Course Title:	**Programming Logic**
Course Number:	**GWDB123 A**
Session/Year:	**Spring 2017**
Day/Time:	**Tuesdays and Thursdays 2:00pm – 4:45pm, Lab 1003**
Instructor:	Patricia Kruep
Contact Info:	pkruep@aii.edu
Office Hours:	Tuesdays and Thursdays, 10:30 – 11:00am
*appointments preferred

Course Description: Fundamentals of programming logic. Introductory concepts, structure, decision-making, looping, array manipulation, calling methods, and an introduction to object-oriented programming. Students combine experience design concepts with advanced programming solutions. Emphasis placed on learning object-oriented approaches to developing dynamic/reusable rich media modules combined with data applications.

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

Implement programmatically controlled animation effects
- Write standards-compliant script
- Style with CSS

Create compelling communication vehicles for advertisement, entertainment and business solutions
- Implement JavaScript

Identify the components of programming logic
- Demonstrate fundamental competency with planning logic, pseudo statements, variables, and data types
- Explain structure, sequences, selection and loops

Explain client-server application concepts
- Identify components of client-server applications
- Distinguish between client-side and server-side

Research methods for solving technical problems
- Conceptualize, design and develop simple client-server JavaScript applications

Employ AND logic and OR logic through decisions decision making
- Construct a simple program using an object oriented programming language with conditional statements
- Utilize looping and counters in a program
- Use arrays and methods

Course Length: 11 weeks

Contact Hours: 6 per week

Credit Value: 4

Definition of a Credit Hour: 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 to 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, practicum, studio work, and other academic work leading to the award of credit hours.

Estimated Homework Hours: Read the assigned texts. Expect to spend several (at least 10) hours each week on this class. Good UX and web design doesn't just happen—it is the product of an iterative process.

Academic Services/Advising: Your School Director or a member of the faculty or virtual advising team is designated as your academic advisor at The Art Institute of Washington. In addition to helping you succeed with your educational goals, the academic advisor will also guide you toward your career goals and successful completion of your portfolio work. While every effort is made by all advisors to assist you in planning your schedules, it is your responsibility to know course sequence and prerequisites for your program of study. If you fail a prerequisite to a course for which you have pre-registered, it is your responsibility to change your schedule prior to the end of the add/drop period.

Disability Services: The Art Institute of Washington 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 Washington.

Students who seek reasonable accommodations should notify Disability Support Services at 1-855-855-0567 or dss@aii.edu of their specific limitations and, if known, their specific requested accommodations. Students will be asked to supply medical documentation of the need for accommodation. 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 Support Services to allow for time to gather necessary documentation. If you have a concern or complaint in this regard, please contact Student Resolution at studentresolution@edmc.edu. Complaints will be handled in accordance with the school's Internal Grievance Procedure for Complaints of Discrimination and Harassment.

Satisfactory Academic Progress: The Art Institute of Washington encourages students to excel in their classes and to earn the highest grades possible. The minimum acceptable academic standard to become a graduate is to earn a 2.0 cumulative grade point average (CGPA) and pass at least 2/3 of the courses attempted (ICR). Receiving a failing grade in any course requires a student to retake the class at the first opportunity. The second, passing grade mathematically raises the CGPA. Earning a D in a class is a passing grade; however, a D is worth only 1grade point and can lower the CGPA to below the minimum level to graduate (2.0). Therefore, it is in the best interest of students to complete their courses with a grade of C or higher. If students encounter difficulty with class material, they are encouraged to utilize the Academic Support Center (703-247-6818) on the 12th floor. Should extenuating circumstances take place that require a student to stop attending classes, students are responsible for contacting their instructor, School Director, or the Registrar's office on the 10th floor.

Academic Resources: Students are expected to utilize resources such as the campus library for research assignments and academic support center for tutoring needs. Information on these services can be found on the student portal at myaicampus.com.

Student Conduct Policy: The Art Institute of Washington recognizes its students as responsible and dedicated men and women who are preparing for career employment. An integral part of their career and professional development is the expectation that they conduct themselves during the education process in the same manner as will be expected in all employment situations.

As members of The Art Institute of Washington community, students have responsibilities and duties commensurate with their rights and privileges. In this policy, The Art Institute of Washington provides guidance to students regarding those standards of student conduct and behavior that it considers essential to its educational mission. This policy also provides guidance regarding the types of conduct that infringe upon the fulfillment of the Institute's mission. Please refer to the "Student Conduct Policy", page 27, Student Handbook 2012-2013 for more details. http://www.artinstitutes.edu/arlington/pdf/student-handbook.pdf

Academic Honesty at The Art Institute of Washington: As members of the academic community, students are expected to recognize and uphold standards of intellectual and academic integrity. Under all circumstances, students are expected to honestly interface with faculty, administrative staff, and fellow students. In speaking with any member of the college community, students must accurately represent facts, and refrain from dishonorable or unethical conduct related to academic work. Students must submit work that fairly and accurately reflects their level of accomplishment. Any work that is not the product of the student's own efforts is considered dishonest. Engaging in academic dishonesty is a rule infraction with severe consequences for the students.

