Intermediate Digital Imaging:

Fall 2013
ARTS 2040-01

Credits: 4
Prerequisite: ARTS-1020 Media Studio Imaging or permission of instructor
Tuesday/Thursday 6:00-7:50
West Hall 214 Digital Imaging Studio (home studio)
West Hall 415 Advanced Graphics Production Studio (for high end printing)

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(please use sign up board on office door WH 314c)

Intermediate Digital Imaging is a second level studio projects course exploring the use of digital technologies for augmenting and expanding creative thought in

headress 2, archival print on arches, 2013 by Angela McCrory
making visual art. The interplay between the observer, the observed, and the process of observation is explored. Concepts in modes of expression, contemporary issues, history/theory, and technique are interwoven through a series of short studies that explore: surveillance, hyperrealism in high dynamic range photography, panorama, personal geographies/maps of the imagination, future spaces/future places, and media fusion in virtual & ephemeral images. Emphasis is placed on creativity, critical thinking, and conceptual and aesthetic decision making relating to expressive content. The final work is a project that uses the potency of visual art and installation to activate public spaces. Students complete a web portfolio of all studies and projects.

Innovation and experimentation are highly encouraged as we discover, explore, and investigate digital imaging as a tool, as a medium, and beyond, dialoging with the physical world, using in-depth photographic, raster and vector imaging techniques, archival printing, and fusion media. Students expand their understanding of contemporary digital arts practice through readings, short lectures/discussions, and critiques.

Goals: To develop creative ability and depth of expression using raster and vector based imaging, photographic, mixed media, and emerging genres. To heighten the keen awareness and study of the interplay between the observed, the observer, and the process of observation and apply technical/aesthetic knowledge in the completion of a series of visual art projects, culminating in a creative student directed final project.

Student Learning Outcomes:

Upon successful completion of the course, students will be able to:

1. Demonstrate a deeper creative ability and depth of expression using digital imaging, emerging, and mixed media art making methodologies.

2. Understand and articulate more fully the interplay between the observer, the observed, and the process of observation.

3. Develop applied technical/aesthetic knowledge in the completion of a series of visual art projects, culminating in a creative student directed final project.

4. Examine the work of several artists, theoreticians, and institutions who engage in digital and mixed media art creation.

5. Design and plan a detailed artist statement document which expounds upon individual concepts, processes, creative exploration, technical experimentation and documented references for the final project.

6. Compare, contrast, describe and critique the strengths and weaknesses of their own artwork and that of their fellow classmates relating to formal, aesthetic, and content attributes.

7. Successfully articulate informed, philosophically and socially aware ideas relating to art, technology, and culture as demonstrated in class discussions and critiques and in short written
reaction papers to the relevant readings and events.

Course Assessment Measures & Grading Criteria:

These outcomes will be evaluated in a series of short study projects at the intermediate level that include studies in digital photography, raster, & vector based imaging, digital painting/drawing, and emerging genres. Students will produce two and three dimensional works utilizing digital output, high end archival digital printing, mid-range digital printing, installation and experimental methodologies. Students must demonstrate satisfactory achievement of course objectives through fulfillment of course projects and by contributing to class discussions and critiques.

The short studies include the following: 55% total in the following increments:

* Surveillance: photo essay & text; 9.17%
* Hyperrealism: HDR High Dynamic Range Photography; 9.17%
* Panorama (VR, print, mixed media, experimental techniques); 9.17%
* Personal Geographies/Maps of the Imagination (in vector or raster based imaging in 2or3d mixed media); 9.17%
* Future Spaces/Future Places using biomimcry montage/collage; 9.17%
* Fusion Media in Virtual & Ephemeral Images: experiments in using a range of multimedia, blended/augmented reality & QR code art experiments; 9.17%

The final project is a purposeful installation work in Art Activating Public Spaces 30%

Participation in class, critiques & reading reaction papers 15%

A final web portfolio of all perfected works is handed in on DVD on the last day of class for final grading purposes.

Adherence to deadlines is expected. It is the individual student's responsibility to keep track of deadlines and to present the work to the class and instructor on the specified dates. 15% per day will be subtracted from late assignments not previously discussed with the instructor.

