University of La Verne

COMPUTER SCIENCE & COMPUTER ENGINEERING PROGRAM

Central Campus, Spring 2018

CMPS 319 PUBLISHING ON THE WEB II – CRN 1649

COURSE INFORMATION:

- **Units:** 4.0 Credit Hours
- **Pre-Req.:** CMPS 218 or 318
- **Schedule Types:** Lecture/Seminar
- **Requirements:** Computer Science and E-commerce B.S. Elective
  Core Requirements for the Internet Programming concentration.
- **Attributes:** UVLL Lifelong Learning.
- **Class Location:** Founders Hall 207
- **Course Time:** Lecture/Seminar: TR: 12:05 - 1:40 p.m.

INSTRUCTOR INFORMATION:

- **Instructor:** Dr. Jozef Goetz, Professor
- **Office:** Founders Hall 108 B
- **E-mail:** JGoetz@laverne.edu
- Phone: (909) 448-4663
- **Office Hours:** M: 3:15 – 5:15 p.m. or by appointment

COURSE DESCRIPTION:

JavaScript (JS) is an interpreted computer programming language. It was originally implemented as part of web browsers so that client-side scripts may interact with the user, control the browser, communicate asynchronously and alter the document content that is displayed. JS is used mainly to create **dynamic, interactive Web pages**. For example, Web developers can use JavaScript to validate form input, create image rollovers, create cookies and open those annoying pop-up windows. JavaScript is the **most popular scripting language** on the Internet. Because JavaScript is the **language of** the **web browser**, and because the web **browser** has become the **dominant application delivery system**, JavaScript has become the **World's Most Popular Programming Language**. You can write **mobile** and **desktop apps** across all browsers quickly and efficiently using your skills with HTML, CSS, and JavaScript. **AJAX** (Asynchronous JavaScript and XML) uses a combination of HTML, CSS, JavaScript, DOM (Document Object Model) and XML for marking up and styling information. The intent is to make web pages feel more **responsive** by exchanging small amounts of data with the server behind the scenes, so that the **entire web page does not have to be reloaded** each time the user requests a change.

Topics include: HTML 5, Cascading Style Sheets CSS3, Introduction to Scripting, JavaScript – Control Statements, Functions, Arrays, Objects, JavaScript Event Handling, XML, Building Ajax-Enabled Internet Applications. **Tools**: Adobe Dreamweaver CS5, Web Developer Toolbar for Mozilla Firefox, Notepad ++, WinSCP, Firebug, http://javascript.cs.lmu.edu/scratch/, Mozilla Firefox, Chrome, Opera, and Microsoft Edge. **This course introduces HTML/CSS/JavaScript hand-coding with practical interactive exercises and projects.**

COURSE OBJECTIVES:

Students enrolled in this class will be able to fulfill the following objectives:

1. Gain perspectives of the Computers, Software Technologies, Internet and Web 2.0.
2. Learn and understand the concepts and building blocks of Web pages with HTML, CSS and JavaScript.
3. Gain understanding **six programming phases**: (1) understand the problem, (2) plan the logic (algorithm, flowchart, pseudo code), (3) write the code (code the program), (4) translate the code - use software to translate the program to machine language, (5) test the program, (6) deploy the program into production, (7) maintain the program.

4. Gain understanding of the **concepts of programming** in JavaScript, XML, and AJAX i.e.
   (a) basic problem-solving techniques,
   (b) object-based programming concept,
   (c) event models and scripting to create dynamic Web pages,
   (d) the basic principles of AJAX.
5. Gain **hands-on experience** by coding in HTML/CSS/JavaScript and employ many important features of DOM (Document Object Models), JavaScript and CSS.
6. Acquire the **knowledge** and **skills** of how to create Internet applications in JavaScript.
7. Demonstrate the ability to **apply** HTML/CSS/JavaScript/Ajax constructs to **designing**, **writing** and **testing** interactive Web pages through successful completion of **laboratory** and home **exercises**, **projects**, and **exams**.
8. Continue their study of using HTML/CSS/JavaScript/Ajax to implement Rich Internet Application.

