

Course Syllabus

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| Course Title: | Advanced Web Page Scripting/Advanced Web Design |
| Course Number: | GWDA233/GWDA283 |
| Class Meetings: | Section A, Tuesday, 1pm – 5pm.. The quarter begins on Monday, April 4, and ends on Friday, June 17 th . |
| Session/Year: | Su17 |
| Instructor Name: | Dr. Pete Markiewicz |
| Email Address: | pmarkiewicz@aia.edu |
| Phone: | Comeon, it's the 21st century, dude |
| Class website: | http://www.plyojump.com/courses |
| Alternate Email: | pindiespace@gmail.com |
| Office Hours: | BY APPOINTMENT ONLY. Office Hours are 11:30a-12:30p ON APPOINTMENT ONLY. |
| Social Networks: | On Facebook or LinkedIn (preferred) username: “pindiespace” or search on “Pete Markiewicz” |

Advanced Web Page Scripting/Advanced Web Design

Course Description:

An exploration of advanced methods for styling websites and creating page layouts. This course will examine the practical application of styling web page content, understanding cross-browser compatibility, and creating designs that display effectively on various devices.

Course Focus:

This course considers how CSS and JavaScript may be use in conjunction for creating web page layouts, both static and dynamic. It includes standards-based HTML, CSS2 and CSS3, and a basic introduction to JavaScript used in page layouts in order to enhance User Experience. Common design and development frameworks (SASS, React, Gatsby) will be introduced. Design patterns (e.g. adaptive design and responsive design) will also be considered.

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| Course Length: | 11 Weeks |
| Contact Hours: | 44 Hours |
| Lecture: | 22 Hours per quarter |
| Lab: | 22 Hours per quarter |
| Credit Values: | 3 Credits |

Quarter Credit Hour Definition:

A quarter credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

(1) *One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for 10-12 weeks, or the equivalent amount of work over a different amount of time; or*

(2) *At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practical, studio work, and other academic work leading to the award of credit hours.*

Course Competencies:

Upon successful completion of the course, the student should be able to:

Define advanced terms and methods for styling web pages

- Articulate the concept for a web page design
- Investigate strategies for designing for multiple devices and browsers
- Identify methods for writing semantic and valid markup

Apply various advanced methods for styling web pages

- Utilize relative, absolute, and fixed positioning methods to control the placement of web page elements
- Utilize floats and clearing
- Redesign existing web sites to display on various screen resolutions and devices

Solve information architecture and communication problems with effective web site styling

- Identify ways to use on-line resources for problem solving
- Implement advanced solutions for common information architecture principles through advanced web page styling

Course Prerequisite(s): *GWDA223 Intermediate Web Page Scripting*

Instructional Materials and Reference:

Text(s):

1. (eBook in course shell) Patrick Carey and Sasha Vodnick, **New Perspectives on HTML, CSS, and XML: Comprehensive (4th edition)**.

Online Resources:

Numerous Tutorials, provided in weekly Labs.

Method of Instruction:

This course will include (1) lectures on topics in the required textbook and selected documents on the Internet, (2) lab work allowing students to apply concepts introduced during lectures, and (3) homework assignments which allow students to practice software and techniques introduced in class. Homework may include extra-credit options allowing students to go beyond the required programming techniques introduced in class. Homework from the previous week is presented in-class prior to the beginning of the lecture with basic and extra-credit options.

Students receive a weekly grade for their coursework consisting of (1) completed homework, (2) completed in-class assignments, and (3) credit for class participation, in particular researching or answering questions posed by the Instructor during the lecture.

Materials and Supplies: Internet connection, backup media (CD-ROMs or thumbdrives)

Estimated Homework Hours: 4hours per week

Technology Required: Computer lab with Internet access

Digital Bookshelf & Course eBook:

If your class uses an electronic book, “eBook”, your required textbook for this course is delivered via electronic format. You do not need to purchase a hardcopy textbook. You will be able to access your eBook via eCompanion (<http://myaicampus.com>) beginning no later than the first day of class. Once you have accessed your eBook via eCompanion, you can then also choose to download the eBook to a personal computer using the Digital Bookshelf software (<http://vitalsource.com/downloads>). Please refer to the Ai Digital Bookshelf Student User Guide, available in eCompanion, for specific instructions.

