

HONR 279K - Fall 2006

Art, Math, Programming, and Research in the World of Digital Images and Photography

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Office Hours: TBA and posted on office doors and class web page
Class Web Page: <http://www.cs.umd.edu/class/fall2006/honr279k/>

Course Description

We will explore a wide variety of topics using digital images and photography as a central theme. These topics will include artistic concepts, mathematics, computer programming, human-computer interaction, ethics, and archiving.

Supplies

- Required
 - WAM login account (you should already have one from orientation)
 - GLUE login account (you might not have one of these yet)
 - Access to a digital camera (details in class)
- Suggested
 - USB "key chain" drive (details in class)

Readings

Readings will be a collection of academic, historic, and trade articles, as well as some book excerpts. There will be opportunities to customize your reading selections. You will need to maintain an electronic (eg: Word document) annotated journal of all of your readings for this class, to be reviewed and/or graded periodically. Details will be provided in class.

Portfolio

Over the course of the semester you will compile a web-based annotated portfolio of the images you capture and create, to be reviewed and/or graded periodically. Details will be provided in class. These will be individual portfolios.

Papers

In addition to the journal and portfolio mentioned above, there will be several writing assignments in the form of opinion papers as well as "how-to" articles. Details will be provided in class.

Tentative Schedule

Evolution of the camera
The Eye and the Camera
Vision and Color
Laws and Ethics relating to photography
Math behind lighting and parts of the camera
Different image compression algorithms
Composition rules and mathematical influences
--Midterm--
Organizing and archiving photographs
Wide variety of image editing techniques and tools
Programming an editing tool
Prototyping new tools
Panoramic photography and image stitching
Presentations

Grading

Assignments (65%)

Readings Journal, Papers, Portfolio, Homework	(32%)
Programming Projects, Team Project(s) and Presentation(s)	(18%)
In-class Exercises/Participation	(15%)

Exams (35%)

Midterm Exam (15%)	- October 18 th (tentative but highly likely so mark the date)
Final Exam (20%)	- Monday December 18 th , 1:30pm-3:30pm

Administrative

Assignments due in class will be due at the beginning of class on the date specified in the project descriptions. Assignments due electronically will have their due times listed in the description. For each project there will be a one-week late period. Assignments turned in during this one-week late period will be assessed a 50% late penalty regardless of when during the late period it is submitted. With a **valid medical excuse** for the due date, an assignment can be submitted at the next class you attend after your medical problem and will not be penalized for lateness. If you have a medical problem for **one week or more** that causes you to need an excused extension for a project, the medical excuse will need to cover that extended period of time and a **letter** from your physician with his/her phone number and the dates for which you were incapacitated **WILL** be required at a **minimum**. Even with a valid excuse, you will still be expected to hand in your assignment, but will be given appropriate time. Assignments may not be handed in at the undergraduate office, in my mailbox, or place other than in class or my office hours. Unless explicitly noted as a group project, assignments are to be done INDIVIDUALLY - working in any way with other students will be considered cheating. Cheating is (of course) PROHIBITED. A student found to be cheating on a project, paper, or exam will receive a zero for that project and will be reported to the honor council for an academic review.

There will be no make-up work for missed in-class exercises. A student with acceptable medical documentation for a missed class where there was an exercise will have that portion of their grade based on the exercises that were done. If the midterm exam is missed with acceptable documentation, the instructor reserves the right to give a special exam to substitute the missed exam. This documentation must be provided at the class session following the exam, or in the case of extended absence due to medical reasons, the class session immediately following the end of the excused period. If a student expects to miss an exam for a university function they are REQUIRED to attend, an explanation from a faculty member will be required IN ADVANCE. As with assignments, cheating on exams is PROHIBITED. This includes looking at another student's exam, showing another student your exam, using any notes not explicitly allowed during the exam. Students caught cheating in any way will receive a zero on the exam and will be reported to the honor council for an academic review.

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit <http://www.studenthonorcouncil.umd.edu/whatis.html>.

If you have a documented disability, you should contact Disability Support Services 0126 Shoemaker Hall. Each semester students with documented disabilities should apply to DSS for accommodation request forms which you can provide to your professors as proof of your eligibility for accommodations. Any student eligible for and requesting reasonable academic accommodations due to a disability is requested to provide, to the instructor in office hours, a letter of accommodation from the Office of Disability Support Services (DSS) within the first two weeks of the semester. The rules for eligibility and the types of accommodations a student may request can be reviewed on the DSS web site at http://www.counseling.umd.edu/DSS/receiving_serv.html.

The University System of Maryland policy provides that students should not be penalized because of observances of their religious beliefs, students shall be given an opportunity, whenever feasible, to make up within a reasonable time any academic assignment that is missed due to individual participation in religious observances. It is the responsibility of the student to inform the instructor of any intended absences for religious observances in advance. Notice should be provided as soon as possible but no later than the end of the schedule adjustment period. Faculty should further remind students that prior notification is especially important in connection with final exams, since failure to reschedule a final exam before the conclusion of the final examination period may result in loss of credits during the semester. The problem is especially likely to arise when final exams are scheduled on Saturdays.