FULL SAIL UNIVERSITY.

PROGRAMMING FOR WEB APPLICATIONS
PWA-I COURSE SYLLABUS

HOME DEPARTMENT

WDDBS Web Design and Development – Bachelor of Science

COURSE NAME

Programming for Web Applications I (PWA-I)

CONTACT INFORMATION

Catalog Course Code:	WDD 244
Three-Letter Course Abbreviation:	PWA-1
Instructor:	Fialishia O'Loughlin (online)
Telephone:	(786) 505-2904 - Alternate: 407.679.0100 ext. 3276
Email:	foloughlin@fullsail.com
iChat/AIM:	foloughlin@fullsail.com
Hours:	Tuesdays @ 9:00 pm EST (GotoMeeting.com) --or by Appointment

COURSE DESCRIPTION

The Programming for Web Applications I course trains students in the technologies used to create dynamic content for the web using client-side programming. This course builds upon the coding and logic concepts learned in the Web Programming Fundamentals course, continuing the use of JavaScript. Students will also be shown more advanced concepts, such as data structures and key algorithms.

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COURSE MATERIALS

- Online Class Files & Downloads available Full Sail Portal under "References" tab
- Laptop with approved Code Editor software (See WebStorm License info online) + GitHub.com Repository
- Review the **Text Book** for this class: **Modern JavaScript by Larry Ullman**
  http://www.coursesmart.com/9780132905893?_hdv=6.8&_professorview=false&_instructor=6937343&_referringfirstname=Fialishia&_referringlastname=O%27Loughlin&_isreferringinstructor=true

COURSE OBJECTIVES

Through the various components of study and application, students will realize these objectives by completing the following milestones. Upon successful completion of this course, students will be able to:

- Improve critical thinking skills to solve logic problems
- Apply and use Native Objects
- Enhance HTML forms with client-side functionality and validation
- Access and manipulate web browser DOM elements
- Understand and implement synchronous and asynchronous events
- Understand Constructor Objects and prototypes
- Create data visualization with the canvas API

TOPICS COVERED

- **Control Structures**
  - Demonstrating problem solving techniques by branching code using conditional logic
  - Creating loops to iterate through elements of an array or properties of an object

- **Data Structures**
  - Recognizing the different types of data structures such as objects and arrays
  - Modifying contents of an array object via array access notation and array methods
  - Creating and manipulating object literals and constructor objects

- **JavaScript and HTML**
  - Controlling HTML (Add, Update, Remove HTML elements)
  - Displaying dynamic content; Working with forms and Events
  - Developing closure and scope levels

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GENERAL EDUCATION COMPONENT

Course is designed to teach students the necessary knowledge and skills to be successful in their lives, their education, and their work, additionally to teach them scripting language by creating a fast past interactive development environment. Students will be required to submit written assignments and take practical exams. Students will also be asked to answer questions in class and take part of the teaching process in-group assignments. Course also encourages students and awards those who attend educational events.

DEGREE CONNECTION

Programming for Web Applications 1 is a continuation of the Interactive Programming courses. This course is designed to teach students new techniques to better their client side programming and prepare them for the advanced client-side programming concepts in the second Programming For Web Applications course.

INDUSTRY CONNECTION

JavaScript skills are a must for modern web development. Knowing JavaScript well is probably one of the most challenging and rewarding things student can do as a web programmer. It is an incredibly diverse language, much larger in application than what it was known for 10 years ago. There are a large number new APIs, and it is in constant development. When people talk about HTML5, they are talking mostly about JavaScript.

RESEARCH COMPONENT

In this course most of the work is graded on student's research for new ideas and their creativity to use these new JavaScript techniques. Students will research "advanced" topics of their choice using the Full Sail Media Library on **http://Connect.FullSail.edu.**

ADDITIONAL RESOURCES

Students are encouraged to use mass media and social networking sites to further their research, including:

- Lynda Video Tutorials on JavaScript Essentials: http://lynda.fullsail.edu
- W3Schools: http://www.w3schools.com/

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LEARNING ACTIVITIES

Course Activities (Non-graded)

Throughout the course, students will have several in-class exercises relating to the topic or objective being discussed. These activities are not graded, however, they are graded & expected to be completed/turned-in by students. If not complete, you will lose GPS participation points. Most of the activities are short and direct and contain small amounts of actual code. However, some of the activities build on each other thus it is imperative that students understand the current activity before moving on to the next.

