

Course Syllabus

FORS 403/803 Advanced Forensic Photography

1 credit hour

Course Description

This course examines advanced theory and technique of forensic photography. Students will review basic photographic terminology, concepts, and techniques, and be introduced to techniques involving close-up photography, low light photography, infrared photography, videography, and digital image analysis.

Course Materials and Equipment

All students must be able to use the University of Nebraska Blackboard System.

A digital camera is required for the course. The camera should have manual setting capabilities and video capabilities.

Access to Adobe Photoshop photo editing software is required for the course. This may be any of the following: Adobe Photoshop Elements 2, 3, 4, 5, 6, 7, or 8; Adobe Photoshop CS, CS 2, CS 3, CS 4. If you are purchasing software for your home computer I would recommend at least Adobe Photoshop Elements 8.0. The UNL computer labs have Adobe Photoshop CS 4, and many libraries have some form of the Adobe photo editing software.

A textbook is not required. Reading assignments will come from online sources.

Measurable Behavioral Objectives

Following the completion of this course, participants will be able to:

- Write an acceptable protocol for a forensic scene photography event.
- Answer why photography is important to forensic issues.
- Discuss the principles of light as light applies to forensic photography.
- Recount the basic considerations of forensic photography composition.
- Describe the basic concepts of perspective, depth of field, field of view, shutter speed, aperture setting, EV values, and ISO speed.
- List and demonstrate the techniques for documentation of a forensic scene using video digital imaging.
- Perform the physical techniques for operation of a digital camera.
- Identify the various applications of crime scene photography that relate to close-up photography, painting with light, fluorescent photography, time exposure photography, cold weather photography, fill flash, side lighting, use of filters, surveillance photography.
- Explain the application of Infrared and Ultra-Violet photography.
- Perform digital image analysis using photo editing software.
- Explain the basic principles of photogrammetry.
- Explain the legal implications of digital images as probative evidence.

Course Topics

1. Review of Forensic Photography
 - a. forensic issues
 - b. protocol
 - c. composition
2. Special Crime Scene Photography Techniques
 - a. close-up (macro) photography
 - b. flash photography
 - c. lighting techniques
 - d. filters
3. Infrared Digital Imaging
4. Videography
5. Digital Image Analysis
 - a. sizing images
 - b. comparing images
 - c. using the invert command
 - d. basic photogrammetry

Assignments

- 1. Please go to Blackboard “Assignments” for each week’s assignment. This will include the practical assignments, readings, and PowerPoint lectures for each week.**
2. Power Point Presentations: Several Power Point Presentations will be posted in Blackboard. These are part of the course material.
3. Readings: These will include assignments from online resources. Text questions will be taken from these assignments
- 4. Due Dates: All assignments are due the Sunday following the weeks instruction: Week 1 is due by midnight Jan. 17; Week 2 is due midnight Jan. 21; Week 3 is due midnight Jan. 31; Week 4 is due midnight Feb. 7; Week 5 is due midnight Feb. 14.**

Blackboard Discussions

1. Blackboard Discussions are an important part of the online learning experience. They are also a part of the course requirements.
2. There will a “General Subjects” mode that you can use to post any thread you wish.
- 3. There are four additional modes. You must respond to each mode with an original post, and respond to at least two classmates post. For each discussion you should have 3 posts.**

Grading

Quizzes: There are four quizzes. Quizzes must be taken online. Questions are taken from the assigned readings, Power Point presentations, and practical application knowledge. Grades are in compliance with the University of Nebraska grading system. One hour is allowed for taking a quiz.

Blackboard Discussions: There are five discussion questions. You are required to post to each question a personal response, and post to at least one classmate post. This amounts to 2 posts per question.

Lab Assignments: Five lab assignments are required for completion of the course. These are digital image capture, image interpretation, and image enhancement assignments. Photos are to be submitted via the internet. Image files should not be larger than 3 megabytes. Submit all images as an attachment in a PowerPoint file.

