

Course Syllabus

LIT 231 – Web Systems Technologies 3 Credit hours

I. COURSE DESCRIPTION

Addresses web systems and technologies and covers how web-based applications (e.g. databases, interfaces and digital media, and software) are designed, implemented, and tested. It includes information architecture, digital media, web development and vulnerabilities of web systems.

Pre-requisites: IT 2XX* - Programming

II. ACADEMIC MISSION

Oral Roberts University's academic mission is to transform students by the power of the Holy Spirit into whole, competent servant-leaders through liberal arts and professional education that is fully Christian. Within a Spirit-filled healing community, administration, faculty, and staff love and serve students by helping them grow in knowledge, skills, wisdom, character, and spirit.

Student transformation is measured through the evaluation of student expression of University learning outcomes as demonstrated through accompanying proficiencies and capacities.

Spiritually alive	Biblical knowledge; sensitivity to the Holy Spirit; evangelistic capability; ethical behavior
Intellectually alert	Critical thinking; information literacy; global and historical perspectives; aesthetic appreciation; intellectual creativity
Physically disciplined	Healthy lifestyle; physically active lifestyle
Socially adept	Communication skills; interpersonal skills; appreciation of cultural and linguistic differences; responsible citizenship; leadership capacity

Professionally competent Discipline-specific proficiencies listed under Program Outcomes. The last page of this syllabus, "COURSE INVENTORY for ORU's Course Objectives," indicates how this course supports ORU's academic mission and ORU's whole-person approach to learning outcomes through its <u>ePortfolio system</u>.

III. PROGRAM OUTCOMES

This course supports the program outcomes of the Bachelor of Science degree in Information Technology. An ORU Information Technology graduate must acquire a skill set that enables him or her to successfully perform integrative tasks, including the following Program Outcomes this course supports, marked below in **bold text** and with an asterisk (*).

- 1. *An ability to apply knowledge of computing and mathematics appropriate to the discipline.
- 2. *An ability to analyze a problem and identify and define the computing requirements appropriate to its solution.
- 3. *An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- 4. An ability to function effectively on teams to accomplish a common goal.
- 5. An understanding of professional, ethical, legal, security and social issues and responsibilities.
- 6. An ability to communicate effectively with a range of audiences.
- 7. *An ability to analyze the local and global impact of computing on individuals, organizations, and society.
- 8. Recognition of the need for and an ability to engage in continuing professional development.
- 9. An ability to use current techniques, skills, and tools necessary for computing practice.
- 10. *An ability to use and apply current technical concepts and practices in the core information technologies.
- 11. An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems.
- 12. *An ability to effectively integrate IT-based solutions into the user environment
- 13. *An understanding of best practices and standards and their application
- 14. An ability to assist in the creation of an effective project plan.
- 15. *An ability to solve real world problems informed by a Christian worldview.

IV. COURSE GOALS

This course provides an introduction to how web systems are programmed and maintained and how online pages are created and delivered by web servers and used by clients. It covers the concepts and practice necessary to create Internet content. Further, the course provides a technical overview of the Internet environment and the structures of the World Wide Web.

V. COURSE OBJECTIVES

As a result of successfully completing this course, I should be able to:

- 1. Describe the core architecture of the World Wide Web (WWW) as interconnected hypertext documents.
- 2. Program web applications using HTML, CSS and JavaScript.
- 3. Discuss how to organize information, build a web site and select graphical images and multimedia elements.

V. TEXTBOOK AND OTHER LEARNING RESOURCES

Textbook(s) and materials for the course are listed using standard <u>citation style</u> (APA, MLA, Chicago, Turabian, etc.). Since other styles may be used in disciplines other than the one used in this course or school,

the <u>ORU Citing and Documenting Sources</u> pages offer a collection of styles students may choose from. This course asks that students be consistent in whatever style they use throughout the course. The ORU Bookstore carries print as well as eTexts of assigned textbooks. http://www.bkstr.com/oralrobertsstore/home

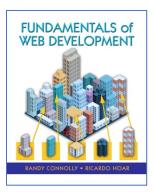
Required Materials

Textbook:

Connolly, Randy and Ricardo Hoar. *Fundamentals of Web Development*. First Edition. Boston: Pearson. 2015. ISBN-10: 0133407152 https://www.vitalsource.com/referral?term=9780133857290

Downloadable Software

<u>Wamp Server</u> is a Windows web development environment. It allows you to create web applications with Apache2, PHP and a MySQL database.



