

Scientific Imaging Syllabus

Course Format: 1, 3 hour lecture/lab period per week. 3 credit hours.

Prerequisites: Sophomore standing with major in the sciences, education or visual arts or permission of instructor.

Instructor: D. McShaffrey
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Books: *Bird Photography Pure and Simple* by Arthur Morris. 1997. (required)
Photoshop for Nature Photographers by Ellen Anon and Tim Grey. 2007. (required)
 Note: 2008 edition for Photoshop 4 is out and can be used as well.

Other Expenses: You must have access to a digital or 35mm camera. You will need to pay for film and some media, details in syllabus.

Attendance: You are expected to attend all class meetings. You must notify me in advance of any absence. Failure to attend classes will result in a lower grade.

Exams: A single final exam.

Portfolios: A series of 36 assigned images in various formats. A copy of the portfolio assignment is attached. Typically 1 image per week will be graded for 30 points. The other 2 images will receive a cursory overall grade of up to 10 points.

Class Grading:

Portfolio – critically graded (12 images @ 30 points)	360 points
other images (24 @ 10 points)	240 points
Presentation	100 points
Final	150 points
Quizzes	100 points
Participation/Attendance/Peer Grading	50 points
	1000 points

Your final grade will be determined as follows:

A+	97%	B+	87%	C+	77%	D+	67%	F	< 60%
A	93%	B	83%	C	73%	D	63%		
A-	90%	B-	80%	C-	70%	D-	60%		

The plus-minus grades may be adjusted to fit the circumstances at the discretion of the instructor.
 Mid-term grade will be based on the portfolio(s) turned in as of March 7.

Week	Date	Topic	Schedule Reading	Assignment
1	Jan. 14	Introduction	Basics	
2	Jan. 21	Quickstart	BPPAAS Chapters 1 & 2 Photo Basics	
3	Jan. 28	Exposure/PowerPoint	BPPAAS Chapter 4 Photoshop (skim)	01. Diagram 02. Scanned Image 03. Page of Text with Photo B/W* 04. Flowchart
4	Feb. 4	Digital - Photoshop	Digital Darkroom	05. Equipment – Labeled 06. Portrait (fun) 07. Labeled Apparatus
5	Feb. 11	Equipment/Techniques *****QUIZ*****	BPPAAS Chapters 3 & 5 Camera Web Pages Wide-Angle	08. Software Screen Capture 09. Portrait (formal) 10. Moving Subject
6	Feb. 18	Copystand	Copystand Macro	11. Wide Angle 12. Glass container with liquid 13. Object with scale
7	Feb. 25	Microscopy	BPPAAS Chapters 6, 7 Field Photography	14. Photo of Computer Screen 15. Your Room 16. Pollution
8	March 4	Critique/Aesthetics	BPPAAS Chapters 8 & 9	17. Habitat - Terrestrial 18. Macro
March 11 Spring Break				
9	March 18	Digital - Photoshop	Insect Photography	19. Habitat – Aquatic 20. Worm 21. Laboratory
10	March 25	Students' Choice	Flash	22. Protozoa 23. Algae (with scale) 24. Procedure
11	April 1	Instructor's Choice	Telephoto	25. Atmospheric Phenomenon 26. Geologic Phenomenon 27. Image taken with Flash
12	April 8	Biological Illustration ***** QUIZ*****		28. Field Work 29. Field Plot 30. Telephoto
13	April 15	Presentations		31. Fish 32. Life Cycle 33. Area Related
14	April 22	Presentations		34. Bird 35. Amphibian 36. Area Related <i>or</i> animated GIF

Hyperlinks are to web-based material. See course web page at: <http://www.marietta.edu/~biol/imaging/image.html>

Some web material is password-protected, the password is: _____

The Anon and Grey book is meant as a lab resource, not a textbook, hence, there are no reading assignments from it. Bring it to class and have it handy when working on your images.

*Must be hard-copy

Final: Friday, May 1, 3:00 to 5:30 PM

Presentation: Each student will prepare a 10 minute presentation showing their work and explaining to the rest of the class the artistic intent, strengths and weaknesses – as well as pointing out any special techniques utilized. Each student is free to include several works by other artists for comparative or illustrative purposes.

Costs:

In general, it is impossible to say how much the course will cost you. By use of digital cameras, it is theoretically possible to complete the portfolio for “free”. If you shoot film it will cost more.

Camera: Each student will need to have use of a 35mm or digital camera. This could be anything from a disposable camera to a 35mm SLR. A 35mm digital SLR with interchangeable lenses would be best. A single departmental camera with basic lenses will be available, as will a digital camera and a digital camera for the microscope.

Film: Conceivably, most of the assignments in the portfolio can be done with a digital camera. If you decide to use film, you must supply the film and processing.

Printing Supplies: Students may use (with reason) the other color printers in the department without cost; however, you may wish to purchase special print paper on your own.

Image rights: All images submitted for grading become the non-exclusive property of Marietta College, to be used in the educational programs, or to promote the college, or to be sold to benefit the college. Of course, you retain all other rights to the images; you just can't stop the college from selling your image if we want the money. Some of your images may be used in classes. All digital images submitted may be collected on a CD, posted on the web, or stored on the network. Of course, this means that other students will have copies of your images. All hard-copy images may be retained by the college to post in the hallways, use for dartboards, or in an emergency, as toilet tissue. You can ask for them back, but we don't have to give them back. If you become a famous photographer, we reserve the right to flood the market with cheap knockoffs of your early work.

General Requirements:

1. All images must have a title.
2. Digital images should have the photographer's name and the title digitally added in an inconspicuous space. In most cases, this will be done by increasing the canvas size in Photoshop so that the text is not on the image itself.
3. Digital images will be submitted on the network in the appropriate directory. This is the normal way most of your work will be submitted unless you are using film. Each file submitted will use the following naming convention:
Assignment #_Last Name_FirstName_Year
The first assignment (diagram) would be: 01_McShaffrey_Dave_2008.JPG
The algae assignment would be: 23_McShaffrey_Dave_2008.PSD
Note that the suffix (.JPG, .PSD) depends on the type of file; you will normally be turning in JPG files.
4. Hard copy images (35mm slides, LaserWriter or color printouts, prints) should have the photographer's name and the title displayed on them.
5. Hard copies will be submitted in appropriate plastic page protectors.
6. All work must be physically handed in or present on the server **AT THE BEGINNING OF CLASS THE WEEK IT IS DUE**. Class time may ***not*** be used for turning in homework due that week.
7. Work will be graded on:

A. Technical merit (exposure, sharpness, contrast, color, etc.)	10 points
B. Composition	10 points
C. Artistic Merit	10 points
7. Each student must fill out a peer grading sheet (next page) for one image from another student in the class each week (after the first portfolio is submitted). A total of 10 such sheets are due from each student; you may not review another student's work more than once, nor may you turn in more than one sheet per week without prior permission to do so. Failure to submit a peer grading sheet will be penalized at 5 points per occurrence. Peer grading sheets will be assessed as part of the class participation grade. Peer grading will remain anonymous, although comments may be shared with the class and/or the students involved (the student graders names will be removed).

Name of Student doing Grading: _____

Peer Grading Sheet

Name of Student being assessed: _____

Insert image being assessed here and size it reasonably.

Grading and comments may be typed or printed neatly. Form may be printed in color or B/W

One a scale of 1 to 10, how would you rate the technical merits of this image (sharpness, depth-of-field, exposure, color balance):

Comments:

One a scale of 1 to 10, how would you rate the composition of this image:

Comments:

One a scale of 1 to 10, how would you rate the artistic merits of this image:

Comments:

Continue on back as needed.....