

August 22, 2011

CGT 353 Principles of Interactive and Dynamic Media

<http://www2.tech.purdue.edu/cgt/courses/cgt353>

Fall 2011

Course Syllabus

CGT 353 Principles of Interactive and Dynamic Media. Class 2, lab. 2, cr. 3.

This course explores the development of interactive and dynamic media components for web and interactive media products. The course examines the design, creation, and integration of 2D animation, 2D games, text, sound, video, programming, and databases for use in web and other interactive media.

Prerequisites: **CGT 216.** Authorized equivalent courses or consent of instructor may be used in satisfying course pre- and co-requisites.

Recommended Co-Requisite or Prerequisite: **CGT 356.** Some of the content of the class builds upon knowledge that is covered in-depth in CGT 356.

Course Supervisor: Professor R.J. Glotzbach

Office: 319 Knoy Hall of Technology

Phone: 496-2953

Email: rjglotzbach@purdue.edu

Course Learning Outcomes

Upon completion of CGT 353, students will be able to:

1. Develop skill and proficiency in creating professional vector animations and interactive components using Adobe Flash.
2. Demonstrate understanding of ActionScript programming.
3. Develop beginning to moderately complex games.
4. Integrate Adobe Flash with PHP, MySQL, and XML using ActionScript.
5. Further understand the emerging capabilities of delivering Web content.
6. Further examine the advantages, disadvantages, and limitations of multimedia content on the Web.
7. Extend the students ability to systematically develop content for the Web, from concept to implementation.
8. Further the students' cognitive skills in problem solving, debugging, and programming.

Weekly Topics

(The weekly topics are subject to change at any time by the course administrator. For the most up to date weekly topics, see the course website. There is typically one week of vacation time during the year that is not listed here. For this reason, a 15-week schedule is listed.)

Week	Lecture	Lecture	Lab
Week 1	- Introduction to the Course - Introduction to Rich Internet Applications, Background, and Possibilities - Implications of Flash / Getting Started and Tour	- Drawing and Painting / Graphics and Layers - Symbols, Instances, and Libraries	Lab 01: Animation, Character Setup, and Repetitive Motion
Week 2	- Symbols, Instances, and Libraries - Integrating Audio	Project 1 Intro	Lab 02: Integrating Sound and Audio Controls
Week 3	Integrating Video/ Video Demo	Tweens and Animation	Lab 03: ActionScript - Pre-Loaders
Week 4	Integrating text	Inverse Kinematics	Lab 04: Inverse Kinematics
Week 5	ActionScript 101	Implementation, Distribution, and Optimization	Working lab
Week 6	AS basics and scripting refresher Pt 1/ Pt 2 / loading assets demo, basic sites demo	Project 2 Intro Project 1 due	Lab 05: Web Site Building I - basic site
Week 7	Peer Review	The Display List / Event Handling	Lab 06: Web Site Building II
Week 8	XML	Exam Review	Working lab
Week 9	Midterm Exam: In Class what to study	Extended Notes I, Extended Notes II Data Integration , Extended Notes	Lab 07: Web Site Building III - Optimization, XML, programmatic tweens
Week 10	Shared Objects/ Keys to a "A" Project	Intro to Flash Gaming and Basic Physics	Working Lab
Week 11	Game Building Demo	Flash Gaming - Collision Detections and Reactions	Lab 08: Project 2 due / Game Building I & II
Week 12	Liquid GUI Demo PHP, MySQL, & Flash Demo	Final Project Intro	Lab 9: Liquid GUI, PHP, MySQL, & Flash
Week 13	Scrolling Banner Demo	PHP / Database interactivity	Lab 10: Scrolling Banner
Week 14	Testing and Assessment Pt 1 / Pt 2	CGT 411 Presentations	Lab 11: Polling application Lab 12: Interactive menu
Week 15	Final Exam Review	Course Wrap-up Instructor Evaluations (10 pts)	Instructor Eval Lab 13: Video gallery Lab 14: 411 Presentations