Grades:
A Excellent: consistent effort, timely 4.00 - 3.68
A - 3.67 - 3.34
B + 3.33 - 3.01
B Good: effort, timely 3.00 - 2.68
B - 2.67 - 2.34
C + 2.33 - 2.01
C Satisfactory: some effort, timely 2.00 - 1.68
C - 1.67 - 1.34
D + 1.33 - 1.01
D Passable: little effort 1.00 - .68
F Failure 0.67 – 0

Students will be provided with assessment of their progress at the time of critique. Projects needing further work will be so declared. Students can then perfect the work within the next week to change the grade. If you have any questions at any time about your creative work trajectory or your grades please speak with your instructor at your earliest convenience. Students receiving less than a grade of B will be informed immediately.
Class Attendance Policy: As an enrolled student, you have made a commitment to this class and your attendance is a significant part of that commitment. Attendance will be taken at every class. An absence is considered excused if the student has informed the course instructor by phone, email or in person before the beginning of the class and the excuse is considered reasonable by the instructor. All students are required to be on time and in attendance for each and every class. Students arriving to class more than 10 minutes late may be counted as absent. Two (2) unexcused absences will result in a reduction of one entire letter grade. Four or more unexcused absences will result in expulsion from the class. Do the readings and tutorials and come prepared to ask questions. Turn work in on time. Contribute to the discussions.

PROJECTS & READINGS:

Short Study Project 1 due Sept. 3, 5, 10

Surveillance photo essay & text

Project: The idea of photography as a research tool
You will increase your observational skills by looking at how the world looks at you.
Create an original Photo-essay about surveillance in 3 parts: (You must use your own images here.)

1. Observations: due Sept 3 take at least 24 photographs of various types of surveillance you see or are aware of. Reflect on what you photographed and why your gaze or attention was drawn to this particular type of surveillance. Try to become aware of the roles of observer, observed, and the process of observation. Who is looking at whom and why?

2. Statement: Sept 5 Next take a point of view on what you observe. Do you like what you saw... why? Or are you critical of what you saw...why? Go back to the particular site or sites and take 24 more photographs with either an empathetic or antagonistic eye towards the issue.

3. PDF Photo Essay: due Sept 10
Edit all of the images down into a clear statement piece of 10 images. You can use just straight photography, or you may use photomontage, or text to make a PDF photoessay that expresses your viewpoint.

Some broad examples of straight photo essays are below; however, you are encouraged to use your imagination and be creative with text and treatment!

* the social life of wireless urban spaces

* Photo Essay - American Birding Association www.aba.org/nab/v65n2sparrows.pdf

Readings: due Sept 3

* He Served in Silence by Igor Vamos Please write a short reaction paragraph about your views and interpretations.
* The Panopticon by Jeremy Bentham skim though and see some of the history of surveillance thinking
Short Study Project 2 due Sept 26

**HDR High Dynamic Range Photography: Hyperrealism**

**Project:** After our lecture in class on HDR, take your handout, camera and tripod out into the field to explore ways of making HDR (High Dynamic Range) photography.

Set your ISO to the lowest value possible, as the HDR technique creates additional noise.

Take a number of shots using Camera Raw (with an accompanying high resolution JPEG) of the same scene. In each shot use the different exposures: -2EV, 0EV, and +2EV (EV=Exposure Value). Also experiment!

You can use auto-bracketing if your camera has this function: **Auto Exposure Bracketing (AEB)** select the **Continuous Shooting** mode, make sure the camera is set to **Aperture Priority**, and select exposure increments for bracketing: +2EV, 0EV, -2EV (EV=Exposure Value). (However, if you do not have Auto Bracketing you can exposure manually, but do not change your Aperture as that would change the depth of field of the photos. Simply change your speed: for example if your EV 0 photo taken at 1/60 second with f/8, the lighter one (+2EV) should be shot at 1/15 second with f/8, and the darker one (-2EV) should be shot at 1/250 with f/8.)

(You can also experiment with taking only one Raw image of the same scene and compare the amount of shadow or highlight detail after processing. Using one image will have much less richness of details.)

Bring the images into Photoshop File > Automate > Merge to HDR (or an HDR program such as Photomatix or Dynamic Photo-HDR). Tone Map In Photoshop (Image > Mode > choose either 8-bit or 16-bit) or in Photomatix or Dynamic Photo-HDR.