Optional Materials

Textbook: None

Other: <u>Student Companion Website</u>, which include labs, source code, case studies, and other materials. An access code should be included with the purchase of a new textbook.

VI. POLICIES AND PROCEDURES

A. University Policies and Procedures

- 1. **Participation:** Participation in each online class through discussion forums, assignments, and all other course activities is mandatory at Oral Roberts University. This counts as your attendance in the course. Excessive absences can reduce a student's grade or deny credit for the course.
- 2. **Plagiarism:** The ORU Catalog explicitly addresses the issue of plagiarism. Make sure you know ORU's policy on plagiarism and what is considered plagiarism: <u>https://goo.gl/iG7F4D</u>
- 3. Privacy: By law, students are entitled to privacy regarding their records. The Family Educational Rights and Privacy Act of 1974 (FERPA), as amended and available in the <u>ORU Employee</u> <u>Handbook</u>, sets forth requirements designed to protect the privacy of student education records. The law governs access to records maintained by educational institutions and the release of information from those records.

4. Whole Person Assessment Requirements:

a. Specify which, if any, Whole Person Assessment requirements there are for this course. None for this course.

B. School and/or Department Policies and Procedures

1. Class Assignments

- a. Students need to have the appropriate textbooks, course materials, and other supplies as designated by the professor.
- b. Professors may refuse to accept an assignment if it has inappropriate content, does not meet the assignment's criteria (e.g., not typed, incorrectly documented), is incomplete, is suspected of plagiarism, or is turned in too late.
- 2. Late Work

- a. The student is responsible for obtaining class assignments and materials, and all work is expected to be completed as scheduled. Late work may not be accepted by the professor, or it may result in a lower grade. Computer or Internet malfunctions do not constitute an excuse for late work; students should have their work prepared in time to ensure that they can get it completed, edited, and proofread prior to the instructor's due date. These responsibilities assist the student in professional development.
- b. Generally, assignments missed from a serious sickness or family crises can be made up and the instructor should be notified as soon as possible to reach an agreement on due dates and possible penalties. Each instructor has his or her own late-work policy. Instructors use their own judgment in accepting late work.

3. Incompletes

As stated in the University catalog, incompletes are granted only for "good cause," such as extended hospitalization, long-term illness, or a death in the family. Students must petition for an incomplete using the form available in the English and Modern Languages Department. Very few incompletes are granted.

C. Online Programs Policies and Procedures

- 1. **Learning Community:** Online learning community is established through active participation in the threaded weekly discussions. The mutual exchange of ideas, information, and experiences is an essential part of the learning process, and students are encouraged to use the discussion forum as virtual classroom platform.
- 2. ADA and Students with Disabilities:
 - Click here (http://www.brightspace.com/about/accessibility/) to view Desire2Learn's "Accessibility Resources for Students with Disabilities."
 - Students requiring Disability Services from ORU, please click here: <u>https://goo.gl/QGoK4x</u>
 - Desire2Learn (D2L) Accessibility Guidelines and Checklist: <u>https://goo.gl/Ck4RwY</u>
 - D2L Accessibility Policy: <u>https://www.d2l.com/accessibility/</u>

3. Useful Links for Online Students:

- Student Learning Glossary
- Library: <u>http://library.oru.edu</u>.
- D2L Helpdesk: <u>d2lhelp@oru.edu</u>
- I.T. Student Helpdesk: <u>studenthelpdesk@oru.edu</u>
- Netiquette and Online Discussions: https://goo.gl/f744AY
- Contact the University: please <u>fill out this online form</u>. Please first contact your instructor for assistance with any matter specific to the course.

D. Course Policies and Procedures

Evaluation Procedures: The final grade will be based on forum discussions, quizzes and projects. The weight of each item is included in the Course Calendar. Extra credit items are not offered in this course.

Category
Forum Discussions
Projects a

- 30% Projects b
- 21% Quizzes
- 1. Grading Scale:

A=90-100% B=80-89% C=70-79% D=60-69% F=59% and below.

2. Other Policies and/or Procedures: None

VI. COURSE CALENDAR

The Course Calendar shows the specific learning activities and assessments for this course, along with their respective grade weights. The far-right column lists the Course Objectives (CO) that support the corresponding Assessment in column 2. Further descriptions for activities and assessments are in their respective weeks in D2L. When applicable, ¥ Indicates this is a Whole Person Assessment item that is also submitted to the E-Portfolio system. † indicates this is a faith integration item tracked by the program.