Texts & Videos

- *Required*
 - There are no required hard-copy textbooks for this course. All reading assignments will be accomplished through course notes, Web articles, and a number of free online texts available to students using the Safari Books Online Database. While hard-copy textbooks are not required, it is important to note that students are responsible for learning the concepts presented in the class. Those students who feel most comfortable with a hard copy text may wish to purchase one or more of their preference (See Recommended Textbooks.)
 - Assigned and supplementary reading materials are freely available to Purdue students via the Safari Books Online database. [Click here for detailed instructions on using and accessing this database.](#)
 - [Flash CS4: The Missing Manual](#)
 - [Learning ActionScript 3.0, 1st Edition](#)
 - [Essential ActionScript 3.0, 1st Edition](#)
 - [The ActionScript 3.0 Quick Reference Guide, 1st Edition](#)
- *Recommended*
 - [Adobe Flash CS4 Professional Classroom in a Book](#) - Adobe Creative Team, Adobe Press, ISBN-10: 032157382X, ISBN-13: 978-0321573827
 - [ActionScript 3.0 for Adobe Flash CS4 Professional Classroom in a Book](#) - Adobe Creative Team, Adobe Press, ISBN-10: 0321579216, ISBN-13: 978-0321579218
 - [ActionScript 3 Bible](#) - Roger Braunstein, Mims Wright, Joey Lott, Josh Noble, Wiley, ISBN-10: 0470135603, ISBN-13: 978-0470135600
 - [ActionScript 3.0 Game Programming University](#) - Gary Rosenzweig, Que, ISBN-10: 0789737027, ISBN-13: 978-0789737021
 - TIP: Go to <http://www.lib.purdue.edu/> > Select the Database tab > Select "Safari Tech Books Online" from the drop down list > Click Go > then search for the book listed above.
- *Video Tutorials*
 - Each student is required to purchase an Online Training Library (OTL) account (\$39 for the semester) with Lynda.com and view the corresponding course materials and tutorials. [Click here for instructions on purchasing and utilizing a Lynda.com account.](#)

Supplies

- Media (CD-R). You will need at least 6 CD-R disks for project submission.
- Your own personal media to backup labs and projects to. Probably a thumb/flash drive. You *won't* turn this in.
- CD Label kit (to digitally create CD/DVD labels, print them, then stick them to CDs/DVDs)
- 4 Mini-DVD cases (the ultra thin kind) for turning in projects
- 1 Package of 3" x 5" notecards (for attendance and questions)

EVALUATION

Activity	Percentages*
Project 1	15%
Project 2	15%
Project 3	15%
Labs & Quizzes	15%
Midterm Exam	20%
Final Exam	20%
 Total	 100%

*Regardless of the above percentages, any student who completes less than 80% of the assignments will receive an F for the course.

Grading Scale

This course assigns grades as A, B, C, D, F. The +/- system is not used in this course.

90 - 100%	A
80 - 89%	B
70 - 79%	C
60 - 69%	D
0 - 59%	F

Grading Philosophy

Superior work, professional	A
Above average student work	B
Average student work	C
Below average student work	D
Failure	F

Course Administration

- *Lecture and Demonstration*
Lectures will concern the body of knowledge surrounding hypermedia production. The demonstrations will cover specific operations and techniques. You are expected to be at both of these (see Excused Absences below). If you have to miss a lecture or a demonstration, permission for an excused absence must be granted by the professor before the lecture or demo. It is your responsibility to secure all materials and information presented in lecture or demo, even with an excused absence. Lectures and demonstrations will not be repeated. Lectures or demonstrations may be tape recorded with the professor's permission.
- *Excused Absences*
You must clear any absence beforehand with the instructor and the instructor will require documentation before the absence is excused. Absences due to illness or other circumstances beyond your control will be handled on a case-by-case basis and will require documentation.

Note:

- Attendance will be taken during every class meeting.
- A class is defined as one (1) lecture, one (1) demonstration or one (1) lab.
- You may have 3 absences (for any reason) from class without affecting your semester grade (no questions asked).
- Upon the 4th absence from class your final semester letter grade will be reduced by one letter grade.
- Upon the 5th absence you will automatically fail the course.
- Extenuating circumstances will be handled on a case-by-case basis. A case will only be considered "extenuating" if the student has contacted the Office of the Dean of Students and requested an explanation of absence be sent to Professor Glotzbach.

