**ISM 4243 – Section 001**

**CRN 42865**

 **Business Software Systems Development Project with Java**

**Spring 2018**

**FL 409**

**Wednesday 6:30pm-9:20pm**

**Professor Information**

Omar Toledo, M.S.

Room 204 in CM22, the Computing Center, behind Wimberley Library, Boca Campus

otoledo@fau.edu

**Office Hours (by appointment)**

* *Omar Toledo, M.S.*

*Monday 5:00 – 6:20pm*

# Required Text and Materials

* Sams Teach Yourself HTML, CSS & JavaScript Web Publishing in One Hour a Day, ISBN-13: 978-0-672-33623-2
* USB key/flash drive (1GB or 2GB recommended)

# Recommended Text and Materials

* Eclipse IDE for Java EE Developers (http://www.eclipse.org/downloads) (free!) - Used to write programs and complete the group project. You may use any other JAVA IDE or development tools, but I may not be able to help troubleshoot any problems you encounter.
* Web Resources
	+ <https://www.w3schools.com/>
	+ <https://www.tutorialspoint.com/jsp/>
	+ <https://www.codecademy.com/learn/learn-html>
	+ <https://www.codecademy.com/learn/introduction-to-javascript>

**Course Description**

Project oriented course that emphasizes analysis, design, and development of sophisticated, functional web applications using Java and Java Web services.  This project class will build web applications based on JAVA technology. It will be strongly utilizing all the skills acquired by the students in ISM 4234 – Java Object-oriented Programming. Additional technologies which are expected to be used extensively by students include Microsoft Project, any flow design tools, database design tools, Microsoft Access, Oracle or MySQL, HTML and JavaScript, CSS, and, preferably, XML, and others.

Upon completing successfully this class, students would have accumulated exceptional amount of professional skills, both visionary, management, and technical, which are well appreciated and sought in the job market. Their knowledge on web development would be cutting-edge, which will enhance their competitiveness in the job market.

Students should expect that the challenge, standards, and amount of work and dedication in this class are very high. There are minimum functionality requirements stated by the professor, and some additional suggestions for “extra credit” embellishments and/or functionalities which, if present, would bring extra points (for details see Project guidelines). From the time of the proposal approval to the project presentation, the estimated timeframe for the project completion is 6 to 8 weeks. This period, if well planned and if time well utilized, would be sufficient for accomplishing and delivery of the project.

**Course Prerequisites, Credit Hours, and Class Time Commitments**

This course has the following prerequisites:

* ISM 4212 Database Mgmt Systems
* ISM 3230 Intro Comp Sys Softw Develop

This course is worth 3 credit hours.

According to Florida State Statute 6A-10.033, students must spend a minimum 37.5 hours of **in class** time during a 3-credit course. Additionally, students enrolled in a 3-credit course are expected to spend a minimum of 75 hours of **out-of-class-time** specifically working on course-related activities (i.e., reading assigned pieces, completing homework, preparing for exams and other assessments, reviewing class notes, etc.) and fulfilling any other class activities or duties as required.

**Course Learning Objectives**

Learn the advanced techniques of web application development using Java and Java Web services framework, including web interface design, server processing, server and user interface component development, data access using JDBC, and web application security.

This class is designed to develop and strengthen your analytical, problem solving, team work, and communication skills through the development project and working with real customers in real companies.

**Course Resources**

This course is Canvas-assisted, and much course business, such as file distribution, emails, assignment submission, and announcements between classes, will occur exclusively through Canvas. Therefore, students are expected to have access to a computer, the Internet, and a Java compiler for this course. If you do not have your own, computers are available to all FAU students in the FAU Open Labs (<http://www.ecs.fau.edu/labs/open/>). We will be using Canvas extensively for this course, so make sure that you log in and get familiar with the course web site as soon as possible. In addition, if you need to transfer files between your home computer and the lab, you should furnish your own means, such as a thumb drive (recommended), CD-ROM, or online storage.

**Grading Scale**

Your course grade is **based on your own work**. Everyone is given the same opportunity to achieve a high grade. The best way to end the semester well is to begin the semester well and follow through consistently. Please realize that you earn your grades and that **your actions alone** determine your grade. I cannot arbitrarily move the grading scale to accommodate individual students' specific needs or desires.