1. *Academic dishonesty includes, but is not limited to, the following:*
2. *Cheating*
3. *Plagiarism*

4. *Submission of the same work in two or more classes without prior approval of the faculty members of the classes involved*
5. *Submission of any work (full or partial) not actually produced by the student*
6. *Submission of any work without clear acknowledgment (reference/credit) of the original author or creator of the work*

Students proven to have been dishonest in submitting or presenting their work in a class will receive the following sanctions:

- First Offense: you will receive an F for the assignment and meet with your program director
- Second Offense: you will receive and F in the course in which you committed the second offense and will need to meet with the Dean of Academic Affairs
- Third Offense: you will be dismissed from The Art Institute of Washington

Record of any incidents will be kept in the student's fill—this procedure is in place for all a student's classes collectively. If such an incident occurs and you would like to file a written appeal, you may do so with the academic director of the department.

Portable Communication Devices: The Art Institute of Washington is committed to providing an atmosphere that enables the highest quality of student learning. In order to ensure the maintenance of such an environment, The Art Institute of Washington prohibits the use of portable telecommunications devices (cell phones, pagers, mp3 players, radios, etc.) in classrooms during class meetings. Such devices should be disabled prior to class periods to prevent their inadvertently sounding during classes. Failure to adhere to this regulation may result in grade adjustments, dismissal from class, and/or additional disciplinary action. Page 8, Student Handbook 2012-2013. http://www.artinstitutes.edu/arlington/pdf/student-handbook.pdf

Attendance Policy: The Art Institute of Washington 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 absences 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 states 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 and you have a documented mitigating circumstance, 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) 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.

Unearned F (UF) Grade: Students who failed the course *and* did not complete the final assignments in the course. Final assignments include, but are not limited to: final exam, final project, final paper, portfolio presentation, capstone project, or any assignment due in the last week of the course. If a student completed some or any 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 graded will be reflected as a "UF" grade on the transcript. The course's instructor will award this grade when appropriate.

Student Evaluation/Methods of Assessment:

Grading: Grading is based on culmination of points (think XP). Points are earned by completing various challenges. Point values for these challenges are based on their complexity and difficulty. Something easily accomplished (for example, submitting a URL) would have a lower point value than something of higher difficulty (for example, presenting a completed, working website). See below for an outline of types of challenges and their point values. Note that some of these are required, some are optional, and some may be completed multiple times for additional points.

Points awarded for a given challenge are based on effort towards the challenge and level of completion. Work must be officially submitted, per challenge instructions, for points to be awarded. Conversely, work not submitted or work not submitted correctly will receive 0 points. Late work may not received the full amount of points available.

Assignments: All assignments (aka challenges) and assignment details are posted to my faculty site, http://pk311.aisites.com. Assignments will have a corresponding placeholder, typically a link to the assignment, in the eCompanion course shell. The following tasks and activities can be completed for points:

- **Kata**, 50pts each: Required exercises designed to expand and enhance your understanding of programming techniques and concepts. These exercises can be completed multiple times for additional points.

- **Dojo**, 50pts each: These are in class activities, completed as a group (or guild), where coding problems are identified, tackled, and refined in an iterative and interactive process. These are typically required. When in class, you are expected to participate.

- **Crafting**, 100pts each: These assignments are about taking the skills learned and applying them towards designing, building, and publishing programs. All crafting assignments are required. Also, crafting is not strictly pixel- or code-based. Crafting can also include concept development and content development.

- **Bosses**, small (50pts), medium (100pts), and large (200pts): Bosses come in different shapes and sizes. Sometimes you beat the Boss solo, sometimes as a team. All Bosses are required.

- **Plugged In**, 50pts each class: Did you show up, on time, for class? Are you plugged in—that is, are you an active participant for class?

Levels: Everyone starts at level 0 (n00b) with 0 points. As you gain points by completing tasks and activities, you rise in levels, the highest being 20 (Master). See the chart below for levels and their points values. Your midterm grade is based on your completion percentage towards level 10. Your final grade is based on your completion percentage towards level 17. For example, by midterm you achieved 1400pts, level 8 (just shy of level 9). To reach level 10, you needed 1600pts. 1400 is 87.5% of 1660 (1400 / 1600 * 100). Looking at the grading scale below the levels chart, 87.5 is a B—your grade for midterm.