Course Homework

Students will be developing a wide variety of small-scale projects to validate the knowledge they gained through out this course. Most assignments will focus on the core learning objectives taught in the previous learning material or two and are usually due before start of the following class. This will allow students to have some time at home to complete the assignment if necessary. Although the grade weight of the course assignments is fairly light, understanding and completing them is a crucial part of preparing the students for the written and practical exams

Practical Examinations

Programming for Web Applications I places a strong emphasis on using practical exams to assess the student's knowledge and understanding of the objectives and is reflected in the overall grade weight of the course. Students will be administered two (2) practical exams. Sometimes unannounced quizzes may be given out if necessary.

FULL SAIL GRADING SCALE & WEIGHTS

The following grading scale will be used to determine your final grade:

A+	**95 – 100**	4.0
A	**90 – 94**	3.5
B+	**85 – 89**	3.0
B	**80 – 84**	2.5
C+	**76 – 79**	2.0
C	**73 – 75**	1.5
D	**70 – 72**	1.0
F	**0 - 69**	0

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Activities & Homework Assignments - (100% of total grade)

Quizzes & Exams (2 total)   42%

HW Assignments & Research (7 Total)   48%

GPS Professionalism   10%
(---Attend Weekly Screen Casts, Complete Activities & HW, Be Respectful, etc..)

PROFESSIONALISM GRADE (10% OF TOTAL GRADE)

Easy… During Weeks #1-4, just submit an iChat to your instructor and introduce yourself to classmates. During ALL weeks, just be sure complete your non-graded assignments, turn your homework assignments in on-time, stay in touch, be professional, and this should be an easy 10%. Also note that watching GoToTraining.com Archives is REQUIRED (see below) & posting a weekly summary is also tied to your Professionalism grade.

WEEKLY "LIVE" SCREEN CAST SESSIONS
GO TO TRAINING

This course uses the GoToTraining.com platform as a chance to gather and have interactive discussion. Each live session will clarify and set expectations for future activities, provide context for the skills you're learning, and answer questions that might be easier to do interactively than over chat or email. **Live sessions in this course are optional**, with one exception... IF you decide to NOT attend, you will need to:

- Review the archived/recorded session + Post a 50-word summary of what you learned on the Discussion Board for the corresponding GoToMeeting/Training session.

- You will **earn 2%** towards your Professionalism grade if you attend. OR, you can **earn your 2%** by watching the archived session & post your summary on the Discussion Board. To participate in the session, please use your microphone and speakers (VoIP) - a headset is recommended. Or, call in using your telephone & don't be shy!

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Schedule of Homework Assignments and Exams (90% of Grade)

Week 1 Non-Graded Activities			Due Week 1 - (Thursday)
Homework 1 - The Duel Part I		3%	Due Week 1 - (Friday)
Homework 2 – Debug It!		5%	Due Week 1 - (Friday)
Quiz #1		7%	Due Week 1 - (Friday)
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Week 2 Non-Graded Activities			Due Week 2- (Thursday)
Homework 1 - The Duel Part II		5%	Due Week 2 - (Friday)
Homework 2 – Guessing Game		5%	Due Week 2 - (Friday)
Quiz #2		5%	Due Week 2 - (Friday)
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Week 3 Non-Graded Activities			Due Week 3 - (Thursday)
Post JavaScript Research Topic		2%	Due Week 3 – (Thursday)
Homework 1 - The Duel Part III		8%	Due Week 3 - (Friday)
Homework 2 – Validation & RegExp		5%	Due Week 3 - (Friday)
Midterm Practical Exam		15%	Due Week 3 – (Friday)
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Week 4 Non-Graded Activities			Due Week 4 - (Thursday)
End of Course Survey *(Optional Extra Credit)*			Due Week 4 – (Thursday)
Final JS Research Project		7%	Due Week 4 – (Thursday)
Homework 1 – Advanced Objects		3%	Due Week 3 - (Friday)
Homework 1 – Canvas API		3%	Due Week 3 - (Friday)
Final (Quiz #3) Assessment		15%	Due Week 4 – (Friday)

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HOMEWORK SUBMISSIONS:

You will need to read & follow the grading rubrics & directions given for each "graded" assignment, however, here are a few guidelines to get you start...