GENERAL LEARNING OUTCOMES:

1. Acquire **understanding of basic concepts** in Computer Science (objectives 1 – 7).
2. Demonstrate skills in **analyzing** problems before and during project assignments (objectives 3, 7).
3. Obtain a sense of "**urgency**" to meet deadlines (objective 7).
4. Get a foundation for a future employment in industry related to concentration areas such as Internet Programming, Software, E-commerce and Information Science (objectives 1 – 7).

REQUIRED TEXT:

[1] *Internet & World Wide Web: How to Program*, 5/E by Harvey & Paul Deitel & Associates, Prentice Hall, 2012, ISBN-10: 0132151006 • ISBN-13: 9780132151009.

RECOMMENDED:

[1] Terry Felke-Morris, *Web Development & Design Foundations with HTML* 5 **8/E**, Addison Wesley Higher Education - Pearson, **2017**, Print ISBN-10: 0-13-432275-4, Print ISBN-13: 978-0-13-432275-9.

EVALUATION AND GRADING:

There will be lab assignments, projects, presentation, quizzes, midterm and a final. The course grade will be calculated as follows:

Lab and home assignments	**25%**
Final project	**15%**
Presentation	**05%**
Quizzes	**15%**
Midterm	**20%**
Final Exam	**20%**
TOTAL	**100%**

Final course grades will be assigned as follows:

94 – 100 = **A**	90 – 93 = **A-**	87 – 89 = **B+**
84 – 86 = **B**	80 – 83 = **B-**	77 – 79 = **C+**
74 – 76 = **C**	70 – 73 = **C-**	67 – 69 = **D+**
64 – 66 = **D**	0 - 63 = **F**	

NATURE OF ACTIVITES IN THE CLASS

1. **Time spend outside of class:**

   In order to gain genuine knowledge and skills you should know that for every **one credit hour** in which you enroll, you need to spend approximately **two to three hours** outside of class **studying** and **working** on **assignments** for the course. Students should plan to work **at least 8 - 12 hours** per week outside of class. The

class requires textbook study, lecture notes study, hands-on practice, weekly projects, quizzes, midterm exam, final exam, final project presentation and final project report. Each component is essential for the learning process. You need to be aware that approximately **33.4%** of your learning will take place in class with the remaining **66.6%** at home.

2. ☺**Collaboration:**

One of the goals **of studying at the university is to learn how to learn. Learning is a long life process. One of the** computer-science educational methods is an **Extreme Learning** method. Extreme Learning integrates **problem-based** learning**, pairing** learning**, collaborative** learning practices to help students gain more hands-on experience and in-depth knowledge on specific topics. **Collaborative learning** in pairs allows students to **open interaction, educate** each other and **share ideas, knowledge and experience.**

Guidelines:

a. You should use the **Extreme Learning** method by giving each other technical support, help understand the assignment and brainstorm general solution but each student must submit **your own detailed project solution.**
b. Each member of the group project should be able to explain any part of the submission, and **not just be able to explain "his or her" part.**

3. 🔔 **Attendance and Participation:**

Required and verified. Attendance and class participation are **extremely** important in this course. You should **notify the instructor in advance of your absence** from the scheduled course meeting. If you miss **two consecutive weeks of class** you will receive a **grade of F**. Regardless of excuse, absences in excess of **three week classes** will result in the automatic exclusion of the student from that class and you will receive a **grade of F.** If you are **absent** from class, it is **your responsibility** *to make-up* any missed classes and check on announcements made while you were absent. **It is essential that you attend all lectures and labs to succeed in the course.**

You have to **read** sections in the **textbook/ Lecture Notes**, which will be covered at the **next** class meeting (flipped learning). In addition to that, **after** each lecture/lab session you should study the **Lecture Notes** and the corresponding sections in the **textbook one more time** and run all corresponding programs.

4. 🔔 **Timeliness:**

You are expected to be in your seat and ready to begin class promptly at the start of each class. **Tardiness** will not be tolerated. **Don't leave the class before class ends.** When students do that, it **negatively affects** the **whole class.** It is **distracting** and **rude, and sends a message** that the **material is easy, which is not true.** Schedule your day such that you may manage contingencies (such traffic, doctor appointments, etc.) when they occur. The instructor maintains the discretion to mark you absent for all or part of the class in the event you fail to be timely and prompt.