To start using your eBook, enter the eCompanion site for this class. Click on the “Digital Textbook” link on the left-side navigation bar. Then, click on the link for the book.

For support using the Digital Bookshelf, contact Campus Support at 1-866-642-2771 or campus_support@aii.edu. This support group is available SEVEN DAYS A WEEK from 7:00 AM – MIDNIGHT Eastern Time.

Grading Scale:

All assignments must have clear criteria and objectives to meet. All students shall be treated equitably. It will be that student’s right to know his/her grade at any reasonable point that information is requested by that student. The criteria for determining a student’s grade shall be as follows (on a percentage of total points basis):

| Grade | Grading Scale | Grade Calculations |
|-------|---------------|--------------------|
| A | 100 – 93 | 4.0 points |
| A- | 92 – 90 | 3.7 points |
| B+ | 89 – 87 | 3.4 points |
| B | 86 – 83 | 3.0 points |
| B- | 82 – 80 | 2.7 points |
| C+ | 79 – 77 | 2.4 points |
| C | 76 - 73 | 2.0 points |
| C- | 72 – 70 | 1.7 points |
| D+ | 69 – 65 | 1.4 points |
| D | 64 – 60 | 1.0 points |

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| F | 59 and below | 0.0 points |
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Process for Evaluation:

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| Class Participation | 10% |
| Assignments and Exercises | 50% |
| Mid-Term Project/Examination | 15% |
| Final Project/Examination | <u>25%</u> |
| Total | 100% |

***PLEASE NOTE: SHOWING UP TO CLASS AND DOING ALL ASSIGNMENTS, WITHOUT PROGRESS, DOES NOT CONSTITUTE A PASSING GRADE.**

Student Evaluation/Grading Policies:

- Class time will be spent in a productive manner.
- Grading will be done on a point system.
- Points for individual activities will be announced.
- All work must be received by the set deadlines.
- Late work receives a grade of zero.
- On-time projects may be redone with instructor approval.
- ABSOLUTELY NO WORK WILL BE ACCEPTED AFTER THE FINAL CLASS MEETS WEEK 11.

Classroom Policy:

- No food allowed in class or lab at any time. Drinks in re-closeable bottles allowed in classroom.
- Edible items brought to class or lab must be thrown out.
- If student elects to eat/drink outside class or lab door, missed time is recorded as absent.
- Break times are scheduled by the instructor at appropriate intervals.
- No private software is to be brought to lab or loaded onto school computers.
- No software games are allowed in lab (unless in course curriculum).
- Headphones are required if listening to music during lab. No headphones are allowed in lecture.
- Any student who has special needs that may affect his or her performance in this class is asked to identify his/her needs to the instructor in private by the end of the first day of class. Any resulting class performance problems that may arise for those who do not identify their needs will not receive any special grading considerations.
- Cell phones may NOT be used in the classroom. If you have an emergency that requires you to take a call during class, you MUST inform the instructor before class begins, and step outside the room to take the call or text message.

Attendance Policy:

The Art Institute of Campus is committed to learning-centered, hands-on instruction, which can only be accomplished when students attend class. There are no excused absences. The satisfactory explanation of an absence does not relieve the student from responsibility for the course work assigned and/or due during his/her absences. A student who does not attend class during the first week of school or starts late is still held responsible for his/her absences.

