COURSE SYLLABUS COM288: Internet Programming II

Course Description

This course expands on the foundational web programming skills learned in COM 287. The present course expands those capabilities through the introduction of JavaScript and the related technologies, AJAX and DHTML. This course of study provides the student with in depth client side scripting capabilities. Industry standard software testing and debugging techniques are also introduced.

General Course Information

Number of Units/Weeks	4/10
#Hours Lecture/#Hours Laboratory/#Hours Homework	30/20/60
Prerequisite(s)	COM287
Co-requisites (s)	None
Course Developer(s)	Charlie Morgan, B.A.
Date Approved / Last Review	March 2007 / December 2013

Learning Outcomes

- Use the standard programming structures and objects to author industry standard web based software
- Create interactive web forms with client side scripts providing validation of user input
- Create dynamic web pages using DHTML, a synergy created by combining the capabilities of HTML, CSS and Javascript
- Combine Javascript with server side scripts and XML, termed AJAX or Asynchronous Javascript, to provide real time updates to web pages
- Understand and utilize industry standard techniques for program debugging and testing

Instructional Methods Employed in this Course

- Lecture and reading assignments
- Hands-on exercises and labs
- Research
- Practical application of theory and skills in authentic Internet
- Build on prior knowledge and experience of students to enhance richness of class activities

Information Resources for this Course

Textbook

Gosselin, Don. <u>Javascript</u>. 4th edition. Florence, KY: Course Techonology, 2008. ISBN-13: 978-1-4239-0150-1



Web Site Readings

ECMA International. Home Page

http://www.ecma-international.org/publications/files/ECMA-ST/ECMA-262.pdf Retrieved April 27, 2010

World Wide Web Consortium. Home Page. http://www.w3c.org Retrieved September 11, 2009

W3 Schools. Home Page. http://w3schools.com
Retrieved September 11, 2009

Table/Topics & Assignments

Types of Assignments:

Lecture -

Considered Lecture Hours

Classroom Discussion -

Considered Lecture Hours

In Class Critique -

Considered Lecture Hours

Delivering Oral Presentations -

Considered Lecture Hours

In Class (IC) Exercise -

Considered Lecture Hours

Reading -

Considered Homework (HW), work done outside of class

WebClass lesson (non-online courses) -

Considered HW, work done outside of class

Lab Work -

Considered Lab Hours

Quiz, Midterm or Final -

Considered Lecture Hours

Week 1						
		LEC	LAB	HW	Point	
Type	Topic/Description	Hours	Hours	Hours	Value	Due

LAB 1A	Page Content		2		5	Week 2
HW 1A	Read Chapters 1 (50 pages) Evaluated by HW 2B			5.0		
HW 1B	Review Questions: Chapter 1 20 Questions			2.6	0	Week 2
Total Week 1		3	2	7.6	5	
Week 2						
Туре	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 2A	Working with Data Types and Operators	3				
LAB 2A	Project 2: Basic Javascript I		2		5	Week 3
HW 2A	Read Chapter 2 (41 pages) Evaluated by HW 3B			4.1		
HW 2B	Review Questions: Chapter 2 20 Questions			2.7	0	Week 3
Total Week 2		3	2	6.8	5	
I Olai Week Z			_	0.0		
Week 3		O	2	0.0	ū	
Week 3	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
	Topic/Description Functions, Events and Control Structures	LEC	LAB	HW	Point	Due
Week 3	Functions, Events and Control	LEC Hours	LAB Hours	HW Hours	Point Value	Due Week 4
Week 3 Type LEC 3A	Functions, Events and Control Structures Project 3: Basic	LEC Hours	LAB Hours	HW Hours	Point Value	
Type LEC 3A LAB 3A	Functions, Events and Control Structures Project 3: Basic Javascript II Read Chapter 3 (42 pages) Evaluated	LEC Hours	LAB Hours	HW Hours	Point Value	
Type LEC 3A LAB 3A HW 3A	Functions, Events and Control Structures Project 3: Basic Javascript II Read Chapter 3 (42 pages) Evaluated by HW 4B Review Questions: Chapter 3	LEC Hours 3	LAB Hours	HW Hours 4.2	Point Value	Week 4
Type LEC 3A LAB 3A HW 3A HW 3B	Functions, Events and Control Structures Project 3: Basic Javascript II Read Chapter 3 (42 pages) Evaluated by HW 4B Review Questions: Chapter 3	3	LAB Hours 2	HW Hours 4.2 2.5	Point Value 5	Week 4
Type LEC 3A LAB 3A HW 3A HW 3B Total Week 3	Functions, Events and Control Structures Project 3: Basic Javascript II Read Chapter 3 (42 pages) Evaluated by HW 4B Review Questions: Chapter 3	3	LAB Hours 2	HW Hours 4.2 2.5	Point Value 5	Week 4
Type LEC 3A LAB 3A HW 3A HW 3B Total Week 3 Week 4	Functions, Events and Control Structures Project 3: Basic Javascript II Read Chapter 3 (42 pages) Evaluated by HW 4B Review Questions: Chapter 3 20 Questions	LEC Hours 3 3	2 2 LAB	HW Hours 4.2 2.5 6.7	Point Value 5 0 Point	Week 4