Utilize the techniques learned to help you express your message through a mood or tone.

**Create at least 15 excellent HDR images** that utilize the technique and software for creative impact. Experiment with different subjects, objects, environments, landscapes, sky scapes, lighting conditions (outdoor/indoor/studio). Show the works on the large monitors in class and we will select one image to print on the Epson 9800 archival printer.

**Readings:**
* technical readings and research about HDR
* Associated tutorials

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Short Study Project 3 due Oct 10

(please upload all work to class dropbox)
Panorama (QTVR, print, mixed media, experimental techniques)

**Project:** Using the idea and technique of panorama, tell a story or narrative through the use of various photographic and/or graphic elements, object scans, textures, etc. which work together to give visual form to your ideas. Text can be used, either incorporated as part of the image or as captions. Print your work on the large format printer at the VCC or on the Epson 9800 archival printer in sizes that utilize panoramic vision. You could instead create a virtual panorama a VR panorama. Experiment with ideas including polar panoramas, cycloramas, or encompassing diorama. You can use straight photography or digital and/or physical photomontage, collage or assemblage techniques. Discover new forms of panoramic vision!

**Readings: (Due Oct 1)**
* Techniques of the Observer by Jonathan Crary
create a short reaction paper
* Associated tutorials

Short Study Project 4 due Oct 24

**Personal Geographies: Maps of the Imagination**
(vector or raster based imaging/2 or 3d mixed media)

**Project:** Create a map which shows your relationship to your world, your experiences and your personal journey using either vector based imagery, raster imagery, 3dimensional objects in assemblage or any combination thereof. This can be a “true map” or an imaginative expressive map, but it should aim for an understanding the world around us and our place in it.

**Readings:**
create a short reaction paper
* Associated tutorials

Short Study Project 5 due Nov 7

**Future Spaces/Future Places (bio mimicry montage/collage)**

**Project:** Using biomimicry visualize new futures. Extensive observing (and photographing) nature and then proposing a potential solution to a perplexing problem. A great exercise that might turn up some real-life technical solutions that are self-sustainable and not harmful! Create 4 original, interrelated sequential level designs, maps, or set designs which tell a story by creating a background or landscape upon which some kind of action could take place. Pay careful attention to color, lighting, texture, symbolism, allegory. You can use any digital process or application as well as scanned objects (such as crumpled paper, sticks, leaves, etc.), or digital paintings or textures to create an imaginary landscape. Project or print the resulting works.

**Readings:**
Biomimicry: Innovation Inspired by Nature
By Janine M. Benyus pages 1-32
create a short reaction paper
* Personal Research readings
* Associated tutorials

Short Study Project 6 due Nov 19
Fusion Media in Virtual & Ephemeral Images:
(using a range of multimedia, blended/augmented reality/ QR code art experiments)

Project: Experiment with blended reality techniques such as QR coding, augmented reality, etc. to explore the ways you can communicate an issue or idea you are passionate about. You may use any combination of media (print, audio, video/film/IT digital/cellphone) in conjunction with the blended reality experiment.

Readings:
* Simulations by Jean Baudrillard
And
* Baudrillard and Hollywood: subverting the mechanism of control and The Matrix by Jim Rovira

create a short reaction paper
* Personal Research readings
* Associated tutorials

Final Project due Dec 3/5
Art Activating Public Spaces

Project: Activating public spaces with digital images, installations, and art delivery systems

Readings:
* Critical Issues in Public Art: Content, Context, and Controversy by Harriet F. Seni, & Sally Webster, eds.
create a short reaction paper
And
* Critical Issues in Public Art: Phillips Temporality and Public Art by Harriet F. Seni, & Sally Webster, eds.
create a short reaction paper

* Associated tutorials

Browse: browse through and see other artists and ideas you are interested in:
* New Media Art by Mark Tribe
https://wiki.brown.edu/confluence/display/MarkTribe/New+Media+Art++Profiles

Final Project pre-REVIEWS: Dec 4
Artist Statement & Digital Ideograph
The artist statement and digital ideograph begin the development of your individual ideas and starts the trajectory towards the final project. It utilizes the techniques, theory and history learned in class and in
individual research. It is, in essence, a digital ideograph of your art delivery system in action, virtually. Create a web page that illuminates your idea and its location in terms of what you want to reconstruct in it. Photograph the exact location and then digitally create your ideas within it. You are required to articulate your final project in an artist statement of from one to two paragraphs whereby your concept, methodology and at least 5 bibliographic references/influences are stated.

