Advanced Software Programing - 40314 - ITMD 415/515

Time: Tuesday/Thursday 3:15pm-4:30pm   **Room**: Robert A. Pritzker Science Ctr 121

Instructor: Omar Aldawud   **TA**: TBD

Course Catalog Description

This course considers Web container application development for enterprise systems. The primary focus is on database connectivity (JDBC) integration with Web application programming using an enterprise-level application framework. A Web application term project considers the design and implementation of a database instance that serves as the information tier in a contemporary 3-tier enterprise solution. (2-2-3)   Technologies addressed in this course include Enterprise Java.

Prerequisite [(ITM 411) OR (ITMD 510)]

Course Outcome

At the completion of the course, each student will have designed, produced, and documented projects using the Java EE platform, culminating in a comprehensive and multi-tiered final project that builds cumulatively on prior work. Students will have deployed enterprise applications to modern application server environments. Students will have demonstrated knowledge of Java EE specifications, APIs, architectures and techniques, including security, database persistence, business components, web services and presentation components.

Textbook

The textbooks for this course are mandatory, but are freely available from IIT Galvin Library.

- Goncalves, Antonio Beginning Java EE 7, Apress July 8, 2013; ISBN 978-1-4302-4626-8. Cited in readings as Goncalves. (Available from Safari Books Online, IIT Galvin Library).
- The Java EE 7 Tutorial. Cited in readings as Tutorial. (Available online https://docs.oracle.com/javaee/7/tutorial/).

Course Notes

Copies of the course lecture notes in the form of a PDF of the PowerPoint presentation accompanying each lecture will be provided for each student on Blackboard. This should be useful if you miss a class.

Course Web Site: http://blackboard.iit.edu/

Blackboard

The course will make extensive use of Blackboard http://blackboard.iit.edu/) for communications, assignment submissions, group project coordination, providing online resources and administering examinations. All remote students will view the course lectures online via Blackboard, and online readings will be found on Blackboard.

Attendance

This class is being taught online. The class will be live via Blackboard Collaborate ultra. The class will also be recorded and posted both to Blackboard and to YouTube. It is your choice whether to attend the live web conference or watch the recording. If I am unable to teach a Live web conference, I will notify you as far in advance as

possible via Blackboard, and will post a make-up lecture to Blackboard to cover the material from that week.

Class Participation

Participation in online discussion forums, Q/A, blogs, and appropriate collaboration with instructor and fellow students, will be the major determining factor in your class participation grade.

Assignments

There will be labs and sample projects that will be collected regularly. These labs will make up a significant portion of your grade. In addition to the regular labs and sample projects, there will be a Midterm and Final Project.

Questions and Quizzes

Each student is expected to post relevant Questions, Comments and Answers to the Q/A style discussion forum in Confluence. The appropriate topic and "netiquette" will be demonstrated in class.

Licensing

An excerpt from the ITM Student Handbook: "While it is not required, students are strongly encouraged to license academic programing assignments under an applicable Open Source license. This is in line with the academic traditions of openness and sharing that have created Linux and the Internet. The preferred license for ITM student use is the MIT License. Alternative licenses could be the GNU General Public License (GPL) or any one of a variety of other Open Source licenses. Suggested formats for software licensing may be found at http://www.itm.iit.edu/resources/licensing.php" Academic Honesty: Plagiarism: All work you submit in this course must be your own. You must fully attribute all material directly quoted in papers and you must document all sources used in the preparation of the paper using complete, APA-style bibliographic entries. Including directly quoted material in an assignment without attribution is always plagiarism and will always be treated as such by me. No more than thirty-three percent of material included in any paper may be direct quotes. I will process all code and project submissions using automated utilities to check for potential violations in programming projects. An excerpt from the ITM Student Handbook: "Each student must read and ensure you understand both the Illinois Institute of Technology Code of Academic Honesty in the The Illinois Institute of Technology Student Handbook at http://www.iit.edu/student_affairs/handbook/ and the Information Technology and Management Policy on Academic Honesty Violations below. You must understand that if you commit academic dishonesty —*if you cheat*— there will be consequences. You will be punished. At a minimum you will be assigned a grade of zero for the assignment; if it is a second offense you will be given a failing grade for the class and lose our approval for participation in Curricular Practical Training (CPT) and/or Co-op/Internship programs. On a third offense, we will recommend that you be expelled from the university."

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Grading

Undergraduate ITMD 415/IT-D 415

Grading criteria for Undergraduate ITMD 415/IT-D 415 students will be as follows	
A Outstanding work reflecting substantial effort	90-100%
B Excellent work reflecting good effort	80-89.99%
C Satisfactory work meeting minimum expectations	70-79.99%
D Substandard work not meeting expectations	60-69.99%
E Unsatisfactory work	0-59.99%

Graduate ITMD 515/IT-D 515

Grading: Grading criteria for **Graduate ITMD 515/IT-D 515** students will be as follows	
A Outstanding work reflecting substantial effort	90-100%
B Adequate work fully meeting that expected of a graduate student	80-89.99%
C Weak but marginally satisfactory work not fully meeting expectations	65-79.99%
E Unsatisfactory work	0-64.99%

Final Grade The final grade for the class will be calculated as follows:

Assignments	25%
Midterm	25%
Final	25%
Final Project	25%

Late work will be penalized at a significant rate to be determined by the Instructor. Extra Credit opportunities may be provided as determined by the Instructor.

Our Contract

This syllabus is my contract with you as to what I will deliver and what I expect from you. If I change the syllabus, I will issue a revised version of the syllabus; the latest version will always be available on Blackboard. Revisions to readings and assignments will be communicated via Blackboard.

Disabilities

Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must obtain a letter of accommodation from the Center for Disability Resources and make an appointment to speak with me as soon as possible. My office hours are listed on the first page of the syllabus. The Center for Disability Resources (CDR) is located in 3424 S. State St., room 1C3-2 (on the first floor), telephone 312.567.5744 or disabilities@iit.edu.

Tentative Schedule of Topics

Updates to the schedule, readings and assignments will be posted to Blackboard on a weekly basis and announced in class. This schedule is tentative.