The grading scale:

Grade A A- B+ B B- C+ C C- D+ D D- F

Cutoff 93 90 87 83 80 77 73 70 67 63 60 0

Please do not ask me for an unearned extra point or two at the end of the semester in order to move you into the next grade category. This is not only unfair to those who worked hard all semester to achieve their grades; it is also unfair to expect your instructor to do extra work to fix your mistakes for you. In life, you reap the consequences of your actions, both positive and negative. We all make mistakes from time to time and you need to accept responsibility for your actions. I will be happy to assist you in acquiring the knowledge and skills required to meet your goals, both within and outside of class. However, your grade itself is determined by you, and not by me.

**Course Evaluation Method**

Group Project Score: 30%

Final Presentation: 15%

Final Documentation: 15%

Oral Exam: 20%

Quizzes 10%

Homework 10%

GROUP PROJECT

You will be asked to complete a group project comprised of 3 students.

Student who cannot find a group will be assigned a group by the instructor. The web site will be utilizing JavaScript, HTML, CSS, security, search, shopping cart technology, Java Server Pages, Servlets – some or all of the above, depending on the specificity of each project. The web site should be easy to use and intuitive, with all the features a customer would desire present. It should be optimized, so unnecessary load and delays due to server-side processing are avoided.

A team may unanimously (not including the fired member) agree to fire one of its members for poor performance before the final course drop date by requesting this action in a written memo to the professor. The fired team member (not the professor) is responsible for finding another team to join. Similarly, a team member may resign from a team before the final course drop date by requesting this action in a written memo to the professor. The resigning team member (not the professor) is responsible for finding another team to join.

Team Leader:

Each student team should consist of 3-4 students, no more, no less. Each team should elect a project leader who will be responsible for assigning works to team members and organize team meetings and contacting the customer site. By beginning of week 2 every team should designate a team leader, and the team leader should e-mail me his or her contact information. The team leader is responsible to coordinate, distribute work among team members. He or she should be able to manage difficult situation of miscommunications, lack of participation of a team member, s/he should be able to reinforce discipline, responsibility, and demand work completed. S/he should be ready to communicate problems with me if they cannot be solved internally.

FINAL PRESENTATION

The following form will be used by the instructor to give each group a presentation score. It is completely up to the discretion of the instructor in determining the points and student inputs will not be a factor.

|  |  |
| --- | --- |
| Criteria | Points (0 – 10) |
| 1. Every team member dressed professionally |  |
| 2. The project worked without any bugs |  |
| 3. The presentation is well prepared, organized and interesting |  |
| 4. The presentation showcased all major project components |  |
| 5. The presentation completed within the allocated time |  |

FINAL DOCUMENTATION

The Final Documentation will be submitted in a hard-cover 3-ring binder, well designed and professional. It should be professionally assembled and must include: Project Proposal and Specifications (complete description of the purpose, functionality and design of the project; this is where you "sell” your project), Client-side Documentation, Server-side Documentation, Description of web pages, Source code with comments for each variable, function, method or procedure, complete instruction for the user on how to use your application, issues and bugs and projected fixes. A CD with the complete project, all files under one folder should be included in the Documentation binder.

ORAL EXAM

An individual oral exam based on the team’s project will be administered. The students need to show proficiency and deep knowledge of the project’s structure, coding, and features. The purpose of the exam is to ascertain that the student contributed to the group project and has the understanding of the technology s/he has built. It is not an exam that one prepares for. If a student has worked on the project, he or she will have spent many hours writing and debugging code and be familiar with every aspect of it, so the oral exam will not present a problem.

QUIZZES

There will be 4 quizzes over the course of the semester. Quizzes will be taken in class, in Canvas. The lowest quiz grade will be dropped.

INDIVIDUAL PROGRAMMING ASSIGNMENTS (HOMEWORK)

Individual programming assignments will be assigned throughout the semester. It is absolutely essential for you to complete all of the assignments and understand what you did. Many test questions are based on the programming assignments. If you have difficulties in understanding or completing the programs, it is your responsibility to make an appointment to come to see me or contact other students for help (refer to the section on Academic Irregularities if you are uncertain as to what is considered appropriate help from other students). All students must work independently unless otherwise indicated. Programming assignments are due by 11:59PM on the date due. Students must become familiar with posting assignments to Canvas and using ZIP files.

**Additional Course Policies**

Missing Exams and Quizzes

To make up any missed exam you must provide a valid reason: documented emergency, illness, or standard FAU exception (military service, student athletes, etc). If you are unable to take an exam due to a medical or family emergency, you MUST inform me of that fact **on or before** the day of the exam (and before the exam is administered) and arrange for a make-up to be administered before the graded exam is returned to the class.

