



Department of Computer Science

CSCI 531 Advanced Programming with Java Fall 2016

INSTRUCTOR INFORMATION

Instructor	Dr. Yuehua Wang
Office location	TBD
Office hours	M/T/W 9:00 AM- 11:00 AM
Office phone	TBD
University Email address	TBD

COURSE INFORMATION

Course	CSCI 531(01E-82028)
Time	Monday 4:30 PM -- 7:10 PM 08/29/16 - 12/16/16
Location	EDS135
Prerequisite	Prerequisites: Lvl G CSCI 515 Min Grade B or C515 075 or W515 0
Credit	3

***Note: Students who have not finished the pre-requisites should not take this course. The Instructor reserves the right not to give any grade to those students who ignore this advice**

Course Description

Java is popular among professional programmers because it can be used to build visually interesting graphical user interface (GUI) and Web-based applications. This course will motivate students to learn programming skills while building advanced applications in use. Particular emphasis is given to all topics of fundamental programming including selection and repetition; advanced topics include inheritance, polymorphism, exceptions; and representative Java applications such as Java GUI, Java Applets, Java Graphics, Java Multithreading, and Java networking. Concretely, it covers:

- An Overview of Computers and Programming Languages
- Basic Elements of Java
- Introduction to Objects and Input/Output
- Control Structures I: Selection
- Control Structures II: Repetition
- Graphical User Interface (GUI) and Object-Oriented Design (OOD)

- User-Defined Methods
- User-Defined Classes and ADTs
- Arrays
- Inheritance and Polymorphism
- Handling Exceptions and Events
- Advanced GUIs and Graphics
- HTML and Applet
- Multithreading
- Networking

A. Program Information: Program Outcomes, Sequence, Prerequisites, Post-requisites

Students will learn basic elements of Java and how to write Java programs and applications, including Java GUI, Applets, Graphics, Multithreading, and Networking, how to utilize pre-existing Java programs and develop new programs and applications. Students will be expected to complete numerous programming assignments and programming projects. This course requires students have experience with C++ programming language and object oriented methods.

Supplementary information for the course is available at [eCollege](#). Log on with your Access ID for class notes, lecture slides, class announcements, the course syllabus, and other information for the course. You will submit your assignments and project and check grades there too.

B. Student Learning Outcomes

This course is similar to an exercise class. You learn new concepts and techniques, and then, exercise these new found skills. At the end of the class you should

- Have a clear understanding of fundamentals of programming and object-oriented programming in Java
- Be aware of the important topics and principles of software development
- Explore how to design, build, and run Java GUI applications using Swing and AWT
- Have the ability to develop and debug simple web applications using the Java environment and class library.

***Note: All background material will be developed and offered in efficient and effective ways within the course itself and from scratch.**

Textbooks

D.S. Malik, Java Programming: From Problem Analysis to Program Design, Fifth Edition. Course Technology, Cengage Learning, 2011, ISBN-13 978-1-111-53053-2.

In most cases, the instructor slides are sufficient for understanding the material. The following textbooks are very useful as references or tutorials for Java.

- Joyce Farrell, Java Programming, Eighth Edition. Course Technology | Cengage Learning, 2016, ISBN-13: 978-1-285-85691-9.
- Bruce Eckel, Thinking in Java (4th Edition). Prentice Hall, 2006, ISBN-13: 007-6092039389

Computer Programs

The software is Eclipse, and it is freely available online at [eclipse https://eclipse.org/downloads/](https://eclipse.org/downloads/) Google Chrome and Internet Explorer are two recommended browsers for developing Java Applet

Course Contents and Schedule (Outline/Calendar)