FULLY REALIZED FINAL PROJECTS DUE (IN SITE) – Dec 6
The actual project manifested as an original (billboard, large poster series, drive by car art, aerial art, photo projection, data projection, etc.) art system device that carries your message to those who may not have the opportunity to see your work inside a normal gallery environment. Your work must be realized physically and you must photograph the work in the site for inclusion in your final project CD web site file.

Web Portfolio due Dec 10 10:30 am
Project: Web portfolio & documentation: create a simple website that features all of your perfected works and documentation of works in situ. This will be used for final grading.

Readings:
* Associated tutorials

Academic Integrity

Trust: Student-teacher relationships are built on trust. For example, students must trust that teachers have made appropriate decisions about the structure and content of the courses they teach, and teachers must trust that the assignments that students turn in are their own. Acts that violate this trust undermine the educational process. The Rensselaer Handbook of Student Rights and Responsibilities defines various forms of Academic Dishonesty and you should make yourself familiar with these. In this class, all assignments that are turned in for a grade must represent the student’s own work. In cases where help was received, or teamwork was allowed, a notation on the assignment should indicate your collaboration. If you have any question concerning this policy before submitting an assignment, please ask for clarification.

Plagiarism: All work produced in this course must be original and created by the student. First infraction will result in a failure for the course and a report to the Office of the Dean.

Class Specific: Collaboration and discussion about class projects is actively encouraged, and is in no way considered cheating. This is a studio course, and personal ownership of information is not deemed to be appropriate. Original work and images are required, except if indicated otherwise. Projects are expected to reflect personal endeavor, but may also be collaborative in nature as long as the collaboration is clearly defined and approved by the professor previously.

Gender-fair language: Because the way we speak and write affects the way we think, everyone in this course is expected to use gender-fair language in all discussions and writing. A guide to gender-fair language is available from the Writing Center and from the Library.

Other Course Specific Information:

Required materials:
* A laptop computer (bring laptops to class every class)
* An active RCS account.
* High capacity external hard drive, or USB drive (minimum 64GB), or approximately 20 DVDs
* A camera (preferred: digital, 35MM DSL, or the new mirrorless cameras, or high end point and shoot with manual overdrive). A variety of cameras can be signed out from the equipment room as well.
* Software for Intermediate Digital Imaging: Adobe CS6 Design Edition (which includes: Photoshop, Illustrator, Dreamweaver and Flash) suggested to purchase, but you can use the Mac computers in Studio WH 214 that have this software, or use the VCC North.
* Other materials on a project basis
* Journal: it is highly recommended that you keep a working journal of ideas, drawings, photographs, dream records, etc. which will act a source for your creative process. You should carry this with you at all times to record your creative insights.

Fabrication costs/materials:
You will be making a number of digital prints/manifestations of your work. The costs of digital printing vary, but be prepared to incur approximately $50 to $100 in fabrication/material costs.

Assumed Knowledge and Skills: Awareness of digital imaging and interactivity concepts, skills, and topics in electronic arts from media arts studio classes (ARTS-1020) and/or other personal achievement. These include basic knowledge of formal topics (light, scale, color, composition, form, motion, proportion), scanning; basic raster and vector imaging skills; resolution; ppi; dpi; ability to draw with a digital stylus and understand gesture, point, line, plane; basic digital photography skills; and basic printing skills.

For Issues in Lab: Please contact hasshelp@rpi.edu

For high end archival printing: Location: West Hall-415
This suite contains the Epson Pro 9800 large format archival printer operated by print coordinator available by appointment only.
please setup appointment with operator Brian Mertik via email at mertib@rpi.edu

Information on the other printer in WH 415: EPSON STYLUS PHOTO 1400 USER MANUAL (Open file)

* Required Events Please attend at least 3 of the suggested events and write a short critique for each, print, and hand in on the first class after the event. Click here for a guideline for writing a critique if needed.

* Helpful Resources and Tools

* Drop Box Information

* Art Sites