Any student requiring a make-up has to document his/her reason (e.g., a letter from a physician written on the physician's letterhead). If you miss an exam due to illness, you must present a physician’s statement outlining the nature of the illness and specifically state that the illness was **severe enough** to prevent your attendance (and this must be specifically written by the physician). Please note that **in no event will a make-up test be given after the graded exam is returned to the class**.

I will not provide make-ups for missed quizzes. If you miss a quiz for a legitimate reason (see above), provide appropriate documentation, AND contact me prior to the class you will miss, I will replace the missed quiz grade with the average quiz grade you receive on quizzes during the semester.

Late Assignments

Late programming assignments will receive a 10% penalty for each week the assignment is late (i.e. a 10% penalty is received if the assignment is submitted up to one week following the due date; a 20% penalty is received if the assignment is submitted two weeks late). **No late assignments will be accepted after Monday, December 4, 2017, 11:59pm.**

Arriving Late to Quizzes and Exams

If you are late to a quiz/exam, you will only be able to begin the exam if no students have yet submitted their quiz/exam and left the classroom. In addition, if you are late, you will not get extra time to finish the quiz/exam. I will NOT administer a make-up quiz/exam for students who are late and arrive after the first student has submitted the quiz/exam and left the classroom.

Attendance Policy

Attendance is not mandatory, but **strongly** encouraged. However, attendance will be taken, and regular absences will negatively affect your class participation grade. You may also miss quizzes if not in attendance. See the Quizzes section for the policy regarding missed quizzes.

Academic Irregularities

It is valuable to work with a friend or classmate when learning to program or working out a problem. However, the work that you perform for a grade must be your own work unless "working in groups" is explicitly allowed. Individual programming assignments in this course should be done by the individual. While I encourage you to help and teach one another, you must distinguish help from cheating. If you have trouble doing so, ask yourself if both helper and helpee would be able to complete the assigned work independently when you submit the assignment. If either one of you is unable to do so, you have cheated.

Cheating, plagiarism, copying, unauthorized collaboration, and hiring another person to do your assignments are unacceptable, and are subject to disciplinary actions, including, but not limited to, an "F" in the course, a letter of fact on your student record, and a notation on your transcript in accordance with the policies of FAU and the College of Business. In cases where this has occurred, both the person who cheats/plagiarizes/copies/collaborates/hires another person AND the originator of the work will be punished.

Please note that none of the quizzes or exams are collaborative, and any cheating attempts will be dealt with harshly and swiftly. Examinations are closed book/notes/computer/cell or smart phone/iPad (the idea should be clear). Hats, cell phones, and any electronic devices are disallowed in the exam/quiz administration as well as during review of the exam materials, and things like clear water bottles or visible loose papers may be considered suspicious.

For information about the University’s Honor Code, please refer to the policy statement under the section titled Selected College and University policies.

Anti-plagiarism Software

Written components of any assignment or project may be submitted to anti-plagiarism software to evaluate the originality of the work. Any students found to be submitting work that is not their own will be deemed in violation of the University’s honor code discussed above.

Email

Students are required to have an email account for this course. It is your responsibility to ensure that your email address listed in Canvas is the one that you check regularly (you can always change it in Canvas or set up auto-forward or POP download if not).

The best way to reach me is by sending an email message or visiting my office during office hours. Phone calls or phone messages are recommended only during office hours and are not a useful tool if you need an urgent response.

ALL emails should:

* Have “ISM 4243” at the beginning of the subject line, so that I recognize that it is from one of you, and so that my spam filters do not accidentally delete your message.
* Include your name in the body of the message since email addresses do not always identify the sender.
* Use proper salutations and signatures.
* Use the same type of language and manners that you would use in a formal, business setting.
* Ask specific questions that are not answered through Canvas.
* Emails concerning software issues: List the complete sequence of procedures you followed. Most often, problems with software are procedural errors by the user. Phrases such as “it didn’t let me” only convey that you have not understood computer concepts and/or that you are rushing and not willing to take responsibility for your actions.

*If you do not follow these guidelines, I reserve the right to request a revised email with appropriate changes before addressing your questions or issues.*

Course Outline



**Selected University and College Policies**

Code of Academic Integrity Policy Statement

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards because it interferes with the university mission to provide a high-quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive to the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty.

For more information, please see FAU Regulation 4.001 at: [FAU Regulation 4.001](http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf).