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HW 4A	Read Chapter 5 (44 pages) Evaluated by HW5B			4.4		
HW 4B	Review Questions: Chapter 5 20 Questions			2.8	0	Week 5
Total Week 4		3	2	7.2	5	
Week 5						
Туре	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 5A	Strings and Arrays	2				
LAB 5A	Project 5: Manipulating Strings and Arrays		2		5	Week 6
HW 5B	Read Chapter 7 (39 pages) Evaluated by HW 6B			3.9		
HW 5C	Review Questions: Chapter 7 20 Questions			2.7	0	Week 6
EXAM 5A	Midterm Exam	1			25	Week 5
Total Week 5		3	2	6.6	30	
Week 6						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
Type LEC 6A	Topic/Description Debugging and Error Handling	LEC Hours	LAB Hours	HW Hours	Point Value	Due
<u> </u>	-	Hours	Hours	Hours	Value	Due Week 7
LEC 6A	Debugging and Error Handling Project 6: Making It	Hours 3	Hours 	Hours 	Value 	
LEC 6A LAB 6A	Debugging and Error Handling Project 6: Making It Work Read Chapter 8 (43 pages) Evaluated	3	Hours 2	Hours 	Value 5	
LEC 6A LAB 6A HW 6A	Debugging and Error Handling Project 6: Making It Work Read Chapter 8 (43 pages) Evaluated by HW 7B Review Questions: Chapter 8	3	Hours 2	+ Hours 4.3	5	Week 7
LEC 6A LAB 6A HW 6A HW 6B	Debugging and Error Handling Project 6: Making It Work Read Chapter 8 (43 pages) Evaluated by HW 7B Review Questions: Chapter 8	3	2	+ Hours 4.3 1.7	5 0	Week 7
LEC 6A LAB 6A HW 6A HW 6B Total Week 6 Week 7	Debugging and Error Handling Project 6: Making It Work Read Chapter 8 (43 pages) Evaluated by HW 7B Review Questions: Chapter 8 20 Questions	3 3	2 2 LAB	+ Hours 4.3 1.7 6	5 0 Point	Week 7 Week 7
LEC 6A LAB 6A HW 6A HW 6B Total Week 6	Debugging and Error Handling Project 6: Making It Work Read Chapter 8 (43 pages) Evaluated by HW 7B Review Questions: Chapter 8 20 Questions Topic/Description Document Object	3 3	2 2	+ Hours 4.3 1.7 6	5 0	Week 7
LEC 6A LAB 6A HW 6A HW 6B Total Week 6 Week 7 Type	Debugging and Error Handling Project 6: Making It Work Read Chapter 8 (43 pages) Evaluated by HW 7B Review Questions: Chapter 8 20 Questions	Hours 3 3 LEC Hours	2 2 LAB Hours	+ Hours 4.3 1.7 6 HW Hours	5 0 Point	Week 7 Week 7

