Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and 25 copies. Attach a course syllabus to each.*

1. This request is submitted by the Department of **Anthropology**

2. Course prefix, number and complete title  **ANTH 654 Archaeological Photography**

3. Course description (not more than 50 words)  
   Instruction on how to better use cameras in the process of reporting archaeological sites and material culture by exploring old and new photographic technologies.

4. Prerequisite(s)  
   **Graduate Classification**  
   Cross-listed with **Cross-listed courses require the signatures of both department heads.**

5. Is this a variable credit course?  □ Yes ☑ No  
   If yes, from _______ to _______.

6. Is this a repeatable course?  □ Yes ☑ No  
   If yes, this course may be taken _______ times. Will the course be repeated within the same semester/term?  □ Yes ☑ No

7. Has this course been taught as a 489/689?  □ Yes ☑ No  
   If yes, how many times?  _______  
   Indicate the number of students enrolled for each academic period it was taught.  
   13. Spring 2006  

8. This course will be:  
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
   **MA, PhD in Anthropology**

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix | Course # | Title (exclude punctuation)  
       **ANTH 654** **ARCHAEOLOGY PHOTOGRAPHY**

Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
0 3 0 0 0 3 4 5 0 3 0 1 0 0 0 1 0 2 8 0 0 8 - 0 9 0 1 0 3 6 6

Do not complete shaded area.

**Approval recommended by:**

**D. L. Hamilton**  10/15/2007  
Head of Department  Date  
Chair, College Review Committee  Date

Head of Department (if cross-listed course)  Date  
Dean of College  Date

Submitted to Coordinating Board by:  
Dean of College  Date

Director of Academic Support Services  Date  
Effective Date

* Attach a syllabus according to the guidelines on the Internet site www.tamu.edu/admissions/oaras. To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.

1 of 7B8
Archaeological Photography – ANTH 654
Room 108 - Anthropology Building - Wilder Imaging Lab, Spring 2007
Instructor, Dr. C. Wayne Smith
Office Hours: by appointment: Tuesdays, 9:00-11:00am.
Office Number: Anthropology 311A.

The overall aim of this course is to instruct students to better use cameras in the process of reporting archaeological sites and archaeological material culture. If a single picture is worth 1000 words, this course is designed to make each picture worth 2000 words. We will explore old and new photographic technologies. Each week as we explore more aspects of the art of photography, you will note that some photographic techniques mask the details we most want to see - others enhance. Observation, then, is the main assessment tool we will use in this class. Your end product will be a complete portfolio of your work. A weekly Lab Section has been organized to assist in the development of your portfolio. Readings will be assigned to guide you through your time of discovery in the lab and in the field. Ultimately, the aim of this course is to help you better understand and, accordingly, better describe your area of archaeological expertise.

‘Our best pictures show a less busy world than we experience, a world that bears an uncanny resemblance to the sentimental one held in the mind’s eye that was first simplified through normal visual processing and further idealized through the golden sieve of memory.’ (Rowell, 2001, p.91)

Ansel Adams stated, ‘in learning to visualize image values we should understand that what we see with our eyes is not the same as what photographic film sees in the camera.’ Galen Rowell has observed that ‘to be self-directed is to be self-aware. When we are in the driver’s seat, we take personal control over the direction our vehicle travels, but also are far more likely to retain a clear memory of what we see. The odds of finding the way toward fine pictures are far higher if you have been in the driver’s seat well before a photo opportunity appears.’ The same observations are very true of the relationship between our vision of an object, a digital camera’s sensor and our modern possibilities for visual output.

The Lab portion of this class is organized for you to practice and create meaningful images to include in your portfolio. Work (play) hard and above all, enjoy this class.

Library Materials and Text
The general course textbooks are:

ISBN 0-8212-2186-8

ISBN 0-7357-1240-9

ISBN 10987654321


ISBN 0-8174-4179-4

Hunter, Fil and Paul Fuqua
Log-On Identifications:
It is necessary that each student set up a logon-id and a password within the computing system in order to use the computer labs. Logon-ids can be setup using the CLAIM system in any of the Open Access Labs (not from a remote location). If any of the classroom participants are not students or faculty, please contact Ginny Hughlett (845-7223) in CIS account services for assistance in establishing logon-ids.