Disability Policy Statement

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) — in Boca Raton, SU 133 (561-297-3880); in Davie, LA 131 (954-236-1222); or in Jupiter, SR 110 (561-799-8585) — and follow all SAS procedures. The web site is: <https://fau.edu/sas>.

Religious Accommodation Policy Statement

In accordance with rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices, observances, and beliefs with regard to admissions, registration, class attendance, and the scheduling of examinations and work assignments.

For further information, please see FAU Regulation 2.007 at: [FAU Regulation 2.007](http://www.fau.edu/regulations/chapter2/Reg%202.007%208-12.pdf).

University Approved Absence Policy Statement

In accordance with rules of the Florida Atlantic University, students have the right to reasonable accommodations to participate in University-approved activities, including athletic or scholastics teams, musical and theatrical performances, and debate activities. It is the student’s responsibility to notify the course instructor at least one week prior to missing any course assignment.

College of Business Minimum Grade Policy Statement

The minimum grade for College of Business requirements is a “C”. This includes all courses that are a part of the pre-business foundation, business core, and major program. In addition, courses that are used to satisfy the university’s Writing Across the Curriculum and Gordon Rule math requirements also have a minimum grade requirement of a “C”. Course syllabi give individualized information about grading as it pertains to the individual classes.

Incomplete Grade Policy Statement

A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete (“I”). The assignment of the “I” grade is at the discretion of the instructor but is allowed only if the student is passing the course.

The specific time required to make up an incomplete grade is at the discretion of the instructor. However, the College of Business policy on the resolution of incomplete grades requires that all work required to satisfy an incomplete (“I”) grade must be completed within a period of time not exceeding one calendar year from the assignment of the incomplete grade. After one calendar year, the incomplete grade automatically becomes a failing (“F”) grade.

Withdrawals

Any student who decides to drop is responsible for completing the proper process required to withdraw from the course.

Grade Appeal Process

A student may request a review of the final course grade when s/he believes that one of the following conditions apply:

* There was a computational or recording error in the grading.
* Non-academic criteria were applied in the grading process.
* There was a gross violation of the instructor’s own grading system.

The procedures for a grade appeal may be found in [FAU Regulation 4.002.](http://www.fau.edu/regulations/chapter4/4.002_Student_Academic_Grievance_Procedures_for_Grade_Reviews.pdf)

Disruptive Behavior Policy Statement

Disruptive behavior is defined in the FAU Student Code of Conduct as *“... activities which interfere with the educational mission within classroom.”* Students who behave in the classroom such that the educational experiences of other students and/or the instructor’s course objectives are disrupted are subject to disciplinary action. Such behavior impedes students’ ability to learn or an instructor’s ability to teach. Disruptive behavior may include, but is not limited to, non-approved use of electronic devices (including cell telephones); cursing or shouting at others in such a way as to be disruptive; or other violations of an instructor’s expectations for classroom conduct.

**Faculty Rights and Responsibilities**

Florida Atlantic University respects the right of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions which do not impede their exercise. To ensure these rights, faculty members have the prerogative:

* To establish and implement academic standards
* To establish and enforce reasonable behavior standards in each class
* To refer for disciplinary action those students whose behavior may be judged to be disruptive under the Student Code of Conduct

**References**

1. Randy Connolly and Ricardo Hoar, 2015, Fundamentals of Web Development, Pearson Education
2. Laura Lemay, 2016, Sams Teach Yourself HTML, CSS & JavaScript Web Publishing in One Hour a Day, Seventh Edition, Pearson Education
3. Anil Hemrajani, 2006, Agile Java Development with Spring, Hibernate, and Eclipse, Sams Pubblishing
4. Rami Sarieddine, 2014, JavaScript Promises Essentials, Packt Publishing
5. Chris Aquino and Todd Gandee, 2016, Front-End Web Development: The Big Nerd Ranch Guide, Perason
6. Cay S. Horstmann, 2017, Core Java, Volume II – Advanced Features, Pearson
7. Sams Teach Yourself JavaServer Pages in 24 hours by Jose Annunziato and Stephanie Fesler, Sams, SAMS, ISBN: 0672320231
8. Amuthan G, 2014, Spring MVC Beginner’s Guide, Packt Publishing
9. Sai Sriparasa, 2013, JavaScript and JSON Essentials, Packt Publishing
10. Budi Kurniawan and Paul Deck, 2015, Servlet, JSP and Spring MVC, Brainy Software