5. ☺ **Class Contribution:**

Class Contribution in the form of presentation your final project, **comments** that relate to material in the text and **answering a question** asked by the professor or another student counts for **extra points** of your grade in this course. These are the behaviors to avoid:

- not listening
- pretending to be listening while texting or cruising online
- speaking without being recognized
- making fun or otherwise berating something said by another person.

6. ◘ **Quizzes:**

Several brief quizzes will be given during the semester. The content will relate to the material covered in the lectures and assigned readings. Please **attend class regularly and keep up** with course material. **No-makeup quizzes** are allowed. However, your lowest quiz score will be dropped in determining your grade score.

7. ✍**Lab, home and project assignments**:
The class will be presented as a combination of *lectures and hands-on activities*. Several lab and project assignments will be given over the course of the semester. An electronic version of the project assignments can be downloaded from the course's website. All assignments will be graded on a scale from 0 to 2 after presenting the assignments to the instructor. Expect one to two quick questions to show your understanding.
You will receive a **score of zero** if **falsified input/output** that doesn't much the source code or submissions that are plagiarized or that violate the collaboration guidelines.

Class and **project assignments** are the **key** to your **success**. Don't expect to learn or have a good grade if you miss classes and/or home assignments. You will **build** your knowledge and skills **based** on the **previous classes** and **project assignments**. Each week **keep track** of the list of the skills and programming constructs you have **learned** during the course. Later on you may be asked to turn in the detailed list of them for a grade.

You will need to **create** and submit the **final** project proposal of your website, see the schedule. At the end of the semester you will present your website to the class, discussing all elements of phase from 1 to 5 included in the **Project Submittal** handout (1_Project Submittals.doc). You need to turn in your projects according to the description found in 1_Project Submittals.doc at http://classes.jgspectrum.com/classes/319_S18/Guidelines/.
Please do not attempt to **turn in any lab assignment by email. No credit will be given for such work.**

Each project assignment will be submitted in a **clear plastic binder** with a firm **attached** USB flash drive to the binder. This USB drive should contain only all documents and executable file for the current assignment.

8. ☻ **Make-up and late assignments**:
No credit will be given for assignments turned in after the due day specified in Assignment.doc. Assignments MUST be submitted **before class begins** on the due date**. No-makeup assignments are allowed.** However, your lowest quiz score will be dropped in determining your grade score. **Do not get left behind**. Unless extraordinary circumstances can be documented, no assignments will be accepted after the beginning of class on the day the assignment is due. **No assignments will be accepted after they have been handed back or reviewed in class.**

9. ✍**Midterm and Final Exams:**
There will be two exams to complete the course work and obtain a grade for the course. **There will be no make-ups for the midterm and final examinations**. If you are absent from a **midterm** and have a **valid excuse**—an illness, a death in your family, injury or another equally compelling reason—the weight of your final will be increased by the weight of the midterm. You must provide **adequate** and **verifiable** documentation. Without a valid excuse, you will receive a **zero score for** the **midterm** and the final's weight will remain unchanged.
A missed **final** will be dealt with according to University regulations on incompletes and withdrawals. Midterm and final **exams** will cover specified chapters (see schedule for dates and coverage). The final will be comprehensive. These exams are a combination of multiple choice questions, true/false, short answer questions, and writing programs/apps.

10. 🗁**Course material:**
All handouts, my syllabus, guidelines, lecture notes, links and assignments will be posted at **http://classes.jgspectrum.com/**. You will see a folder labeled 319, and you will find all **CMPS 319** documents there. You may copy them to your computer.

11. ♫**Email Policy:**
I usually reply to emails that require a fast answer within 24-36 hours on weekdays. I will not reply to email messages that are unclear or disrespectful. Please include your **class name** and **section** in the **subject** field and a **salutation** (e.g. Dear Professor Goetz), so that it is clear that the message is not junk mail and deleted. **Students must check their e-mail messages on a daily basis. I will only use your Laverne e-mail. address.**

12. **Others:**

Before class begins, **turn off cell phones**. The **cell phone vibrating** or a **student texting** can be **very distracting to those around the student,** including **the faculty.** Please don't use **cell phones, e-mails, keyboards, browsers** etc. **during lectures** unless the instructor asks you. **Desktops** are to be **used only** for the purpose of lab exercises and taking notes. No recording devices are allowed.