HW 7B	Review Questions: Chapter 10 20 Questions			1.6	0	Week 8
Total Week 7	20 Questions	3	2	4.3	5	
Week 8						
Туре	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 8A	DHTML	3				
LAB 8A	Project 8: Animated Web Page		2		5	Week 9
HW 8A	Read Chapter 11 (30 pages) Evaluated by HW 9A			3.0		
HW 8B	Review Questions: Chapter 11 20 Questions			1.9	0	Week 9
Total Week 8		3	2	4.9	5	
Week 9						
Туре	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 9A	AJAX	3				
LAB 9A	Project 9: AJAX Program		2		5	Week 10
HW 9A	Read Chapter 12 (36 pages) Evaluated by HW 9B			3.6		
HW 9B	Review Questions: Chapter 12 20 Questions			1.7	0	Week 10
Total Week 9		3	2	5.3	5	
Week 10						
Туре	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 10A	Course Wrap Up	3				Duo
HW 10A	Course Wrap Up - Review Chapters 7, 8, 10-12. Evaluated in Exam 10B			4.6		
EXAM 10A	Debug Test		1		5	Week 10
EXAM 10B	Final Exam		1		25	Week 10
Total Week 10		3	2	4.6	30	

Course Hours Summary

Week	Topic	LEC Hours	LAB Hours	HW Hours
1	Introduction to Course / Introduction to JavaScript	3	2	7.6
2	Working with Data Types and Operators	3	2	6.8
3	Functions, Events and Control Structures	3	2	6.7
4	Form Validation	3	2	7.2
5	Strings and Arrays	3	2	6.6
6	Debugging and Error Handling	3	2	6
7	Document Object Model	3	2	4.3
8	DHTML	3	2	4.9
9	AJAX	3	2	5.3
10	Course Wrap Up – Review Chapters 7,8,10-12	3	2	4.6
Total		30	20	60

Table/Point Breakdown

Assignment	Possible Points	Percent of Grade
Projects 1: Adding Web Page Content:	45	45%
Midterm Exam	25	25%
Debug Test	5	5%
Final Exam	25	25%
	100	100%

Your Grades for this Course

Your final grade for this course will be based on an assessment by the Instructor of your performance on a number of course activities, which may include objective tests, classroom exercises, laboratory demonstrations, project papers, or other types of activities. The chart below indicates in what activities you will engage, how many possible points can be earned for each activity, and the percentage of your final grade that will be accounted for by each activity.

Students in this course should be graded following Coleman University assessment practices and policies. A point system is used in the University to indicate student performance on various required activities or projects. For this course, it is recommended that points be distributed as follows:

Coleman University Grade Assignment Policy:

Percent	Letter Grade	Grade Points
94-100	Α	4
90-93	A-	3.67

87-89	B+	3.33
84-86	В	3
80-83	B-	2.67
77-79	C+	2.33
74-76	С	2
70-73	C-	1.67
67-69	D+	1.33
64-66	D	1
60-63	D-	0.67
N/A	INC	0
N/A	W	0
60 or above	CR	0
59 or below	NC	0
N/A	I	0
N/A	W	0
N/A	AU	0
N/A	TR	0
N/A	WV	0

Legend			
CR = Credit	NC = No Credit		
	W = Course		
I = Incomplete	Withdrawal		
AU = Audit	TR = Transfer Credit		
WV = Waiver			

Academic Accommodation / Adjustment Policy:

In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), Coleman University offers accommodations to students with documented physical, psychological, and/or cognitive disabilities. Coleman University will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to offer equal educational opportunities to qualified disabled individuals.

To qualify for an academic accommodation under ADA, the student must provide adequate documentation of a disability. Students seeking academic accommodations should contact the campus ADA Coordinator at 858-966-3953 or via email at ada@coleman.edu. The ADA Coordinator will review the documentation provided and verify ADA coverage. Students covered under ADA must meet with the ADA Coordinator at the beginning of every term to determine the appropriate academic accommodations. Failing to meet with the ADA Coordinator at the beginning of every term may impact the availability of accommodations.

After the academic accommodations have been determined, the students' instructors will be notified by the ADA Coordinator. If any problems or concerns regarding the provision of accommodations occur, the student must inform the ADA Coordinator. If the student feels accommodation is not being made appropriately, the student may follow the published Student Grievance Procedures.