

COURSE ID
COMP 246

COURSE NAME
Full Stack Web Development

NUMBER OF CREDITS AWARDED FOR COURSE
3 credits

PREREQUISITE OR CO-REQUISITE COURSES
Prerequisites: COMP 166 or HTML (with approval of department), and
COMP 171-Programming I or an approval language (with approval of department)

Prerequisites or Corequisites: COMP 269 or relational database experience
(with approval of department)

INDICATE IF NEW OR MODIFIED COURSE (if
modified course, list old course ID)
New

SEMESTER AND YEAR COURSE WILL FIRST BE OFFERED (or,
if modified course, semester and year when revised
course will be offered)
Summer 2019

NAME AND TELEPHONE NUMBER AND/OR E-MAIL
ADDRESS OF DEPARTMENT CHAIR
Peter Geiselman
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DETAILED COURSE DESCRIPTION:
This course allows a student to explore various tools used by a full stack developer. The student will gain a working knowledge of front end web development technologies such as JavaScript as well as back end technologies such as Node.js. This course provides the structure to allow students to design, implement and test dynamic and robust web pages.

OUTLINE OF COURSE OBJECTIVES:

Upon completion of this course, students will be able to:

- Design, code and implement JavaScript on web pages
- Validate forms using JavaScript
- Access databases from web pages

- Understand how to debug web pages
- Understand modules, HTTP, File System and Events in terms of Node.js
- Design, code and implement Node.js to produce dynamic web pages

TEXTS, JOURNALS, AND OTHER MATERIALS USED IN COURSE:

Texts: Node.js, MongoDB, and AngularJS Web Development, Daley,
Brad Addison-Wesley ISBN: 978-0-321995-78-0

GRADE DETERMINANTS

Grades are based upon an accumulation of points as follows:

Activity	Maximum Points to Earn
Programming Assignments	600
Quizzes	100
Tests	300
Total Points	1000

To be considered acceptable, programming assignments must be free of all syntax and logic errors and must meet all of the requirements outlined by the problem statement. Assignments must also meet documentation and style requirements as outlined by the instructor.

To determine the final letter grade for the course, divide the accumulated points by 10:

Numeric Grade	Letter Grade
94-100	A
90-93	A-
87-89	B+
84-86	B
80-83	B-
75-79	C+
70-74	C
60-69	D
BELOW 60	F

TOPICS TO BE COVERED

COURSE CONTENT:

The 6 (units) comprising the course are:

<u>Unit</u>	<u>Title</u>
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- | | |
|----|----------------------------|
| 1. | Introduction to JavaScript |
| 2. | Introduction to Node.js |
| 3. | Event Binding |
| 4. | Working with IO |
| 5. | Servers and Clients |
| 6. | Node.js and database |

Each unit is comprised of objectives, specifically:

UNIT OBJECTIVE: Tells you what you will be able to do after successfully completing the unit.

LEARNING OBJECTIVE: Indicates the details of each unit.

RECOMMENDED LEARNING EXPERIENCE: Indicates by what means the unit will be completed. These include class meetings, text assignments, and lab/programming assignments.

METHODS OF EVALUATION: Tells you the tools to be used for self-evaluation, as well as those which will enable your instructor to evaluate your progress.

ESTIMATED TIME TO ACHIEVE: Indicates the approximate time needed to complete the unit objective.