Rensselaer

Course Syllabus

Course Information

Web Systems Development	ITWS 2110	Section 01
RPI Fall 2019	4 cr	
Lecture	TF	12:00PM-1:50PM	Lally 102
Lecture	TF	2:00PM-3:50PM	Vorhes SO

Prerequisites or Other Requirements:
Prerequisite: ITWS 1110 Intro to ITWS

Instructor

Brian Callahan   callab5@rpi.edu

Office Hours: W 12:00PM-2:00PM

Teaching Assistant(s)

Name	Office	Office Hours	Email Address
Aradhya Kasat	Lally	1-2PM	kasata@rpi.edu
Priyanshu Tripathi	Lally	1-2PM	tripap@rpi.edu

Course Text(s)

None

Course Goals / Objectives

This course involves a study of the methods used to extract and deliver dynamic information on the World Wide Web. The course uses a hands-on approach in which students actively develop Web-based software systems. Additional topics include installation, configuration, and management of Web servers. Students are required to have access to a PC on which they can install software such as a Web server and various programming environments.

Student Learning Outcomes

1. Students will be able to explain and configure the fundamental structure of a Web application including the server environment, protocols used, and other underlying systems.
2. Students will be able to evaluate and justify choices in design patterns and technologies used in Web application development.
3. Students will be able to apply the principles of progressive enhancement in front-end Web development using HTML, CSS and JavaScript.
4. Students will be able to create, interpret and apply planning artifacts commonly used in modern Web application development, including the use

of project specifications, wireframes, and site maps in the Web development process.
5. Students will be able to develop and troubleshoot secure Web application back-ends using an Apache, PHP and MySQL technology stack.
6. Students will understand and be able to implement the basic principles of Web services from the perspective of both the client and service provider.
7. Students will understand basic design and development practices.
8. Students will become familiar with the specification, project design, development and deployment phases of a project by identifying requirements, defining, implementing and deploying solutions.
9. By the end of this course, each student group will have defined the specifications for, developed, tested and deployed a working application. They will also have completed, reviewed and presented their solution to the class and guest audience.

Course Assessment Measures

Assessment	Due Date	Learning Outcome #s
Quiz	2 per semester	1, 2, 7
Group project	1 per semester	2, 3, 4, 5, 6, 7, 8, 9
Lab Report	1 per week/10 per semester	1, 2, 3, 4, 5, 6, 7, 8, 9

Grading Criteria

Labs/Homework: 50%
Group project: 30%
Quizzes: 20%
Participation: +/-10%

Attendance Policy

Attendance is mandatory. Any absence must be communicated to the instructor in advance.

Academic Integrity

Student-teacher relationships are built on trust. For example, students must trust that teachers have made appropriate decisions about the structure and content of the courses they teach, and teachers must trust that the assignments that students turn in are their own. Acts that violate this trust undermine the educational process. The Rensselaer Handbook of Student Rights and Responsibilities and The Graduate Student Supplement define various forms of Academic Dishonesty and you should make yourself familiar with these. In this class, all assignments that are turned in for a grade must represent the student's own work. In cases where help was received, or teamwork was allowed, a notation on the assignment should indicate your collaboration.

Submission of any assignment that is in violation of this policy will result in a penalty of a 0 on the assignment in the first violation. Subsequent violations are ground for failure of the course.

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Course Syllabus

Course Information

Web Systems Development	ITWS 2110	Section 02
RPI Fall 2019	4 cr	
Lecture	TF	12:00PM-1:50PM	Lally 102
Lecture	TF	2:00PM-3:50PM	Vorhes SO

Prerequisites or Other Requirements:
Prerequisite: ITWS 1110 Intro to ITWS

Instructor

Brian Callahan   callab5@rpi.edu

Office Hours: W 12:00PM-2:00PM

Teaching Assistant(s)

Name	Office	Office Hours	Email Address
Aradhya Kasat	Lally	1-2PM	kasata@rpi.edu
Priyanshu Tripathi	Lally	1-2PM	tripap@rpi.edu

Course Text(s)

None

Course Goals / Objectives

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Course Assessment Measures

Assessment	Due Date	Learning Outcome #s
Quiz	2 per semester	1, 2, 7
Group project	1 per semester	2, 3, 4, 5, 6, 7, 8, 9
Lab Report	1 per week/10 per semester	1, 2, 3, 4, 5, 6, 7, 8, 9

Grading Criteria

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Group project: 30%
Quizzes: 20%
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Course Syllabus

Course Information

Web Systems Development	CSCI 2960	Section 01
RPI Fall 2019	4 cr	
Lecture	TF	12:00PM-1:50PM	Lally 102
Lecture	TF	2:00PM-3:50PM	Vorhes SO

Prerequisites or Other Requirements:
Prerequisite: ITWS 1110 Intro to ITWS

Instructor

Brian Callahan   callab5@rpi.edu

Office Hours: W 12:00PM-2:00PM

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