Rensselaer Polytechnic Institute

**Course Syllabus**

**Course Title: Introduction to Information Technology and Web Science**

**Course number: ITWS 1100**

**Credit hours: 4 Credits**

**Semester/ year: Spring 2018**

**Lecture Meeting days: Mondays from 12:00 PM to 1:50 PM**

**Room location: Lally Hall Room 102**

**Recitation Meeting Days: Thursdays**

**Section 01: 12:00 PM to 1:50 PM in Lally Hall Room 102**

**LMS: 1801\_Intro to ITWS**

**Prerequisites or other requirements:**

**BS in Information Technology Core Required Course**

**No prerequisites**

**Instructor: Richard Plotka**

**Office location: Lally 304**

**Telephone number: 516-527-9860**

**Office hours: Mondays 3:00-3:50 PM, Thursdays 11:00 – 11:50 PM, or by appointment**

**E-mail address:** [**rplotka@rpi.edu**](mailto:rplotka@rpi.edu)

**Teaching Assistant: Yamini Bajaj**

**TA office location: ITWS Lab Lally 205**

**TA Telephone number:**

**TA office hours: Wednesdays from 6:00 PM – 8:00 PM**

**TA e-mail: bajajy@rpi.edu**

**Course Description:**

**This course introduces students to the field of information technology and web science, the types of problems encountered in the field, and the approaches used to solve them.  Through a series of activities and projects, students are introduced to topics such as web systems design, emerging web standards, database systems, security, and computer networking.  Guest speakers highlight information technology practices in industry.  Small groups of students work on a project during the semester and present their results at the end of the course.**

**Student Learning Outcomes:**

1. **Students will be able to describe technologies important to the Information Technology Profession**
2. **Students will be able to describe major applications of computer science and web science such as entertainment, communications, enterprise systems, electronic health systems, security, e-commerce, and design.**
3. **Students will design a simple web-site.**
4. **Students will design a simple database.**
5. **Students will analyze business cases.**
6. **Students will plan, design, develop, and execute a Term Project.**

**Course readings:**

1. **There is no textbook for this course**
2. **Cases and other readings are available in a course pack to be purchased at Harvard Business School Press at the following link:**

[**http://cb.hbsp.harvard.edu/cbmp/access/73746859**](http://cb.hbsp.harvard.edu/cbmp/access/73746859)

1. **Most of the weekly readings are available on the Internet or LMS. Links to these readings are noted in the detailed assignments posted on the course LMS website.**

**Assignments:**

1. **Weekly detailed assignments are generally posted on the course LMS website one week prior to their due date.**
2. **In class “labs” are assigned for many of the technology classes. These detailed “lab assignments” are posted on the course LMS website prior to their due date. These “labs” can generally be completed during the class session. If not completed during the specific class session, they must be submitted prior to the next class meeting.**
3. **Business Case write-ups are specified in the Course Calendar.**
4. **Quizzes and a Final Exam will be given during the course as specified in the Course Calendar.**
5. **The Term Project provides an opportunity for student groups to design and mock-up a web application. The application can serve any purpose, real or imagined, in the present or the future. Teams of three to four students will be randomly assigned to work together on the Project. The Teams will submit a Project Final Report and will present their Projects to the class.**

Course Calendar



**Grading criteria**

**Assignments from the “labs”, project, and business cases are outlined in the Course Calendar. Specific detailed assignments will be posted on LMS. Each student must post their answers to the written assignments prior to the assigned class. Each assignment will be given a grade. The grades for homework, projects, business cases, labs, quizzes, term project, participation and final exam will be posted on LMS.**

**The quizzes will cover material from the readings, lectures, class discussions, labs, cases and projects. There will be two quizzes during the semester as shown in the Course Calendar.**

**The mid-term assessment process will provide each student with feedback on their performance in the class based on labs, projects, business cases, participation, and the first quiz. The Early Warning System (EWS) function in the Student Information System will be used to further notify students who are experiencing academic difficulty at the middle of the term.**

**The student’s final grade will be determined based on the following weighting:**

**Homework and Business Cases 15%**

**Labs 15%**

## Quizzes (10% each) 20%

**Term Project 20%**

**Participation 10%**

**Final Exam 20%**

**Course Grade Determination: Letter Grade Numerical Average**

**A-, A 90-100 %**

**B-, B, B+ 80-89 %**

## C-, C, C+ 70-79 %

**D, D+ 60-69 %**

**F <60 %**

**Attendance policy and Participation Grading:**

**A portion of your grade will be received through classroom participation, online discussion boards, labs, and the term project. Therefore it is expected that you attend every class and participate in team meetings associated with the term project. A participation grade will be given for each individual for each quarter of the course. A student may request an excused absence for health or career (job interviews) reasons by emailing the instructor prior to the beginning of that particular class.**

**Participation Grading on a 5 Point Scale: Quality is more important than quantity**

**0 – absence without an excuse**

**1 – 2 in attendance, but not paying attention, e.g. sleeping, or doing email or Internet unrelated to class, and not apparently having done pre-class reading.**

**3 – in attendance, paying attention, appear to have done the pre-class reading, but not otherwise contributing to the class, little or no contributions to online discussion boards**

**4 – 5 in attendance, paying attention, having done the pre-class reading, and contributing to the class by answering questions, making thoughtful comments, engaging in the class discussion and significant contributions to online discussion boards and term project.**

**Academic dishonesty**

**Integrity is an extremely important part of any person’s character and behavior. This course expects the highest level of personal and academic integrity. Students may discuss labs and business case assignments with other students in the class, but each individual must research, write and submit their case assignments individually. Term Project assignments are done collectively by the Project Team and one submittal is made for the entire Team. In all assignments, citations must be done for all references including websites. Any breach of the academic integrity code listed in the Rensselaer Handbook will be considered grounds for failure in the course.**