A student who is absent for three cumulative weeks* will be withdrawn from the course and will receive a Withdrawal (W) grade during weeks 1 through 9 of an 11 week term and a Withdrawal/Fail (W/F) grade after week 9 of an 11 week term for that course (after week 4 of a 5.5 week Mid-quarter ground

term) unless the student submits an appeal to remain in class that is accepted by the instructor and department director/dean. A student is allowed only one appeal per class. In other words, if a student submits an appeal and it is approved, the next absence will initiate a non-appealable withdrawal from the course. The Attendance Appeal Request Form may be found in the Registrar's Office.

It is your responsibility to stay in communication with your instructor about absences in order to stay current with assignments. You are expected to spend the entire amount of scheduled class time in the classroom. If you are dropped from the class, you may have the opportunity to appeal. It is your responsibility to ensure that your attendance in class is brought to the faculty member's attention if you arrive late.

Students who are not marked present in any of their scheduled classes for fourteen (14) consecutive calendar days before the end of the ninth week of the 11 week term (week 4 of a 5.5 week Mid-quarter ground term), will be withdrawn from the Institute and will receive W's (withdrawals, with no grade penalty), or if the withdrawal occurs after the end of the ninth week of an 11 week term (after week 4 of a 5.5 week Mid-quarter ground term) students will be withdrawn from the Institute and will receive WF's (Failures due to late withdrawal). Calendar days include days that the student does not have any scheduled class. All calendar days that the school is not in session (e.g., school closings and holidays) do not count in the fourteen (14) calendar days as well during the active term. Students who have been withdrawn due to violation of the consecutive absence policy, but are still in good academic standing, if otherwise eligible, will be able to return the following term through the normal readmissions process. Students who have been withdrawn and the withdrawal results in a violation of the satisfactory academic progress policy (SAPP) must follow the procedure for appealing the academic dismissal.

Students are encouraged to make all schedule changes early in the first week of the quarter to minimize absences. Failure to sit in all classes during the first two weeks of school will result in termination from school for the quarter. Detailed information about scheduled adjustment periods can be found on the back of your official schedule or in the local Ai campus catalog.

If you are going to miss class, regardless of the reason, you should notify your instructor. You are responsible for gathering any information from the missed class period in a timely manner.

Ai Unearned F (UF) Grade Definition:

Unearned F Grade: students who failed the course AND did not complete the final assignments in the course. Final assignment include, but is not limited to a final exam, final project, final paper, portfolio presentation, capstone project or any other assignment due in the last week of the course. If a student completed some or all of the other requirements in the course but did not complete the final assignment of the course and failed the course, the F grade will be considered unearned. An unearned F grade will be reflected as a "UF" grade on the transcript. The course's instructor will award this grade when appropriate.

Veteran Affairs Course Attendance Policy:

- Students who receive VA educational benefits are required to pursue each of their courses to be eligible for benefits. In order to receive the full benefit allowance the student must attend all classes in which the student is registered throughout the academic term at the campus.
- A student who is absent from a particular course for a period of 14 consecutive calendar days will be considered not pursuing the course.

- At the end of a quarter, a student must complete their final assignment or take their final exam (these dates must be documented) or not receive a grade of W, WF or an unearned F, or their last date of attendance will be provided to the VA.

Withdraw from a Course:

In order to withdraw from a course (that is, receive a grade of “W”), a student must meet with his or her Academic Director before noon on the Friday of week 9.

Academic Dishonesty :

Students are expected to maintain the highest standards of academic honesty while pursuing their studies at The Art Institutes. Academic dishonesty includes but is not limited to: plagiarism and cheating; misuse of academic resources or facilities; and misuse of computer software, data, equipment or networks.

Plagiarism is the use (copying) of another person’s ideas, words, visual images or audio samples, presented in a manner that makes the work appear to be the student’s original creation. All work that is not the student’s original creation, or any idea or fact that is not “common knowledge,” must be documented to avoid even accidental infractions of the conduct code.

Cheating is to gain unfair advantage on a grade by deception, fraud, or breaking the rules set forth by the instructor of the class. Cheating may include but is not limited to: copying the work of others; using notes or other materials when unauthorized; communicating to others during an exam; and any other unfair advantage as determined by the instructor.