Final Test: The final test is a comprehensive test. Two hours are allowed for the final test.

Incompletes: A request for an incomplete grade must be received in writing and approved by the instructor and program director. This approval must be made at least one class period prior to the last class.

Late Assignments: One percent will be deducted for each day late of an assignment.

Grading System: All work and final grades will be denoted according to the following scheme.

Requirements

Quizzes (4) 30 points each	120
Blackboard Discussion Board Participation (5) 10 points each	50
Lab Assignments (5) 15 points each	75
Final Test	100
Total	345
Extra Credit	TBA

	%		%		%		%		%
A+	97-100	B+	87-89	C+	77-79	D+	67-69	F	≤ 59
A	93-96	B	83-86	C	73-76	D	63-66		
A-	90-92	B-	80-82	C-	70-72	D-	60-62		

Expectations for graduate students

Graduate students are held to a higher standard of quality, completeness, and analysis. The quality of photographic projects and discussion board postings are held at a higher level for graduate students. Discussion Board postings are also held to a higher level of quality such as clarity of writing, literature review and depth of writing, logical reasoning, and spelling and grammar. However, lab assignments and quizzes will be graded with the same expectations, regardless of graduate or undergraduate standing.

Academic and Personal Requirements

Important Web sites: <http://forensic.unl.edu>.
www.unl.edu/libr/dept/subjname.html.
<http://iris.unl.edu>

Report and Exam Policy: Make up exams are available to students who experience crises during the semester. Contact me if this becomes the case.

Statement on Academic Integrity: Academic integrity is one of the basic principles of a university community. The University of Nebraska encourages and expects the highest standards of academic honesty from all students.

The University of Nebraska-Lincoln has a policy about academic dishonesty, as indicated in the Student Code of Conduct (see Undergraduate Bulletin). You enjoy rights and protections under the code. You are obligated to conduct yourself in compliance with the code.

One area where students occasionally have some confusion regards plagiarism. The key concept is misrepresenting the work of another as one's own work. Plagiarism will not be tolerated. Please read <http://www.unl.edu/UFP/acadinte.htm>. Pay particular attention to the section that provides students with information about citing sources. We want your work, not the work of others. Summarize, synthesize and completely rewrite the material for your work.

The Student Code of Conduct presents information on academic sanctions for misconduct subject to appeal, and that sanctions are at the discretion of the instructor. Sanctions may include a failing grade for the course. Cheating and other forms of misconduct are fundamentally opposed to the aim of forensic science.

University Policies: University of Nebraska-Lincoln policies can be accessed through the UNL Office of Registration and Records. See <http://www.unl.edu/regrec/rhome.htm> for policies.

Discrimination of any form, as described by The University of Nebraska, will subject any person in violation to disciplinary action.

Professional Accountability: Course materials include graphic photographs and descriptions. These materials are to be treated as privileged information. The photographs are of persons who have died or who have been seriously injured as a result of violence. Respect for the victims of violent crime and their families are expected of all participants. The photographs and descriptions are for educational and research purposes. They shall not be made available for public consumption or entertainment purposes.

Course Etiquette: You are to be courteous to others when submitting assignments and participating in discussions on Blackboard. Offensive materials will be removed from the course web site. Students will be contacted if any instructors deem material inappropriate.

Library Services: UNL students have access to a tremendous library resource. There is a tab at the top of the Blackboard home page that directs you to the library resources. This web site can be accessed directly at <http://iris.eunledu>. Information about other library services can be gotten through <http://www.unl.edu/libr/dept/subjname/html>.

University of Nebraska Commitment to Students with Disabilities

The University of Nebraska seeks to maintain a supportive academic environment for students with disabilities. Students with disabilities are encouraged to contact the instructor for a

confidential discussion of the individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY.

References

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- Robinson, Edward. Crime Scene Photography. Burlington, MA: Elsevier, Inc., 2007.
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