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.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/21</td>
<td>Getting Started with Eclipse for Java</td>
</tr>
<tr>
<td>8/26,8/28</td>
<td>Using WindowBuilder with Java</td>
</tr>
<tr>
<td>9/2,9/4</td>
<td>Using DB with Java</td>
</tr>
<tr>
<td>9/9,9/11</td>
<td>JDBC Applications</td>
</tr>
<tr>
<td>9/16,9/18</td>
<td>Strings, Characters - Ch.14</td>
</tr>
<tr>
<td>9/23,9/25</td>
<td>Files and Streams - Ch15</td>
</tr>
<tr>
<td>9/30,10/1</td>
<td>Review and Exam-1(Wednesday)</td>
</tr>
<tr>
<td>10/7,10/9</td>
<td>Generic collections - Ch.16</td>
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<tr>
<td>10/14,10/16</td>
<td>Recursion - Ch.18</td>
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<tr>
<td>10/21,10/23</td>
<td>Review and Exam-2(Wednesday)</td>
</tr>
<tr>
<td>10/28,10/30</td>
<td>Searching &amp; Sorting - Ch.19</td>
</tr>
<tr>
<td>11/4,11/6</td>
<td>Concurrency (Threading)- Ch.23</td>
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<tr>
<td>11/11,11/13</td>
<td>Lambdas-Ch17</td>
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<tr>
<td>11/18,11/20</td>
<td>Review and Exam-3(Wednesday)</td>
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<tr>
<td>11/25</td>
<td>Java Networking</td>
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<tr>
<td>12/2,12/4</td>
<td>Final Exam Review</td>
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<tr>
<td>12/9</td>
<td>FINAL EXAM (All Topics)-5:30 PM</td>
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</tbody>
</table>
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 Canvas by 5:30 PM on the due date. Late projects will be assessed a penalty of 10% per hour or part thereof - http://elearn.uta.edu
- If you can submit assignments multiple times, last one will be graded.
- Please include your name in the code as a comment
- ALL PROJECTS MUST BE SUBMITTED ONLY TO Canvas . Do not projects to the Instructor!
- Send all communications to Canvas 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 another 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.

Instructor(s): Dr. M. K. Raja
Office Number: Business Building 522

Office Telephone Number: 817-272-3502

Email Address: raja at uta dot edu

Faculty Profile: [http://www.uta.edu/mentis/public/#profile/profile/view/id/1033](http://www.uta.edu/mentis/public/#profile/profile/view/id/1033)

Office Hours: Mondays and Wednesdays: 4:30 - 5:30 PM. Other times by appointment

Section Information: INSY 4306-002 Advanced System Design

Time and Place of Class Meetings: Mondays and Wednesday 5:30 - 6:50 PM - 255 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.

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

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.

90% or more - A  
80% - 89% - B  
70% - 79% - C  
60% - 69% - D  
below 60% - F

Attendance: At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students’ academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, I allow students to attend class at their own discretion.

Grading: See Grading Policy specified above. Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels; see “Student Support Services,” below.

Make-up Exams: If you miss an Exam or a Quiz, no make-up Exam or Quiz will be given.
**Expectations for Out-of-Class Study:** Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

**Grade Grievances:** Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog.

For undergraduate courses, see [http://catalog.uta.edu/academicregulations/grades/#undergraduatetext](http://catalog.uta.edu/academicregulations/grades/#undergraduatetext). For graduate courses, see [http://catalog.uta.edu/academicregulations/grades/#graduatetext](http://catalog.uta.edu/academicregulations/grades/#graduatetext).

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student’s responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships ([http://wweb.uta.edu/aao/fao/](http://wweb.uta.edu/aao/fao/)).

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA), and Section 504 of the Rehabilitation Act. All instructors at UT Arlington are required by law to provide “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the **Office for Students with Disabilities (OSD).** Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

**The Office for Students with Disabilities, (OSD)** [www.uta.edu/disability](http://www.uta.edu/disability) or calling 817-272-3364.

**Counseling and Psychological Services, (CAPS)** [www.uta.edu/caps/](http://www.uta.edu/caps/) or calling 817-272-3671.

Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at
Title IX: The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos. For information regarding Title IX, visit www.uta.edu/titleIX.

Academic Integrity: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents’ Rule 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.
**Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus.* During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located at the entrance to the classroom. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Student Support Services: UT 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. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at http://www.uta.edu/universitycollege/resources/index.php

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located [insert a description of the nearest exit/emergency exit]. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

**Emergency Phone Numbers:** In case of an on-campus emergency, call the UT Arlington Police Department at 817-272-3003 (non-campus phone), 2-3003 (campus phone). You may also dial 911. Non-emergency number 817-272-3381

Active Shooter - How to Respond Link: http://police.uta.edu/activeshooter

Active Shooter - How to Respond
Stop. Think. Protect Yourself. You Have Choices.

The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor.

This graphic provides each member of the UTA community with information and options for responding to an active threat. These options are not chronological, but are designed to address dynamic situations. Assess the situation (your location, the location of the threat, type of threat, etc.), identify and weigh your options, develop a plan of action and commit to it.

### Your Options to an Active Threat

You Have Choices!

<table>
<thead>
<tr>
<th>AVOID</th>
<th>DENY</th>
<th>DEFEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>• AVOID the situation. Stay away from the area and campus.&lt;br&gt;• If you can safely leave the area, RUN.&lt;br&gt;• Get others to leave the area, if possible.&lt;br&gt;• Prevent others from entering the area.</td>
<td>If you can’t leave the area safely, DENY or slow entry to the intruder:&lt;br&gt;• Lock/barricade doors with heavy items.&lt;br&gt;• Turn off lights/projectors/equipment.&lt;br&gt;• Close blinds and block windows.&lt;br&gt;• Stay away from doors and windows.</td>
<td>If you can’t AVOID or DENY entry to the intruder, DEFEND your location:&lt;br&gt;• As a last resort, FIGHT for your life.&lt;br&gt;• Use physical force and any weapons available - fire extinguishers, books, chairs, belts, umbrellas, pens/scissors, hot coffee/drinks, trash cans, etc.</td>
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<td>Know your exit and escape options.&lt;br&gt;• If in a parking lot, get to your car and leave.&lt;br&gt;• If in an unaffected area, stay where you are.&lt;br&gt;• When you are safe, call UTA PD at 817. 272.3003 or 911 with information you have.</td>
<td>Know your exit and escape options.&lt;br&gt;• Silence phones and remain quiet. Don’t let your phone give you away.&lt;br&gt;• HIDE and take cover to protect yourself.&lt;br&gt;• Be prepared to run or defend yourself.</td>
</tr>
</tbody>
</table>

Follow ALL instructions.

For more information, go to: police.uta.edu/activeshooter
Additional information for active threat and other emergency situations can be found through the links below: police.uta.edu/activeshooter, police.uta.edu/em