Note: Students **who use their mobile phones** during class lectures tend to write down less information, **recall less information**, and **perform worse** on a multiple-choice test than those students who abstain from using their mobile phones during class (p.251). Reference: Kuznekoff. J. H. and Titsworth, S. (2013). The impact of mobile phone usage on student learning. *Communication Education*, *62*(3), 233-252.

No clicking keyboard while lecturing. **Please don't leave the class meeting during lectures.** All the above activities are **very disruptive** to others in class.

Every time students should **bring a USB flash drive** to class. Please note that absolutely **all of your work must be saved on your USB drive after each class.**

Patience and **attention** to detail are important to succeed in Apps Development.

Good luck in your course!

13. 🕑 **Tentative schedule (subject to change):**

Date	Week No.	Topic	Reading Chapter	Final Project due
Feb 6, Feb 8	**1**	**Syllabus. Introduction to Computers and the Internet;**	[1]ch1	
Feb 13, 15	**2**	**Introduction to HTML 5 part I and II** Lab Exercises	[1]ch2, 3	
Feb 20, 22	**3**	**Cascading Style Sheets™ (CSS) part I** Lab Exercises	[1]ch4	
Feb 27, March 1	**4**	**Cascading Style Sheets™ (CSS) part II** Lab Exercises	[1]ch5	
March 6, March 8	**5**	**JavaScript: Introduction to Scripting** Lab Exercises	[1]ch6	
March 13, 15	**6**	**JavaScript: Control Statements I** Lab Exercises	[1]ch7	
03/20 03/22		**Spring Break**		
March 27, 29	**7**	**JavaScript: Control Statements II** Lab Exercises	[1]ch8	
April 3, 5	**8**	**Midterm: April 3** **JavaScript: Functions**	above chapters [1]ch9	
April 10, 12	**9**	**JavaScript: Functions** Lab Exercises	[1]ch9	Project proposal submission
April 17, 19	**10**	**JavaScript: Arrays** Lab Exercises	[1]ch10	
April 24, 26	**11**	**JavaScript: Objects** Lab Exercises	[1]ch11	Project updates - phase 2

May 1, 3	**12**	**Document Object Model (DOM): Objects and Collections;** Lab Exercises	[1]ch12	Project updates - phase 3
May 8, 10	**13**	**JavaScript Event Handling** Lab Exercises	[1]ch13	Project updates - phase 4
May 15, 17	**14**	**Ajax-Enabled Rich Internet Applications** Lab Exercises	[1]ch16	Project phase 5, 6 – Testing and Publishing
May 22, 24	**15**	**Project presentation**		Project submission and presentation
May 31	**16**	**Final: Thursday 9:50 am**	above chapters	

14. PLAGIARISM POLICY:

Students are encouraged to collaborate outside of class to discuss and debate course concepts. However, **all assignments MUST be completed and written up individually**. If the assignment has been designated a team assignment by the instructor, **each student is required to turn in his or her own solutions.**

A grade of "F" will be assigned for the course for any occurrence of the **academic dishonesty either in exam, quiz or assignments.** It is all right to ask someone else about how to solve a problem, but it is not all right to copy their code. **Any cases of someone turning in work that is not originally theirs** will be dealt **with by assigning zeros to both parties** involved.

Each student is **responsible** for performing academic tasks in such a way that **honesty** is not in question, unless an exception is specifically defined by an instructor, students are expected to maintain the following **standards of integrity**: 1) **All** tests, term papers, oral and written assignments, and recitations are to be the **work of the student** presenting the material. 2) Any use of the wording, ideas, or findings of other persons, writers, or researchers requires the **explicit citation of the source**; use of the exact wording requires "quotation" format. 3) Deliberately supplying material to a student for purposes of plagiarism is also culpable. The **dean** may place on probation, suspend, or expel any student who violates the academic honesty policy. (See ULV catalog).

Acceptance of this syllabus constitutes acknowledgement by holder that s/he has read and agrees to the provisions of the foregoing contract.