IST400/600 Scripting for Games

School of Information Studies, Syracuse University

Spring 2010

Instructor:	Keisuke Inoue	Days:	Monday and Wednesday
E-mail:	kinoue@syr.edu	Time:	5:15 – 6:35
Phone:	315.569.4295	Room(s):	Monday: HOL 107
Office:	TBA		Wednesday: Hinds Hall 010
Office Hours:	TBA		

COURSE DESCRIPTION

This course will teach students the basics of scripting through hands-on activities implementing various online games. Scripting refers to writing (or customizing) and executing editable components of a computing environment. Scripting can generally be done by anyone with a basic knowledge of scripting languages (e.g. JavaScript, VBScript, Perl, PHP, etc.). Scripting languages are not used only by programmers: web developers use them to create interactive web pages; bloggers use them to customize their blog sites; business analysts, to run statistical analysis; and game designers, to control behaviors of game characters, and so on. Scripting languages use logic and syntax similar to full-blown programming languages underlying application software or enterprise systems (e.g. Java, C++), but are simpler and thus easier to learn in general. The class will be using JavaScript, the scripting language that is widely used for various web technologies. Students will learn basic principles of scripting and best practices related to designing and implementing application software. By the end of the course, students will be able to design and implement their own game by scripting.

PREREQUISITE

None.

OBJECTIVES

- Students will be introduced to the principles of scripting and learn fundamental concepts applicable to a range of scripting languages.
- Core principles of software development will be taught in a hand-on approach that allows students to create their own series of increasingly complex applications.
- In conjunction with the mechanics of game construction, students will be prompted to consider elements of the user interface when designing and building their applications.

TEXTBOOK

Neither of the campus bookstores (SU Bookstore and Orange Bookstore) does not stock the textbook, because they are out of print at the publisher as of January 11th, 2010. Students are encouraged to purchase their textbook elsewhere, including online stores listed below. The SU bookstore is currently contacting the publisher to obtain the permission to make photocopies.

TITLE:	Beginning Scripting Through Game Creation		
AUTHOR:	Jeanie Meyer	EDITION:	1
PUBLISHER:	Course Technology PTR	PRICE:	$29.99
ISBN 10:	1598635115	ISBN 13:	9781598635119
AMAZON:	http://amzn.com/1598635115		
CAMPUS-BOOKS:	http://www.campusbooks.com/books/computers-internet/general/9781598635119_Jeanine-Meyer_Beginning-Scripting-Through-Game-Creation.html		

COURSE SCHEDULE

Week	Date	Topic	Textbook Chapter	Example Lab Outcomes
1	Jan. 20	**Basic Principles of Scripting** • What is scripting? • Scripting languages and applications • Development environment • HTML Basics Part I • First JavaScript Statement	JM 1	Simple web pages with JavaScript
2	Jan. 25, Jan. 27	**Basic Syntax** • Defining functions • Defining variables • If-statement • HTML Basics 2 (Forms) **Game Design Basics** • Flowchart	JM 2	"Campus Life"
3	Feb. 1, Feb. 3	**Numbers** • Arithmetic operations • Random number generator **Quiz #1 (JM 1, 2)**	JM 3	"Campus Life" with scores
4	Feb. 8, Feb. 10	**Event Handling** • Event handing • Images **Quiz #2 (JM 3)**	JM 4	"Find Daniel" (from book)
5	Feb. 15, Feb. 17	**Using Timer** • Timer	JM 4	"Find Daniel" (from book)
	Feb. 22	**Midterm Project Design (Grad Student ONLY) Due**		
6	Feb. 22, Feb. 24	**Variables and Datatypes** • String • Character • Boolean • Array **Quiz #3 (JM 4)**	JM 5	"Hangman"
7	Mar. 1, Mar. 3	**Application State** • Global variables and local variables **Quiz #4 (JM 5)**	JM 6, 7	"Craps" (from book)
8	Mar. 8, Mar. 10	**Midterm Review and Exam** **Topic:** JM1-JM7		
	Mar. 15, Mar. 18	**Spring Break**		
	Mar. 22	**Midterm Project (Grad Student ONLY) Due**		
9	Mar. 22, Mar. 25	**JavaScript Basic 2** • More with Arrays • Loop statement	JM 8	"Memory Game" (from book)
10	Mar. 29, Mar. 31	**Object Oriented Programming** • Class and objects • Defining classes • Creating objects • Using objects **Quiz #5 (JM8)**	JM 9	"Picture Quiz" (from book)
	Apr. 5	**Final Project Design Due**		
11	Apr. 5, Apr. 7	**Advanced Topics I (Sound)** **Quiz #6 (JM9)**		TBD