Students accused of academic dishonesty will be brought before a Student Conduct Committee. If the committee determines that there has been a violation of the Academic Dishonesty policy, the student will automatically fail the class and, depending on the severity of the infraction, may face further disciplinary action up to and including suspension from classes or expulsion from school.

Disability Services:

The Art Institute of California – Los Angeles provides accommodations to qualified students with disabilities. The Disability Services office assists qualified students with disabilities in acquiring reasonable and appropriate accommodations and in supporting equal access to services, programs and activities at The Art Institute of California – Los Angeles in accordance with the Americans with Disabilities Act.

Students who seek reasonable accommodations should contact the Disabilities Services Officer, Sara Lyttle, to discuss what their classroom needs are. Classroom accommodations are not retroactive, but are effective only upon the student sharing approved accommodations with the instructor. Therefore, students are encouraged to request accommodations as early as feasible with the Disability Services Officer to allow for time to gather necessary documentation. If you have a concern or complaint in this regard, please contact Sara Lyttle, telephone number 412.518.3304. Complaints will be handled in accordance with the school’s Internal Grievance Procedure for Complaints of Discrimination and Harassment.

Student Assistance Program:

Last updated Su18

The Talk One2One is a pre-paid service, provided through The Art Institute of California – Los Angeles, that offers a menu of services and support accessible 24/7 to assist the student in attaining balance and academic success, including: counseling, budget and debt assistance, information and resource referrals, consultations, and new parent coaching. If you are in need of services, contact Talk One2One at 888-617-3362.

Tutoring Center:

Full-time faculty will be available during office hours to share knowledge, engage in dialogue and/or give advice and guidance to our student body in the Student Success Center. Students may meet with full-time faculty during their office hours by scheduling an appointment with the faculty member.

Commitment to Excellence – Reading/Writing/Comprehension:

While the principal goal of this course is the acquisition of knowledge in the subject area, students should be aware that The Art Institute of California requires that research on a particular topic and clear and effective writing be an integral part of the learning process.

Media Policy:

All media (images, videos, audio, etc.) used for assignments must be legally obtained, and use of that media must not infringe on any copyrights. Violations of this policy in any assignment will result in a failing grade for that assignment. Documentation of media sources will be required for each assignment.

Communication:

We will use eCompanion for communication during the term. It is your responsibility to check the system and your email daily and be prepared for possible changes and announcements. Use the eCompanion network to get homework assignments and to contact your classmates for notes and details if you miss a class. Homework will be turned in during class or through the eCompanion dropbox. Late homework must be turned in to the correct dropbox in eCompanion to be graded.

Library Assignment:

All students will need to utilize the Library for research and reference throughout the quarter. The Library is a valuable source for finding design ideas that will be needed for this course, i.e.: inspiration and design fundamentals for mid-term and final projects; locating popular trends in design, illustration and photography; referencing past award winning designs which may be used as a guide; identifying benchmarks or referencing competent design works.

Student Art Work:

All student work, which has not already been returned during the quarter, will be available for pickup no later than 5:00 pm, Monday of the first week of break. Any work NOT picked up by that date and time will be discarded unless other arrangements have been made. Students must take personal responsibility for their work.

Additional Policy notes for this Instructor:

1. **If you don't understand, come to office hours...**
2. **Office hours are not a second lecture** – they are designed to give you additional help for problems you didn't understand in class.
3. **You are completely responsible** for your own performance in class.