Week	Date	Topic	Reading	Assignment	Due Date
1	08/29/16	Course Introduction Overview of Java Basic Elements of Java Java packages Java methods Java 2 Math classes JAVA applications-finish your first Java program	Chapters 1-2	Assignment 01	
2	09/05/16	No class Labor Day			
3	09/12/16	introduction to objects and input/output Using Predefined Classes and Methods in a Program Input/Output File Input/Output Control structures-selection and repetition	Chapters 3-5		Assignment 01
4	09/19/16	Arrays , User-defined methods, and User-defined classes	Chapter 7- 9	Assignment 02	
5	09/26/16	Inheritance and polymorphism	Chapter 10		Assignment 02
6	10/03/16	Graphical User Interfaces I (Swing)	Chapter 6	Assignment 03	
7	10/10/16	Review for midterm exam			Assignment 03
8	10/17/16	Midterm Exam (4:30pm - 6:30 pm, 2 hours)			
9	10/24/16	Graphical User Interfaces II (Swing)	Chapter 6	Project and Assignment 04	
11	10/31/16	HTML and JAVA Applet			Assignment 04
12	11/07/16	HTML and JAVA Applet		Assignment 05	
13	11/14/16	Signed Applet			Assignment 05
14	11/21/16	JAVA Graphics	Chapter 12	Assignment 06	
15	11/28/16	Other applications: multithreading and networking Review for final exam			Assignment 06
16	12/05/16	Final Exam (4:30pm - 6:30 pm, 2 hours)			
17	12/12/16	No class Project due at 23:00 pm			

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Using computers, operating systems, program compilers, and Microsoft Word

Instructional Methods

This course is lecture supplemented by text and eCollege. To get started with the course, go to: <https://leo.tamuc.edu>. You will need your CWID and password to log in to the course.

Student Responsibilities or Tips for Success in the Course:

1. Make-up examinations for exams will not be given. If you have a compelling and documented reason for not being able to attend the exam, you must make the alternative arrangements before the examination. Grades will not be curved for the course, and you will receive the grade that you earn through your performance on the assignments, exams, project, and bonus questions. There will be no individual exceptions to the grading policy, and, therefore grades of a C or F are possible.
2. Programming assignments and project help reinforce object-oriented programming techniques discussed in class. There will be 6 assignments and 1 project. Overall, each assignment and project contributes approximately 6% and 10% to a student's final grade, respectively.
3. No late submission for assignment will be accepted.

On Due Date	Next Day
0 deduction	100% deduction

4. Grades will be posted within one week after assignment due date.
5. You are responsible to check your grades after each assignment, and report an inconsistent grade to the instructor no later than 7 days after the grade was assigned. After 7 days from posting it on eCollege, the grade will become final.
6. All assignments must be submitted using eCollege if applicable. Students must adhere to the following rules when submitting assignments. Failure to do so will affect their grades.

- File Name

- Should be named according to the following pattern: LastFirstX.Java, where Last is the student's last name, First is the student's first name, and X is the assignment number.
- For example, student John White would submit WhiteJohn3.Java for programming assignment 3.

- File Header

- The first lines of the submitted file should include a comment with the following information and format:

```
/**
 * A short description of the program.
 *
 * @author Last Name, First Name
 * @assignment CSCI531 Assignment X
 * @date Date
 */
```

7. All students are requested to access their university e-mail account regularly. You may be contacted when important matters arise. If you have any questions about the course or need assistance, please contact the instructor and/or the TA in person during office hours or by e-mail at any time.

GRADING

Final grades in the course will be based upon the percentages given below

A	90% - 100%	C+	65%-69%
A-	85% - 89%	C	60% - 64%
B+	80% - 84%	C-	55% - 59%
B	75% - 79%	D	50% - 54%
B-	70% - 74%	F	0% - 49%

Assessments

Grading for this course is based on a 1000 point scale. End-of-semester numeric scores will be weighted as follows.

- Assignment (6 x 60 = 360 points) 36%
- Project (1 x 100= 100 points) 10%
- Mid Term (1 x 250 = 250 points) 25%
- Final Exam (1 x 350 = 350 points) 35%
- Class Participation 4%
- Bonus in-class quiz questions, attendance and/or participation (up to 5%)

***Note: There will be a number of quizzes that will cover lecture material and be worth a total of 50 bonus points.**

Technology Requirements

Students may develop your programs on any machine that you like: we encourage you to use your own equipment. We provide instructions for setting up a Java programming environment under Windows, OS X, and Linux. You can use one of the several excellent Java IDEs available, with instructor materials covering Eclipse and NetBeans. Google Chrome and Internet Explorer are two recommended browsers for developing Java Applet. Note: This course does NOT address JavaScript.