Week 1	How the Web Works	Hours	Weight	CO
	View/Listen/Read	4		
	Forum 1: Web-based Applications	3	3%	3
	Quiz 1: How the Web Works	1	3%	1
	Project 1: Browser Basics	4	4%	2
Week 2	Introduction to HTML	Hours	Weight	CO
	View/Listen/Read	6		
	Forum 2: HTML Best Practices	3	3%	1
	Quiz 2: Introduction to HTML	1	3%	1
	Project 2a: Book Rep Customer Relations Management (Ch. 2)	3	4%	2
	Project 2b: Art Store (chapter 2)	4	5%	2
Week 3	Introduction to CSS	Hours	Weight	CO
	View/Listen/Read	9		
	Forum 3: Revolving Conflict	3	3%	3
	Quiz 3: Introduction to CSS	1	3%	1
	Project 3a: Book Rep Customer Relations Management (Ch. 3)	3	4%	2
	Project 3b: Art Store (chapter 3)	4	5%	2
Week 4	HTML Tables and Forms	Hours	Weight	CO
	View/Listen/Read	9		
	Forum 4: Website Accessibility	3	3%	3
	Quiz 4: HTML Tables and Forms	1	3%	1
	Project 4a: Art Store (chapter 4)	3	4%	2
	Project 4b: Share Your Travel Photos (chapter 4)	4	5%	2
Week 5	Advanced CSS Layout	Hours	Weight	CO
	View/Listen/Read	9		
	Forum 5: Responsive Design	3	3%	3
	Quiz 5: Advanced CSS Layout	1	3%	1
	Project 5a: Book Rep Customer Relations Management (Ch. 5)	3	4%	2
	Project 5b: Art Store (chapter 5)	4	5%	2
Week 6	JavaScript Client-Side Scripting	Hours	Weight	CO
	View/Listen/Read	5		
	Forum 6: Graceful Degradation	3	3%	3
	Quiz 6: JavaScript Client Scripting	1	3%	1
	Project 6a: Write a Node Highlighting Helper Script	3	4%	2
	Project 6b: Progressive Enhancement Art Gallery Search	4	5%	2
Week 7	Web Media	Hours	Weight	CO
	View/Listen/Read	3		
	Forum 7: Digital Media	3	3%	3
	Quiz 7: Web Media	1	3%	1
	Project 7a: Art Store (chapter 7)	3	4%	2
	Project 7b: Share Your Travel Photos (chapter 7)	4	5%	2
Course Total	Total estimated hours based upon ~16 hours per week for 7 weeks	118	100%	

VII. COURSE INVENTORY

For ORU's Course Objectives

LIT 231

This course contributes to the ORU course objectives as indicated below: **Significant Contribution** – Addresses the outcome directly and includes targeted assessment. **Moderate Contribution** – Addresses the outcome directly or indirectly and includes some assessment. **Minimal Contribution** – Addresses the outcome indirectly and includes little or no assessment. **No Contribution** – Does not address the outcome.

The Student Learning Glossary at <u>http://ir.oru.edu/doc/glossary.pdf</u> defines each outcome and each of the proficiencies/capacities.

OUTCOMES & Proficiencies/Capacities		Significan t	Moderate Contributio	Minimal Contributio	No Contributio
1	Outcome #1 – Spiritually Alive Proficiencies/Capacities				
1A	Biblical knowledge				Х
1B	Sensitivity to the Holy Spirit				Х
1C	Evangelistic capability				Х
1D	Ethical behavior			Х	
2	Outcome #2 – Intellectually Alert Proficiencies/Capacities				
2A	Critical thinking	Х			
2B	Analytical Problem Solving	Х			
2C	Global & historical perspectives				Х
2D	Aesthetic appreciation		Х		
2E	Intellectual creativity		Х		
2F	Information literacy		Х		
3	Outcome #3 – Physically Disciplined Proficiencies/Capacities				
3A	Healthy lifestyle				Х
3B	Physically disciplined lifestyle				Х
3C	Properly balanced nutrition plan				Х
4	Outcome #4 – Socially Adept Proficiencies/Capacities				
4A	Communication skills			Х	
4B	Interpersonal skills				Х
4C	Appreciation of cultural & linguistic				Х
4D	Responsible citizenship				
4E	Leadership capacity				Х

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This syllabus is subject to change without notice up until the first day of the semester.

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