#### New ImageCourse Syllabus

**Course Number:** MM3323

**Course Title:** Advanced Web Based Programming

**Class Meetings:** Fridays from 5:30 pm to 9:30 pm

**Session/Year:** Summer 2012

**Instructor Name:** William Mead

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

**Phone:** 530-219-8998

**Instructor Availability Outside of Class:** On Fridays from 4 pm to 5 pm and by appointment

## **Advanced Web Based Programming**

**Course Description:**  
This course is an exploration of scripting and programming
languages used to develop advanced "server-side" Web applications.
Students learn how to create programs capable of storing and
retrieving data from servers supporting advanced interactivity.

**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 differences between client-side, server-side,
  and server-parsed languages
* Understand the basics of server, as opposed to workstation
  design and software
* Understand common web server software (e.g., Apache, IIS)
  configuration the differences between client-side, server-side, and
  server-parsed languages
* Understand how CGI (Common Gateway Interface) links web forms
  to back-end programs
* Apply basic Perl to create a functional CGI script
* Understand how server-parsed languages allow access to server
  variables and resources
* Apply basic PHP to create a functional server-parsed
  program
* Understand the basics of web-database links
* Understand the use of CGI and PHP in e-commerce systems

**Course Prerequisite:** MM2233 Intermediate Web-based Programming

**Recommended Text:** Murach by Joel Murach, Mike
Murach & Associates, ©2010, ISBN: 978-1890774561

**Method of Instruction:** Lecture and Lab

**Materials and Supplies:** Digital storage device,
notepad and pen

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

**Technology Required:** Computer lab, Adobe
Creative Suite, XAMPP or similar, Internet Access

**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:**

|  |  |
| --- | --- |
| Assignments and Exercises | 50% |
| Mid-Term Project | 15% |
| Final Project | 25% |
| Participation | 10% |
| **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.

**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 13th, 2012 | **Lecture:** Understanding server side scripting  **Lab:** Basic Language fundamentals, part 1, Include function  **Homework:** Dice game project |
| **Meeting #**2  Jul 20th, 2012 | **Lecture:** Loops, Arrays and Conditionals  **Lab:** Basic language fundamentals, part 2  **Homework:** Dice game expanded |
| **Meeting #**3  Jul 27th, 2012 | **Lecture:** Forms, User Input and Regular Expressions  **Lab:** Building forms and passing data to the server  **Homework:** Output user data assignment |
| **Meeting #**4  Aug 3rd, 2012 | **Lecture:** Introduction to Databases and Storing Information  **Lab:** Connecting to MySQL and adding records.  **Homework:** Build your member table. |
| **Meeting #**5  Aug 10th, 2012 | **Lecture:** The power of CRUD and the importance of Security  **Lab:** Adding functionality to our member table  **Homework:** Implement CRUD in member table |
| **Meeting #**6  Aug 17th, 2012 | **Lecture:** Session Variables, Authentication and Encryption  **Lab:** Further expanding the Member Database Application  **Homework:** Work on Member Database Project |
| **Meeting #**7  Aug 24th, 2012 | **Lecture:** PHP, images and the GD2 library  **Lab:** Upload images with PHP, resize and create thumbnails.  **Homework:** Work on Member Database Project. |
| **Meeting #**8  Aug 31st, 2012 | NO CLASS - Labor Day! |
| **Meeting #**9  Sep 7th, 2012 | **Lecture:** Pagination and creating view options  **Lab:** Adding pagination to the member database  **Homework:** Work on Member Database Project. |
| **Meeting #**10  Sep 14th, 2012 | **Lecture:** Using PHP to write to files  **Lab:** Create a log file for Member Database Project  **Homework:** Work on Member Database Project. |
| **Meeting #**11  Sep 21st, 2012 | **Lecture:** Final Project Presentations  **Lab:** Final project assessments  **Homework:** none |