Special Note:

- An additional 5 absences for illness will be allowed this semester. You must present a doctor's note for the absence to fall into this category.
- This means, you can miss class 3 times (above) for any reason, AND you can miss class 5 times for illness, for a total of 8 possible absences before it affects your semester grade.
- *Philosophy*
As a student in a college course you will often be expected to do original analyses of your work and that of others - your peers and recognized professionals. Your ability to plan, evaluate, and critically analyze project goals, guidelines, and problems to create a unique, self-generated solution is a central activity of this course. You will be expected to attend class and laboratory sessions and to turn in assigned work on time. Late work will not be accepted. Failure to do so demonstrates a lack of readiness to handle independent work and may call for individual counseling, loss of course points, or failure.
- *Outside Work*
Outside work will be necessary. Preparatory sketches should be done outside of class. You will not be able to complete the assignments if you work only in class. Files can be passed back and forth between Mac and PC as long as (a) you use a PC disk, and (b) use correct PC 8.3 (ISO 9660 Level 1) file extensions
- *File Security & Disks*
You are responsible for the security of your files. Period. You should have multiple copies on multiple sources (disks, Zip, TCN server, ITaP server) at all times. Given a faulty diskette or other media, the instructor will assist you in attempting to recover lost files. However, ultimately you are responsible for maintaining your digital data. Loss of data, files, or other associated items needed for a project will require that you recreate your work, with no exceptions.

Intellectual Property

For concerns about intellectual property (IP), including IP resulting from student participation in course assignments, see Purdue University's [Policy VIII.4.1, Intellectual Property](#)

Student Conduct and Policies

- The Purdue University Student Conduct Code must be followed.
- No swearing, or derogatory comments about, or towards, any member of the class will be tolerated in any class period.
- Where any type of assignment for this course is concerned, no sexual or sexually suggestive content will be tolerated. No alcohol or drug related sites will be tolerated. No scantily clad or nude people will be tolerated. In general, no inappropriate content will be tolerated. Any of these violations will result in a zero(0) on that exercise, lab, project, exam, or other assignment. Serious violations could result in the student being sent to the Dean of Students. Your work should be something you would be happy to show to your Department Head or the Dean of the School
- No food or drinks of any kind will be allowed in any lab sessions.
- Students are expected to arrive on time for all class and lab sessions.
- Standards set by Purdue University as outlined in the Student Handbook and the University Regulations (1996-1997) will be observed in this course. Students are expected to be present at each and every meeting of the class. In the event that a student must miss a class period, they must inform the supervising instructor of the course of their absence and NOT a teaching assistant (TA). Should the student not be able to reach the instructor they are to leave a message for him/her at their office with the secretary. Should circumstances not allow this, the student may contact the Dean of Students Office and explain their emergency. The Dean's office will then pass the word along to each of the student's professors for them. Upon your return to Purdue, contact the supervising instructor as soon as possible in order to make arrangements for work, handouts, quizzes, or tests that they may have missed. The supervising instructor has the final word on what work, etc. students may be allowed to make up. Every student has the right to appeal to the university any decision made by their supervising instructor.
- Late assignments will not be accepted unless prior arrangements have been made with the Instructor and because of extreme circumstances. (Not coming to lab, or forgetting, doesn't rate as an extreme circumstance.)
- No student will be allowed to make up any written exam, lab practical, exam, or quiz unless they have an official or medical excuse.
- Standards set by Purdue University as outlined in the Student Handbook and the University Regulations (1996-1997) will be observed in this course. Any student found participating in cheating, plagiarism, copying material from another person's disk, using illegal cribs or other materials during a written examination, lying to course instructors and lab assistants about his or her own work, stealing tests, quizzes, or answer keys, and any such activities will be considered in conflict with the printed academic honesty guidelines as set out by Purdue University and the School of Technology. In such cases the matter will be reported to the Office of the Dean and the appropriate Purdue University administration officers for consideration and possible disciplinary action.
- Students who have special needs, i.e. hearing or visually challenged, etc., or in need of tutoring, etc., may contact the Dean of Students Office located in Schleman Hall, Room 207, 494-1747 for further assistance.

Campus Emergencies

In the even of a major campus emergency, course requirements, deadlines, and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. The following are ways to get information about changes in this course:

- Course Web Page
- Course RSS Feed
- My email address: rjglotzbach@purdue.edu
- My office phone: 496-2953
- Preparing for a campus emergency: <http://www.itap.purdue.edu/tlt/faculty/>