12	Apr. 12 Apr. 14	**Advanced Topics II (Animation)** • User experience **Quiz #7 (Sound)**	JM 10	"Bouncing Ball" (from book)
13	Apr. 19, Apr. 21	**Advanced Topics III (Game Engine)** • Using Google Earth API **Quiz #8 (JM 10)**		TBD
14	Apr. 26, Apr. 28	**Final Project Workshop**		
	May 3	**Final Project (All Students) Due**		
15	May 1, May 3	**Final Project Presentation** **Final Exam Review**		
	May 6 – May 12	**Final Exam** **Topics:** JM1-JM7		

GRADING POLICY

The grade will be determined by the overall points that each student accumulates throughout the semester:

- Quizzes: 80 pts
- Lab performance: 120 pts
- Midterm project (graduate students only): 100 pts
- Midterm exam: 100 pts
- Final project 150 pts
- Final project presentation 30 pts
- Final exam 120 pts

Here is the grading scale:

A:	94-100%
A-:	90-93%
B+:	87-89%
B:	84-86%
B-:	80-83%
C+:	77-79%
C:	74-76%
C-:	70-73%
F:	< 70%

ACADEMIC CONDUCT

Undergraduate, graduate and doctoral students enrolled in IST courses are required to follow the guidelines for academic honesty described in the School of Information Studies Statement on Academic Integrity, available in any iSchool Student Handbook, on the web at http://ischool.syr.edu/courses/advising/academic.aspx or on request at the iSchool Student Services office in Hinds Hall. Academic dishonesty includes, but is not limited to: plagiarism, cheating on examinations, unauthorized collaboration, multiple submission of work, misuse of resources for teaching and learning, falsifying information, forgery, bribery, and any other acts that deceive others about one's academic work or record. Students who are new to the University must learn our standards of academic practice. Students who have questions about what constitutes academic integrity should consult this document, their faculty advisors, and instructors. Students should also be aware that standards for documentation and intellectual contribution may depend on the course content and method of teaching, and should consult instructors for guidance.

ACADEMIC INTEGRITY

The academic community of Syracuse University and of the School of Information Studies requires the highest standards of professional ethics and personal integrity from all members of the community. Violations of these standards are violations of a mutual obligation characterized by trust, honesty, and personal honor. As a community, we commit ourselves to standards of academic conduct, impose sanctions against those who violate these standards, and keep appropriate records of violations. The academic integrity statement can be found at: http://supolicies.syr.edu/ethics/acad_integrity.htm

COMPUTER LITERACY SKILLS

Graduate students are expected to meet the minimum and recommended information technology literacy skills required of students in all School of Information Studies master's programs.

STUDENTS WITH DISABILITIES

In compliance with section 504 of the Americans with Disabilities Act (ADA), Syracuse University is committed to ensure that "no otherwise qualified individual with a disability…shall, solely by reason of disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity…" If you feel that you are a student who may need academic accommodations due to a disability, you should immediately register with the Office of Disability Services (ODS) at 804 University Avenue, Room 309 3rd Floor, 315.443.4498 or 315.443.1371 (TTD only). ODS is the Syracuse University office that authorizes special accommodations for students with disabilities.

iSCHOOL LERANING MANAGEMENT SYSTEM (ILMS)

The School of Information Studies uses a Web-based teaching and learning environment called Blackboard. Most IST campus courses use Blackboard as a supplement to classroom activities and all distance learning courses are conducted in Blackboard. Access to Blackboard is available at the following URL: https://ilms.syr.edu. Your professor will let you know the date the course will be available on Blackboard. Questions regarding Blackboard itself should be directed to istwebct@syr.edu or Peggy Brown at 315-443-9370.

OWNERSHIP OF STUDENT WORK

In compliance with the Federal Family Educational Rights and Privacy Act, works in all media produced by students as part of their course participation at Syracuse University may be used for educational purposes, provided that the course syllabus makes clear that such use may occur. It is understood that registration for and continued enrollment in a course where such use of student works is announced constitutes permission by the student. After such a course has been completed, any further use of student works will meet one of the following conditions: (1) the work will be rendered anonymous through the removal of all personal identification of the work's creator/originator(s); or (2) the creator/originator(s)' written permission will be secured. As generally accepted practice, honors theses, graduate theses, graduate research projects, dissertations, or other exit projects submitted in partial fulfillment of degree requirements are placed in the library, University Archives, or academic departments for public reference.