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. <http://www.tamuc.edu/myleo.aspx>

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.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

Interaction with Instructor Statement: For general questions and assistance with the course, the instructor will keep a schedule of 6 regular office hours per week. If a student cannot meet during the designated schedule, arrangements can be made to meet at a more convenient time. An email should be sent to the instructor at least 24 hours prior to the time the student plans on meeting. Generally, I will reply to your e-mail messages in a timely manner. A reply can be expected within 24 hours.

My responsibilities:

- Make sure to accommodate all your learning needs
- Try my best to answer your questions and resolve other related issues
- Give feedback and your grade on assignments within one week of the due date.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Class Decorum Civility in the classroom or online course and respect for the opinions of other is very important in an academic environment. It is likely you may not agree with everything that is said or discussed in the classroom/online course. Courteous behavior and responses are expected. To create and preserve a learning environment that optimizes teaching and learning, all participants share a responsibility in creating a civil and non-disruptive forum. Students are expected to conduct themselves at all times in a manner that does not disrupt teaching or learning. Faculty have the authority to request students who exhibit inappropriate behavior to leave the class/online course and may refer serious offenses to the University Police Department and/or the Dean of Students for disciplinary action. (See Student Guidebook)

Academic Honesty

It is the policy of the University, the History Department, and the instructor that no form of plagiarism or cheating will be tolerated. Plagiarism is defined as the deliberate use of another's work and claiming it as one's own. This means ideas as well as text, whether paraphrased or presented verbatim (word-for-word). Cheating is defined as obtaining unauthorized assistance on any assignment. Collusion is defined as selling or purchasing academic products with the intention that they be submitted to fulfill an academic or course requirement. Proper citation of sources must always be utilized thoroughly and accurately. Cheating/plagiarism/collusion will result in a grade of "0" for the assignment, and may also result in failure of the course and/or disciplinary action by the University. Any student found guilty of violating academic integrity policy will fail the assignment in question, will automatically fail the course and will be subject to disciplinary action by the university (see Texas A&M University-Commerce Code of Student Conduct 5.b. [1,2,3]). Further information on the history department's plagiarism policy can be found on the department webpage. If you are unclear about what constitutes academic dishonesty, ask.

Writing Center

Students are encouraged to take advantage of the Writing Center's resources for assistance with drafting their written assignments. Although the center will not write your paper for you, it may help you to improve your writing skills. If you use the Writing Center, plan in advance because it can only help you if there is adequate time to incorporate their suggestions into your paper. Additionally, I am willing to read rough drafts (and even multiple drafts) of your written work so long as the drafts are submitted at least one week prior to the due date.

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
StudentDisabilityServices@tamuc.edu

For additional information, you could also visit the link
<http://www.tamuc.edu/campuslife/campuservices/studentDisabilityResourcesAndServices/default.aspx>.

Note that it is the student's responsibility to provide the professor/instructor with his/her letter of accommodations from the SDRS office.

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>

For this course, your responsibilities:

- Behave actively in classroom discussions and activities. Let me know if you find any questions or suggestions in the syllabus, course material, or activity due dates
- Watch the deadlines for exams and assignments.
- Work hard and ask for help or assistance if need be.
- Review my feedback on your assignments and let me know of any questions or concerns ASAP

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>

<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>

Class recordings

Students need prior written permission from the instructor before recording any portion of this class. If permission is granted, the audio and/or video recording is to be used only for the student's personal instructional use. Such recordings are not intended for a wider public audience, such as postings to the internet or sharing with others. Students registered with Student Disabilities Services (SDS) who wish to record class materials must present their specific accommodation to the instructor, who will subsequently comply with the request unless there is some specific reason why s/he cannot, such as discussion of confidential or protected information.

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.

Other issues

- Foods and drinks are not allowed during the lecture or lab hours.
- Cell phones and other two-way communication devices: Students are expected to turn off their devices or turn them to the silent mode when they come to the lecture or to the lab. If a device is used in any way in the lab, you will receive a verbal warning first and then you will be asked to leave immediately.