NEW COURSE
CIS 3.5:
introduction to multi-media computing
spring 2009

`http://www.sci.brooklyn.cuny.edu/~sklar/cis3.5/`

- *instructor:*
  Prof Elizabeth Sklar (email: *sklar@sci.brooklyn.cuny.edu*; AIM: *agentprof*)

- *class meeting times and rooms:*
  Mondays 9.30am-10.45am (room 384L) and Wednesdays 9.30am-10.45am (room 4411N)
  Note: Sometimes other rooms will be used, like 3413N or 4412N. Check the "syllabus" section of the class web page for the location of each class meeting.

- *prerequisites:* none

- *course description:*
  This course will commence with a broad introduction to topics in Multi-Media Computing (MMC), including: web design, game design, animation, data visualization, simulation and robotics. Discussions will cover a broad range of subjects, such as: multimedia hardware and software, including games; human interface design and input using multi-media devices; graphical and other forms of output to multi-media devices; computer-based sound editing; agent-based programming for simulations and robotics; and uses of multi-media in industry. Emphasis is on the design and creation of a range of artifacts, including: web pages with cascading style sheets; interactive, graphical web-based programs; and simple computer games, movies and narratives. *The course format consists of a mixture of lecture and laboratory class sessions, with strong emphasis on hands-on learning.*

- *the following topics will be covered in 4 curricular units:*

  (I) introduction to web programming and web design
  (Principles of Web Design; HTML, Cascading Style Sheets (CSS))

  (II) interactive web programming and data visualization
  (technologies include: "Processing"; "Many Eyes")

  (III) game programming, narrative and movie making
  (technologies include: "Scratch"; "iMovie"; "GarageBand")

  (IV) agent-based programming, simulation and robotics
  (technologies include: "NetLogo"; "RoboLab")

- *note to advanced students:*
  I anticipate that there will be a number of students entering our **new Multi-Media Computing (MMC) major** (for which this course is required) who have knowledge of some of the topic areas and technologies listed above. For each of the four curricular units, I will offer an advanced project and modified attendance requirements to students who can demonstrate proficiency with the introductory level material within that topic area.

- *assessment:*
  60% 4 projects (15% each)
  10% midterm exam
  30% final exam