Weekly Outline

- Week 1:** **Lecture:** History of web-based programming. HTML, HTML5, CSS, CSS3 Review. The CSS Box Model. JavaScript. Frameworks.
Lab: Intro to NodeJS-based web workspaces. HTML5 and web standards Create a basic GitHub repo.
Homework: Tutorial work. Develop basic layout using CSS2 techniques.
- Week 2:** **Lecture:** Modern Web Design and Development. Using the Web Inspector Create a standards-based website boilerplate. Practical CSS layout. Layout via the box model. Styling inline vs. block-level elements, margins and margin collapse.
Lab: Set up a web development environment. Practical CSS in boilerplates. Element, id, and class selectors. Attribute selectors. Advanced selectors. Selectivity and the CSS cascade. Static, relative, absolute and fixed positioning. Z-indexes Floats and clearing. Using Github in Web Design and development. Your Midterm Project (create a website from a Wireframe).
Homework: Tutorial work. Get your GitHub archive set up on your own laptop/desktop. Examine the wireframe you will implement for the Midterm.
- Week 3:** **Lecture:** CSS advanced. Multi-column layouts via floats. Flexbox. CSS Grid. CSS table styling. Backgrounds, background gradients and background images. Frameworks. SASS for CSS. Refresher on Ux / Experience Design
Lab: Set up a web development environment using SASS. Archive via GitHub
Homework: Codeschool Tutorial work (progress report).
- Week 4:** **Lecture:** Intro to React for JavaScript. ". More on Ux Deliverables.
Lab: Set up a ReactJS based web development environment. Implement your site in the ReactJS framework (this may require re-doing your boilerplate).
Homework: Prepare for Midterm.
- Week 5:** **Lecture:** none
Lab: Midterm (demonstrate boilerplate and realized website). Present your site work. Demonstrate the ability to archive work.
Homework: "Role Model" websites for Final Project. Read Ux material
- Week 6:** **Lecture:** Setting up a Web Dev environment with "dotfiles". Intro to Gatsby. Develop a single page site template using Gatsby. Universal Conversational Design theory. Ux Deliverables Part I: Ux Customer Research. APIs. Heroku.
Lab: Create server-side website with Heroku. Integrate with your boilerplate.
Homework: Continue developing Ux materials to wireframe stage. Ux deliverables for Mission Statement, Market Segmentation, Personas.
- Week 7:** **Lecture:** Web Typography. SVG Graphics. Web Typography. Role of web type. @font-face. Choosing webfonts. Using CDN (Content Delivery Networks) for webfonts. Ux Part II: Ux Customer Journey. . Writing for the Web. Ux Part II: From Customer Journeys to Conversations. Converting a Conversation to a User Flow. Ux Customer Journeys.
Lab: Develop Customer Journey. Develop User Flow from Customer Journey.

Homework: Web typography tutorials, as assigned by Instructor. Ux Customer Journey deliverables (Customer Journey). Ux User Flow Deliverables.

Week 8: **Lecture:** Inclusive Design. Responsive and Adaptive web design. Mobile First. Ux Part III: From User Flows to Conversation. From Wireframes to Ui. Ui Design Principles. Ui frameworks.

Lab: Explore Adaptive, Responsive, and Mobile First design patterns. Develop Ui wireframes from your User Flow Deliverable. Define Ux device classes for your Final Project. Define responsive design breakpoints for Ux device classes in your boilerplate.

Homework: Ui, Adaptive and Responsive design tutorials, as assigned by Instructor. Codeschool Tutorial work (progress report).

Week 9: **Lecture:** Ux Part IV: Prototyping. Ux Prototyping tools. Web Navigation systems. Ux animation and micro-interactions.

Lab: Explore Ux Prototyping Tools. Develop a Prototype for your Final Website. Develop Microinteraction Patterns in a prototyping tool.

Homework: Work on Final Project, tutorials.

Week 10: **Lecture:** Advanced JavaScript behaviors. Server communication via JavaScript (Ajax). SEO and WPO in websites. Browser compatibility. Fallbacks and polyfills for CSS styles Carbon footprints of websites. Sustainable Web Design. Website Analytics. Design Systems in the Workplace.

Lab: Add SEO, WPO, and Polyfills to your final website as needed. Present Final Project review.

Homework: Work on Final Project.

Week 11: **Lecture:** none

Lab: Presentation and critique of final project

Homework: none