Course Description:

Requirement Engineering (RE) plays a critical and fundamental role within a development process. Before any system can be developed or manufactured, it is essential to establish the need for the system. If the purpose of a system is unknown, then it will be unclear what sort of a system will be developed, and it is impossible to determine whether the system, when developed will satisfy the needs of its users. This course describes RE concepts for practical systems.

Course Prerequisites:

Students are expected to have strong analytical skills.

Course Objectives:

Learn the concepts, activities and techniques of requirements engineering:

- Identify stakeholders and work with them effectively
- Apply a range of elicitation techniques
- Requirements Engineering in the Problem Domain – Techniques for developing Use-Case scenarios
- Specify requirements using requirements templates and modeling techniques
- Validate and prototype requirements
- Negotiate and prioritize requirements
- Manage changing requirements
- Understand the relationship between non-functional requirements (NFRs) and architecture and learn to manage NFRs

Course Competencies:
Students who successfully complete the course with a grade of B or higher will be able to effectively develop requirements specifications document, negotiate requirements with stakeholders, and enhance problem solving skills for practical systems

**Required Textbooks:**


**Reference Texts**


**Class Website:**
Course materials – syllabus, lecture notes, projects, reference materials, and assignments will be available on [http://www.personal.kent.edu/~asamba/tech61095](http://www.personal.kent.edu/~asamba/tech61095)

**Required Hardware:**
USB Flash Drive or other file storage solution.

**Software:**
MS Word; The Requirements Engineering Management software tool will be illustrated as part of lectures

**Grading:**

**Semester Project**
Students will select a Requirements Engineering project and develop detail requirements engineering document for the project. The requirements project may be done individually or in groups of two to four students. The Requirements Engineering project will account for 50% of the overall grade.

**Class Presentation**
Students will be required to make presentations of the RE project. The audience may include faculty members and special guests from industry. The presentation will account for 20% of the overall grade.

**Homework**
There will be two short assignments. Each assignment will account for 10% of the overall grade.

**Final Exam**
The final exam will account for 10% of the overall grade.
Grading Scale

Grades will be assigned based on the range of percentages indicated below:

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93% &lt; score &lt;= 100%</td>
</tr>
<tr>
<td>A-</td>
<td>90% &lt;= score &lt;= 93</td>
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<tr>
<td>B+</td>
<td>86% &lt;= score &lt; 90%</td>
</tr>
<tr>
<td>B</td>
<td>83% &lt;= score &lt; 86%</td>
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<tr>
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<tr>
<td>D</td>
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<tr>
<td>F</td>
<td>score &lt; 63%</td>
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Attendance:

Students are expected to attend every session. In the event that a student misses a class it is the responsibility of the student to get any assignments or other information. For students who miss an exam because of an excused absence (in accordance with KSU policy), and who provide a written excuse to the instructor, a make-up time will be arranged. For unexcused absences, no make-up exam will be given.

Other Policies:

No food or beverages (except bottled water) are allowed in the computer labs. Tobacco, etc. is not allowed in class at any time. Please do not modify computer settings (desktop, screen saver, etc.) unless instructed to do so. Please turn off cell phones prior to the beginning of class. The use of cell phones, iPods, MP3 players, etc. is prohibited during lecture.

Academic Honesty:

Cheating means to misrepresent the source, nature, or other conditions of your academic work (e.g., tests, papers, projects, assignments) so as to get underserved credit. The use of the intellectual property of others without giving them appropriate credit is a serious academic offense. The University considers cheating and plagiarism very serious offenses and provides for sanctions up to and including dismissal from the University or revocation of a degree. The University’s administrative policy and procedures regarding student cheating and plagiarism can be found in the University Policy Register, 3-01.8. By submitting any material in this (or any other class) you are certifying that it is free of plagiarism. If you would like more information on plagiarism, what it is, and how to avoid it, please visit the following site: http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml
Withdrawal Deadline:

For Fall and Spring semesters, the course withdrawal deadline is always the Sunday following the 10th week of the semester. For Intersession, the course withdrawal deadline is always the Sunday following the second week (of three total). For Summer I and III, the course withdrawal deadline is usually the Sunday following the second week (of five total). For Summer II, the course withdrawal deadline is usually the Sunday following the fourth week (of eight total). More information is available on the University Registrar’s web site http://www.kent.edu/registrar/index.cfm.

Students with Disabilities:

University policy 3342-3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through the Student Accessibility Services (contact 330-672-3391 or visit www.kent.edu/sas for more information on registration procedures).

Proper Enrollment:

Students have responsibility to ensure they are properly enrolled in classes. You are advised to review your official class schedule (using Student Tools in FlashLine) during the first two weeks of the semester to ensure you are properly enrolled in this class and section. Should you find an error in your class schedule, you have until cut-off date provided by the Undergraduate Office to correct the error with your advising office. If registration errors are not corrected by the cut-off date and you continue to attend and participate in classes for which you are not officially enrolled, you are advised now that your will not receive a grade at the conclusion of the semester for any class in which you are not properly registered.

Other Resources:

Spring Calendar - http://www.kent.edu/registrar/calendars/stu_spring.cfm
Spring Refund Schedule - http://www.kent.edu/bursar/termdetail/spring-tuition-credit.cfm
Bursar’s Office Home Page - http://www.kent.edu/bursar/index.cfm
College of Technology - http://www.kent.edu/tech/