#### New ImageCourse Syllabus

**Course Number:** MM1113

**Course Title:** Intro To Programming Logic

**Class Meetings:** Tuesdays from 8:00 am to 12:00 pm

**Session/Year:** Summer 2012

**Instructor Name:** Rob Huddleston

**Email Address:** rhuddleston@aii.edu

**Phone:** 916-743-3020

**Instructor Availability Outside of Class:** Mondays 12-1, Tuesdays 12-1 and by appointment

## **Intro To Programming Logic**

**Course Description:**  
Students develop and refine basic programming skills. Emphasis is
placed on programming concepts including logic, problem solving,
process flow and flowcharting, syntax and structures, and debugging
and troubleshooting. Students acquire skills needed to design,
develop, and produce practical interactive applications.

**Course Length:** 11 Weeks

**Contact Hours:** 44 Hours

**Lecture:** 22 Hours

**Lab:** 22 Hours

**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, practica, studio work, and other academic work leading
to the award of credit hours.

**Course Competencies:**

* Understand the relationship of information architecture to
  user-centered interface design.
* Research topics and organize ideas into comprehensive
  information structures.
* Identify the components of a knowledge base including
  interfaces, classes, properties, facets, implementations and
  instances.
* Present information structures in industry-standard visual
  formats (flowcharts, Unified Modeling Language 2).
* Work effectively as a team member.
* **Operate a personal computer using current operating
  system interfaces**
  + Use correct terms and definitions to describe the operations
    and applications of computers
  + Summarize hardware characteristics based on configuration,
    compatibility, processing speed, cost, and rendering speed
  + Match appropriate connection devices with external
    equipment
  + Compare and contrast operation systems
  + Describe and apply the major steps in the "imaging chain"
  + Produce documents using word-processing, spreadsheet, and
    database tools
  + Transfer data across platforms
  + Correlate keyboard functions with menu operations
  + Define characteristics of peripheral communications
    standards
  + Demonstrate cross-platform applications
  + Apply database and spreadsheet skills
  + Protect data and equipment through the use of virus
    utilities
  + Perform basic disk maintenance and data retrieval
    operations
* **Use and manage computer hardware peripherals for input,
  output, and storage**
  + Operate difference kinds of peripheral hardware, including
    printers, scanners, external drives, and Wacom tablets
  + Employ appropriate input-output devices
* **Use an Internet browser**
  + Identify the operational characteristics of the Internet and
    intranets as these compare to standalone systems
  + Create and organize directories, folders, and documents using
    file management techniques

**Course Prerequisite:** None

**Recommended Text:** Just Enough Programming Logic
and Design by Joyce Farrell, Course Technology, ©2010, ISBN:
978-1-4390-3957-1

**Method of Instruction:** Lecture and lab

**Materials and Supplies:** None

**Estimated Homework Hours:** 4 hours per week

**Technology Required:** PC or Mac with code
editing tool

**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):

A 100-93

A- 92-90

B+ 89-87

B 86-83

B- 82-80

C+ 79-77

C 76-73

C- 72-70

D+ 69-67

D 66-65

F 64 or below

**Process for Evaluation:**

|  |  |
| --- | --- |
| Attendance and participation | 10% |
| Assignments and Exercises | 50% |
| Mid-term Project | 15% |
| Final Project | 25% |
| **Total** | **100%** |

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

**School Wide 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.

**Additional Grading Policies:**

**Classroom Policy:**

* No food allowed in class or lab at any time. Drinks in
  recloseable 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.
* Attendance is taken hourly. Tardiness or absence is recorded in
  15-minute increments.
* 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.
* It is AI-Sacramento policy that 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.

**School-wide Attendance Policy:**

Students who do not attend any classes for fourteen (14)
consecutive calendar days and fail to notify the Academic Affairs
Department will be withdrawn from school.  In addition, the
student may be involuntarily withdrawn at the discretion of the
Academic Director, and with the approval of the Dean of Academic
Affairs, at any time.

**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 Policy Statement:**

It is our policy not to discriminate against qualified students
with documented disabilities in our educational programs,
activities, or services. If you have a disability-related need for
adjustments or other accommodations in this class see Steven
Franklin, Director of Student Affairs located on the 2nd
 floor or e-mail him at sfranklin@aii.edu. You must inform
your instructors and the Academic Affairs Office before the end of
week one of classes and preferably before the class start.

**Student Assistance Program:**

The college provides confidential short-term counseling, crisis
intervention, and community referral services through the AllOne
Health Student Assistance Program (SAP) for a wide range of
concerns, including relationship issues, family problems,
loneliness, depression, and alcohol or drug abuse. Services are
available 24 hours a day, 7 days a week, at 1.888-617-3362. The
Student Affairs office also offers programs on mental
health-related topics each quarter. If you have any questions
regarding counseling services, please contact the Student Affairs
office.

**Library Operation Hours:**

The library is open from 8 AM to 8 PM Monday ? Thursday, 8 AM to
5 PM on Friday and 9 AM to 2 PM on Saturday. The library is closed
on Sunday.  Computers are available during these hours for
students to work on classroom projects.

##### Course Outline

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| --- | --- |
| **Meeting #**1  Jul 10th, 2012 | Lecture: Overview of course. Introduction to Object and Scripting Languages. Introduction to flowcharting and writing pseudocode.  Lab: Create a flowchart of the interaction required for a basic game. Write pseudocode for a portion of the game.                          Homework: Complete work on flowchart and pseudocode started in class. |
| **Meeting #**2  Jul 17th, 2012 | Lecture: Program Structures                          Lab: Flowchart more complex programs using proper logical structures                          Homework: Finish flowcharts |
| **Meeting #**3  Jul 24th, 2012 | Lecture: Making Decisions                          Lab: Create the flowchart for a more complex game and a web login interface.                          Homework: Finalize flowcharts. |
| **Meeting #**4  Jul 31st, 2012 | Lecture: Looping                          Lab: Integrate loops into a program's structure                          Homework:  Complete class work. |
| **Meeting #**5  Aug 7th, 2012 | Lecture: Arrays                          Lab: Demonstrate understanding of arrays and complex data structures.                          Homework: Complete any outstanding class work. |
| **Meeting #**6  Aug 14th, 2012 | Lecture: Functions                          Lab: Rewrite any earlier example using functions.                          Homework: Finish code rewrite. |
| **Meeting #**7  Aug 21st, 2012 | Lecture: Object Oriented Programming.                          Lab: Flowchart an application using OOP concepts.                          Homework: Finish flowcharts |
| **Meeting #**8  Aug 28th, 2012 | Lecture: Putting it together: JavaScript introduction                          Lab: Integrate JS with HTML and CSS.                          Homework: Finish introductory JavaScript assignment. |
| **Meeting #**9  Sep 4th, 2012 | Lecture: More JavaScript.                          Lab: Expand on last week's project.                          Homework: Finish expanded JavaScript project. |
| **Meeting #**10  Sep 11th, 2012 | Lecture: More JavaScript  Lab: Begin work on final project |
| **Meeting #**11  Sep 18th, 2012 | Lab: Present final projects |