Computer and Information Science CISC 1600: Introduction to Multimedia Computing Fall, 2015 (3 hours, 3 credits)

Description. Introduction to multimedia topics, including: web design, game design, animation, data visualization, simulation and robotics. Introduction to multimedia hardware and software, including game boxes. Human interface design and input using multimedia devices. Graphical and other forms of output to multimedia devices. Emphasis on design and creation of web pages with HTML and cascading style sheets; interactive, graphical web-based programs; simple computer games, movies and narratives. Computer-based sound editing. Introduction to agent-based programming for simulations and robotics. Uses of multimedia in industry. Hands-on exercises.

Instructor: Prof. Michael Mandel.

Email: mim@sci.brooklyn.cuny.edu

Phone: 718-951-5600 x2053

Office: 2232N

Web: http://mr-pc.org

Office hours: Wednesdays 3:00–6:00 pm and by appointment

Meetings. Wednesday, 6:30–9:10 pm, IH-5301

Prerequisites. [None]

Textbook. There is no textbook for the course.

Online Resources. Slides, labs, assignments, and readings will be posted on the course website: http://mr-pc.org/teaching/cisc1600

Grading. The course will be graded on a curve, with the final grade computed by combining individual assignments as follows:

| Participation / attendance | 10% |
|----------------------------|-----|
| Projects (x4) | 40% |
| Homeworks (x2) | 8% |
| Midterm | 12% |
| Final exam | 30% |

All homeworks and projects should be turned in at the *beginning* of the corresponding class period.

Attending class is mandatory and attendance will be taken at the beginning of every meeting. This rule does not apply to absences due to religious observances, as described on page 72 of the Undergraduate Bulletin.

Course Objectives. Students will be able to:

- (1) Design and construct web pages.
- (2) Write simple interactive web-based programs.
- (3) Understand the concept of a simple program, like a recipe.
- (4) Understand the concept of reading data, storing data in a program, manipulating data and outputting data.
- (5) Understand the concept of iteration, that is, doing something multiple times.

- (6) Understand the concept of automated decision-making.
- (7) Convert a design into a program consisting of small, simple parts.
- (8) Understand the parts of a multimedia system and how they interact.
- (9) Understand the interplay between design and implementation.
- (10) Understand aspects of human subjects research and usability

Course Topics.

- (1) Introduction to Web Programming and Web Design:
 - Intro to HTML5, CSS, Javascript
 - WWW vs. Internet; client-server model
 - Principals of web design
- (2) Game Programming and Narrative
 - Intro to Scratch
- (3) Agent-based Programming, Simulation and Robotics
 - Intro to NetLogo
- (4) Graphics and Interactive Programming
 - Intro to Processing

Required material. Please bring a USB flash drive to class for submitting assignments.

Key Dates. There will be one midterm exam in class on October 14, 2015, and a final exam on December 16, 2015 from 6 to 8pm. Please see the course website for a list of all assignment due dates.

University policy on Academic Integrity. The faculty and administration of Brooklyn College support and environment free from cheating and plagiarism. Each student is responsible for being award of what constitutes cheating a plagiarism and for avoiding both. The complete text of the CUNY Academic Integrity Policy and the Brooklyn College procedure for policy implementation can be found at http://www.brooklyn.cuny.edu/bc/policies. If a faculty member suspects a violation of academic integrity and, upon investigation, confirms that violation, or if the student admits the violation, the faculty member MUST report the violation.

Course policy on Academic Integrity. While you are encouraged to discuss the course material and assignments with your classmates and anyone else you might like, all submitted assignments must be *strictly your own work*. If you include any work from other sources, including existing web pages, publications, books, or conversations, it should be explicitly cited with proper credit given to the original author.

Center for Student Disability Services. In order to receive disability-related academic accommodations, students must first be registered with the Center for Student Disability Services. Students who have a documented disability or suspect they may have a disability are invited to setup an appointment with the Director of the Center for Student Disability Services, Ms. Valerie Stewart-Lovell at (718) 951-5538. If you have already registered with the Center for Student Disability Services, please provide your professor with the course accommodation form and discuss your specific accommodations with him.

Email correspondence. I will regularly use e-mail to send out announcements, changes in the syllabus, reminders about tests or due dates, etc. It is your responsibility to check e-mail regularly to keep up-to-date with these announcements. I will use the e-mail address you have listed with the College. Therefore, please make sure that this is indeed the correct address.

Please include the course number (CISC 1600) in the subject line of any email you send to me. And please make sure that your full name is clearly visible, either with your email address, in the subject, or in the signature.