INSY 4306 Advanced Systems Design Spring 2018

Grading Policy:

Exam(s) - 60 % Assignments & Projects - 30 % Attendance/Class Participation -10%

NO AUDIO OR VIDEO RECORDING ALLOWED IN CLASS.

No Cell Phone Usage allowed in Class.

No outside material or electronic devices allowed during exams.

Proposed Course Schedule: The schedule below is a subject to change as needed.

Getting Started with Eclipse for Java
Using WindowBuilder with Java
Using DB with Java
JDBC Applications
Files and Streams-1
Files and Streams-2
Review and Exam-1(Wednesday)
Concurrency
Threading
Multi-Threading
Review and Exam-2 (Wednesday)
Searching-1
Searching-2
Sorting
Review and Exam-3(Wednesday)
Java Networking
FINAL EXAM (All Topics)-5:30 PM

Project (Assignment) Requirements:

- Create a subdirectory on your local machine called Projects on your
 C:- drive (C:\Projects)
- Save all projects under this directory in a folder with the project name such as xxxproject1, where xxx are your initials (C:\Projects\xxxprojectN - N is the project number) - e.g. "c:\projects\mkrproject1"
- Zip your project folder (e.g. Project1) and submit it on line at Blackboard by 10:30 AM on the due date. Late projects will be assessed a penalty of 10% per hour or part thereof http://elearn.uta.edu

You can submit a project multiple times. The latest (last) one will be graded.

- Please include your name in the code as a comment
- ALL PROJECTS MUST BE SUBMITTED ONLY TO BLACKBOARD. Do not projects to the Instructor!
- Send all communications to Blackboard email

Programming Assignment Rules and Guidelines:

- All assignments are individual assignments.
- You should do the assignment by yourself, without help or assistance from your classmates or others.
- Students in the class are NOT allowed to help others in the class with the PROGRAMMING LOGIC for the solution of the assignment.
- You can not share, exchange or email code used in the assignment.
- You can not help another student write the code for their assignment or write code for them
- You have to debug the program yourself. You can not send it or show it to anther student or other persons. You can not send code to the instructor for debugging!
- You can not get code from another person in the class
- If your code is identical or too similar (except for variable names etc) as another person, both your assignment and the matching assignment from the other student(s) will receive zero credit and you maybe subject to plagiarism action
- DO NOT SHARE or COPY from another student.
- DO NOT WRITE CODE OR HELP WRITE CODE OR LOGIC for another student.

Name: Dr. M. K. Raja

Office Number: Business - 522

Office Telephone Number: 817-272-3540

Office Hours: Monday 4:30-5:30 PM. Other times by appointment

Course Number, Section Number, and Course Title:

INSY 4306 (section 001) Advanced Systems Design

Time and Place of Class Meetings:

5:30AM - 6:50PM Monday thru Thursday - Room 339 (COB)

Description of Course Content:

This course will introduce advanced systems design principles and techniques for developing Object-Oriented systems using Java. This course introduces concepts of designing and developing applications using the Java technology. The course will cover a range of topics starting with simple console applications, proceeding to more complex applications using various techniques and objects available in the Java language. Applications will include using complex data structures and design using the Runtime and class structures available in Java architecture.

Student Learning Outcomes:

Upon successful completion of this course, the student will:

- Understand basic principles of Java Database application development
- Know what Files and Streams are and how to use them in an application.
- Understand how to design, code, test and implement Java GUI applications
- Understand how to implement searching and sorting algorithms in Java.
- Familiarity with the Java Networking classes and structures and how to use them in applications

Requirements: A thorough understanding of the basic concepts Java programming and Java Object classes, fields, methods and events is essential to this course. Hands-on working knowledge of how to develop and use Classes, Interfaces and Inheritance is necessary. A good understanding of the concepts of Classes, Instances, Encapsulation, Polymorphism is needed. The ability to conceptualize solutions to problems and develop an implementation of the solution using Java programming language is essential.

Textbooks and Other Course Materials:

Recommended (not required) Textbook: Java - How to Program (Early Objects)-10th Edition - P. Deitel and H. Deitel

All necessary course material is available online for free. The instructor will provide links to needed material as the course proceeds. Additional material may also be provided in class during the course to augment the online content.

Links to sites will be provided where the students can find additional learning tools and content for the course.

Other material:

Software - Java SE8 (or later) must be installed on your computer (PC). Eclipse Neon (or later) software must also be downloaded and installed. Links will be provided for this purpose.

Descriptions of major assignments and examinations: There will be a number of projects, assignments and exams during the semester. There may be unannounced short quizzes during the semester.

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Late for projects/assignments will NOT be accepted!
Student must be present to get credit for in-class assignments and projects.
All Exams are cumulative in content. (Includes all material covered until that exam).
NO MAKE UP EXAMS! If you miss an Exam, it will be substituted by the Final Exam score.

Class grade will be assigned based on the following percentages for the course.

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90% or more - A
80% - 89% - B
70% - 79% - C
60% - 69% - D
below 60% - F
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Attendance Policy: Attendance is essential for both learning the material and doing the assignments. Attendance and class assignments will contribute to the final grade (see Grading Policy above).

Drop Policy: University drop policy should be followed for dropping the course. Drop grade will be based on current university policy.

Americans With Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled *Americans with Disabilities Act (ADA)*, pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

Academic Integrity:

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

Student Support Services Available:

The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

Librarian to Contact: Contact the Business Librarian in the Business building, if you need Library assistance

E-Culture Policy:

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly.

Make-up Exam Policy: No make up exams are given. If the student is unable to take an exam, he/she should contact the instructor **AHED of the scheduled exam time** and set up a time take the exam BEFORE THE SCHEDULED TIME. Under NO CIRCUMSTANCES make-up exams will be given after the regular exam is scheduled.

Grade Grievance Policy: Please see the student handbook or University policies on the UTA website.

Student Support Services Available: The University of Texas at Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817-272-6107 or visit www.uta.edu/resources for more information.