Grading Scale:

A	100-92	C+	79.9-78
A-	91.9-90	C	77.9-72
B+	89.9-88	C-	71.9-70
B	87.9-82	D+	69.9-67
B-	81.9-80	D	66.9-60
		F	59.9-0

Levels	XP	Rank
Level 20	4000	Master of All Web
Level 19	3700	Unicorn
Level 18	3550	Step <Aside>
Level 17	3400	Lord of the Coders
Level 16	3175	Pikachu
Level 15	2950	Survivor
Level 14	2700	Super Man Ticks
Level 13	2500	Senior Designer
Level 12	2200	Web Developer
Level 11	1900	Designer
Level 10	1600	King Code
Level 9	1450	Virtual Builder
Level 8	1300	Some Man Ticks
Level 7	1125	Supervisor
Level 6	950	Fetcher of Coffee and Donuts
Level 5	700	HTML5 Master
Level 4	500	CSS Wizard
Level 3	350	Code Monkey
Level 2	225	Div Artist
Level 1	100	Intern
Level 0	0	n00b

Class Policies:

Submitting Work: All work must be posted on your student portfolio portal as per department requirements with the URL to the work submitted to the eCompanion course shell (specific instructions are given with each assignment), by the given deadline. It is your responsibility to ensure that all work online is kept up-to-date with the latest versions. It is also your responsibility to acquire alternate means of posting work online if your main account runs out of space. Finally, work not found via your portal will not be grade—this includes any work sent to me via email.

Late Work: Work turned in late will not be awarded the full amount of available points for the assignment. Point values decrease by 5% of the total value, rounded to nearest integer for each day the assignment it late.

Resubmitting Work: Work submitted on deadline may be resubmitted for an improved grade.

Lab Policies: No eating, drinking, smoking, chat/IM, installing software, or any other activity outlawed by the Technology department. Please limit surfing to the activity at hand.

Class Participation: When in class, you are expected to participate in class. That means participating in the activity at hand, be it working on a project, participating in a critique, following the lesson, etc. I urge you to make the most of the time and resources provided by this class and myself. Push yourself to the next level.

Class Conduct: Professional conduct is expected. Respect for classmates, the instructor, and the classroom environment is expected.

Class Communication: Primary communication is through scheduled class time. If necessary, students will be contacted through their student email account. Class assignments and other useful information will be posted at http://pk311.aisites.com. I am also available for IM/Chat on Google Talk/Google+ (pkruep) and AIM (pkruep, Twitter: http://twitter.com/littleberry, and Facebook: https://www.facebook.com/patricia.kruep. You can also email me at pkruep@aii.edu.

Week 11: This course is 11 weeks. That is, we meet 6 hours a week 11 times over the course of the quarter. Classes cancelled for any reason will not be made up. It is strongly recommended to not make plans for the scheduled class time during the 11th week.

Homework: All assignments posted to http://pk311.aisites.com.

Handouts: All course resources or handouts posted to http://pk311.aisites.com. This includes assigned readings.

Saving Work: You are responsible for all of your work. Keep backups of your files. Keep your files organized. School computers and the UAM server are not suitable or safe places to keep your files. It is a good practice to restart a lab computer before plugging in your own drive. On boot, the lab computers are reset to their initial settings. Any virus or other nasties that might be lurking there should be wiped away in the reset.

Student Web Space and Email: Students are required to have the password for their school email and server space by the first week of class.

Faculty Tardiness/Absenteeism: In the event that the instructor is late or absent, students should wait 30 minutes. Students must then circulate an attendance sheet and designate one of their members to scan or clearly photograph the attendance sheet and email the scan/photo to the instructor.

Text and References:
- *Starting Out With Programming Logic and Design, 4th ed.* by Tony Gaddis. This ebook is available via the eCompanion course shell.
- Additional eferences, resources, and articles will be posted to http://pk311.aisites.com as needed.

Technology Needed:
- Internet connection
- Server space for student portal (Student web account is sufficient)
- Text editor (color-coding capability recommended)
- Web browsers (Internet Explorer, Firefox/Mozilla, Safari, Chrome, Opera)
- Word processor and presentation software
- Adobe Acrobat
- Image editing/creating software (as needed)
- Storage media (USB drive/disk recommended)

Materials and Supplies:
- Index cards (4x6 and/or 5x8). These are not precious. You'll be using them like candy. Get many and bring them to class each week.
- Sharpies or other markers for taking notes, sketching out ideas, storyboarding, problem solving, flow charting, etc.
- A rubber ducky
- Notebook for storing class materials

Course Calendar – Content subject to change at the discretion of the instructor.

	Topic/Activity	Assignment	Reading	Due Date
Week 1	Introduction to course and each other Introduction to Computers and Programming	See http://pk311.aisites.com for list of each week's assignments.	See http://pk311.aisites.com for list of each week's reading assignments.	
	Input, Processing, and Output			
Week 2	Input, Processing, and Output			
	Input, Processing, and Output			
Week 3	Modules and Functions			
	Modules and Functions Small Boss			
Week 4	Decision Structures and Logic			
	Decision Structures and Logic			
Week 5	**Midterm** Decision Structures and Logic			
	Medium Boss Repetition Structures			
Week 6	Repetition Structures			
	Repetition Structures			
Week 7	Small Boss Input Validation and Text Processing			
	Input Validation and Text Processing			
Week 8	Working With Arrays			
	Working With Arrays			
Week 9	Menu-Driven and Event-Driven Programs			
	Menu-Driven and Event-Driven Programs			
Week 10	File IO			
	File IO			
Week 11	**Final** Large Boss			
	TBD			