# Computer and Information Science CISC 1600: Introduction to Multimedia Computing Spring, 2018 (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**

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Office hours Tuesday 12:45-2:15 pm, Thursday 3:30-5:00 pm, and by appointment

#### **Course meetings**

**Time** Tuesday and Thursday 2:15–3:30 pm, see course website for location each meeting **Lectures** Room 1105 Ingersoll Hall **Labs** Room 5301 Ingersoll Hall

**Prerequisites** [None]

**Textbook** There is no textbook for the course.

**Online Resources** Slides, labs, assignments, and readings will be posted on the course website:

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http://mr-pc.org/t/cisc1600/
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The course will also have a blackboard site with a dropbox for each assignment along with grades and announcements.

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

Participation / attendance	10%
Labs (x10)	1% each
Projects (x3)	10% each
Homeworks (x2)	4% each
Midterm	12%
Final exam	30%

All homeworks and projects should be turned in via blackboard at least 30 minutes prior to the beginning of the corresponding class period. Homeworks turned in late will be penalized 10% for each day they are late. For example, a project that is turned in two days late and would have received a 100% will instead receive an 80%.

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.

**Extra credit** Many labs will have a description of additions that can be completed for extra course credit. You may turn in up to two of these before the final exam for up to 3% extra credit each, or up to 6% extra credit total on the final course grade.

### **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 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 Simulation
  - Intro to Scratch
- 3. Interactive Programming, Graphics, Visualization
  - Intro to Processing

**Key Dates** There will be one midterm exam in class on March 20, 2018, and a final exam on May 24, 2018 from 1:00 to 3:00 pm. 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 <a href="http://www.brooklyn.cuny.edu/bc/policies">http://www.brooklyn.cuny.edu/bc/policies</a>. 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. I have a filter defined in my email that marks all emails containing this exact phrase as important. And please make sure that your full name is clearly visible, either with your email address, in the subject, or in the signature.