1. **FIRST**: MAKE SURE the name of your repo includes your LAST NAME.
2. **SECOND**: Create a folder for each of the following weeks: "Wk1", "Wk2", "Wk3", "Wk4".
3. **THIRD**, please add your instructor as a new collaborator called "DeveloperFia" to your new repo account. Instructions on how to add collaborators can be found here: **https://help.github.com/articles/how-do-i-add-a-collaborator**
4. **NEXT,** please make sure your name is INSIDE each of your JavaScript Files
5. **REMEMBER** to upload an archive (as a ZIP file) for all homework for FSO & include all necessary files.
6. NOTE: Midterm Exam will only be submitted to FSO---NOT Github.com!

LATE POLICY:

- Visit the "References" Section of FSO to read the official **WDDBS Late Policy**. You can also view it by visiting https://assethub.fso.fullsail.edu/assethub/LateWorkPolicya579b20e-7cf6-481e-9056-37ec2eeae398_e96d84e7-a94b-46b5-af58-6030724b3a28_f44d7d80-8df1-44e0-ac23-0a8296f8eac3.pdf
- Make-up assignment will be allowed in cases of well-documented student emergencies ONLY. For student emergencies, it is the student's responsibility to contact the instructor and provide documentation AHEAD OF TIME ----or ----within one week of each due date (unless special arrangements have been made previously).
- If you are going to miss a few days of class, you (or a family member) must notify the instructor either by email or phone prior to the absence--- if at all possible. Failure to notify the instructor in advance may result in you not being allowed to make-up any missed assignments or exams.
- All LATE & UNEXCUSED work will automatically result in a 25% reduction of points earned for each day that you are late. You may also lose GPS points;

ACADEMIC HONESTY:

Each student is required to follow Full Sail University policy regarding academic honesty. All work submitted by students is expected to be the result of the student's individual thoughts, research, and self-expression unless the assignment specifically states "group project." Any act of academic dishonesty will be handled in accordance with Full Sail University policy.

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STRATEGIES FOR SUCCESSFUL LEARNING

1. Learning through repetition and struggle is **normal**. Coding & trouble-shooting errors for some will not come easy, so perseverance is key. Don't give up!

2. Do not get frustrated when error messages or bugs occur in your program. They occur to everyone even the most experienced. Stay focused and code in a modular fashion. Complete one thing at a time!

3. Don't be afraid to ask questions. Send me an iChat or use the "ASK THE INSTRUCTOR" link within FSO.

4. Visit the "References" Tab on FSO to download these files so that you can GET & STAY ORGANIZED…

   o Review the **Course Syllabus** to start getting organized;
   o Review the **Weekly Calendar** to STAY ON TRACK;
   o Review all **Course-Specific Rubrics** to know what's expected of each assignment;
   o Review the **Text Book** for this class: **Modern JavaScript by Larry Ullman**
     http://www.coursesmart.com/9780132905893?_hdv=6.8&_professorview=false&_instructor=6937343&_referringfirstname=Fialishia&_referringlastname=O%27Loughlin&_isreferringinstructor=true

INSTRUCTOR INSIGHTS

- My greatest desire is that all of you succeed in this class, however, one thing to remember about homework is ----ask questions & don't get behind. Again, the importance of doing your homework cannot be stressed enough.

- Logging into the Full Sail Portal is NOT sufficient enough to obtain a good grade. For each week of class, your grade will be determined by completion of your JavaScript assignments & exercises (submitted via FSO and/or GitHub.com when required) and participation in discussions for that week's class.

- You cannot understand the topics presented without making time for careful and timely study sessions. If you are having difficulty, by all means please contact me. But FIRST make sure you have taken the time to DO YOUR PART! The best way to contact me is via iChat or E-mail, as listed on this syllabus: foloughlin@fullsail.com. You can also contact me via phone using the contact info listed at the beginning of this document.

- *Have fun & I look forward to programming with you over the next 4 weeks!*

DISCLAIMER: This syllabus may be altered, at the instructor's discretion, during the course of the term. It is the responsibility of the student to make any adjustments as announced.