Critical understanding and object oriented problem solving |
| Participation | 10% | Improved communication and collaboration |

Assignments and term project will be graded on the following:

- Demonstrating good form; including good organization, remarks and indentation
- Submission on-time (Late submission are subject to the penalty, ref. late submission section)
- Degree of successful compilation and compliance with requirements on a scale of [0-100], as follows:
 - [o]: project was not submitted or submitted after hard deadline.
 - [10-50]: project programs 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 (This is the maximum grade for programs that do not compile).
 - [60]: a good attempt has been made but program has **run time errors**.
 - [70]: the program is correct with small amount of easily fixable **run time errors**.
 - [80]: the program compiles and runs but doesn't meet several requirements.
 - [90]: the program compiles and runs and meets most requirements.
 - [100]: the program compiles and runs and meets all requirements

Quizzes and exams are graded based on the correctness of the answers and workflow. The number of assignments and quizzes are negotiable.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

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 helpdesk@tamuc.edu.

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 is expected to have a backup method to deal with these inevitable problems. In case of extreme technology related circumstances, please communicate directly with the instructor to best manage your success in this course.

COMMUNICATION AND SUPPORT

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

To communicate with me about this course, kindly use the email address included in this syllabus. During the week, you can generally expect a response to your emails within 1-2 business days. *If you do not receive my response in 2 business days, please send a second email to me.*

To ensure I get your email and respond within indicated timelines above, please make sure that:

- Your email message is sent from your Texas A&M student account.
- Your email message includes a descriptive subject with the indicated prefix:
 CSCI 428 Spring 2022 --<CWID>: <descriptive subject>

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Attendance is required but not graded. Students are expected to do the readings, attend class, and participate in class discussions. Each student is responsible for managing their own time and work-load. Emergency / extreme circumstances causing a student to miss deadlines/exams will need to be supported by official and university approved documentation.

Positive Learning Environment

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).

Late Policy

The deadline for any assignment/project can be extended with a 15% penalty per day, for a maximum of two days. Assignments/project will NOT be accepted 48 hours after the due date.

Makeup Policy

There will be no makeup exams or quizzes. If you shall miss a quiz/exam because of acceptable extreme circumstances (hospitalization, serious injury, death in the family etc.), you may be offered to choose to receive a grade based on your inclass ranking in the next quiz/exam.

Collaboration Policy

Students are encouraged to consult with each other, with the instructor, or anyone else about any assignments / project. However, this must be limited to the discussion of the problem and sketching general approaches to a solution. Each

student is responsible for submitting their own independent solutions to the assignment / project. 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 or doubts about whether some activity would constitute cheating, please feel free to ask.

Academic Integrity

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 / project are to be completed by the individual student unless otherwise specified. Any student cheating will receive a zero on the work they are doing, and subsequent cheating will result in a failing grade and potential academic sanctions.

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.

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.

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/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

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>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

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/1 3students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/1 3students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

Academic Integrity and Artificial Intelligence

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors 'guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty 13.99.99.R0.10 Graduate Student Academic Dishonesty

Students with Disabilities-- ADA Statement

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: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

 $\underline{http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndService}$

<u>s/</u>

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:

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.

Al use policy [Draft 2, May 25, 2023]

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

The syllabus/schedule are subject to change.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty 13.99.99.R0.10 Graduate Student Academic Dishonesty

COURSE OUTLINE / CALENDAR

| Week | Course Subject |
|--------|---|
| Week 1 | Introduction to Java Applications: Input/output & operators |
| Week 2 | Introduction to Java Applications: Input/output & operators |

| Week 3 | Introduction to Classes, Objects, Methods and Strings |
|---------|---|
| Week 4 | Introduction to Classes, Objects, Methods and Strings |
| Week 5 | Control Statements, Arrays & Array Lists |
| Week 6 | Classes and Objects: A Deeper Look |
| Week 7 | Classes and Objects: A Deeper Look |
| Week 8 | Midterm exam |
| Week 9 | Spring Break |
| Week 10 | Object-Oriented Programming: Inheritance |
| Week 11 | Object-Oriented Programming: Polymorphism |
| Week 12 | Exception Handling |
| Week 13 | Strings, Characters and Regular Expressions |
| Week 14 | Concurrency, Searching, Sorting and Big O |
| Week 15 | Accessing Database with JDBC |
| Week 16 | Final Project Presentations |

The schedule is **tentative** and may be adjusted to fit the actual class progress.