Software Use and Abuse:
All software used during this course is licensed software. Copying software is strictly forbidden and will not be tolerated. Academic pricing has made these programs affordable for many students and programs are available through the University Book Store and other retail outlets.

Course Requirements:
Classes will be assessed as follows:

5 Assignments ........................................................................................................ 20% each (total 100%)

NOTE - extensions on assignments are strongly discouraged.

Grading will follow a standard scale:

90% -100 - 'A'
80%-89% - 'B'
70%-79% - 'C'
60%-69% - 'D'
59% - and below is a failure ..........

Missing Exams, Assignments and Classes:
There are no exams in this class. However, material will be covered in class lectures that is not in the assigned readings - class attendance is very important. Where possible, handouts will be provided. Absence from classes and labs will be accepted for students who have legitimate excuses as defined in the Texas A&M University Handbook of Regulations. These include:

1. Participation in an activity appearing in the University Authorized Activity List;
2. Proof of confinement due to illness (medical slip);
3. Death within a student's immediate family;
4. Participation in legal proceedings that require a student's presence;
5. A religious holiday (defined as a holy day observed by a religion who's places of worship are exempt from property taxation under Section 11.20 of the Texas Tax Code).

Americans with Disabilities Act (ADA)
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Services for Students with Disabilities in Cain Hall or call 845-1637 for assistance.

TAMU Plagiarism Policy
As commonly defined, plagiarism consists of passing off as one's own ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty."

Social Security Numbers
It is no longer legal to use a student's complete Social Security Number for posting grades. All students can obtain can obtain their grades through the Texas A&M University Student Information System (My Record) (https://myrecord.tamu.edu).
Aggie Code of Honor

"An Aggie does not lie, cheat, or steal or tolerate those who do." To learn more about this code and other important information concerning your studies at Texas A&M University, visit http://student-rules.tamu.edu/aggiecode.htm

Tentative Class Schedule

Class 1 The Rules of Photography - Light, Light...Glorious Light! Shades of Gray and Color

Art is the modification of things by human skills and intention, and thus an artifact is no longer considered natural.

A. Visualization
B. Camera Modes - A - M - Tv - P etc...
C. Incident Light / Reflective Light
D. Black & White - Shades of Gray
E. Aperture - Depth of Field - Shadows
F. What You Already Have - What You Need to Find in Yourself
G. Your Work - Your Portfolio
Handout: Visualization and Image Values

Lab: Next Class - bring two (2) images to class - one you really like and one that you do not like. Be prepared to discuss both images. For this exercise, you do not need to get highly philosophical - just tell us what you think.

Class 2 Pop Culture and Scientific Imaging or 'Zen and the Art of Motorcycle Maintenance'

A. Drawing with light - design and innovation - PowerPoint usage and your imagination
B. Exposure - The Zone System - Kodak 18% reflective neutral gray card
C. Light Meters - the good, the bad and confusing
D. Aperture - depth of field - shadows
E. Types of Lenses
F. www.pixmante.com (Raw Shooter Essentials) free download
G. ACDSee - TuCows and other essential WWW sites
H. Bracketing your images

Lab - Handout:
Go forth and do...
- create a PowerPoint presentation demonstrating aspects of depth of field manipulation using aperture settings – use lab time to develop your presentation materials
- draw with light! -show us next class!

Class 3 Methods of Creating B&W Images From Color Images - Digital Photo - B&W vs Color Imaging

- Classic, Great Photos
A. Histograms - adjusting, RGB, total image, maximizing image data
B. CTRL+SHIFT+U
C. Image-Mode-Grayscale
D. Image-Mode-Lab Color --> Windows-Channels-Lightest
E. Channels-RGB

Lab: Use Lab time to experiment with methods of creating effective and accurate black-and-white illustrations.
Go forth and create a PowerPoint illustrating the use of 'C' and 'D' & 'E' to create B&W images.

Class 4 Show and Tell

Come prepared to show your PowerPoint presentations with the goal to create a discussion about the merits of each method of creating images.
Also:
A. Grayscale vs de-saturation of color images to create B&W images. MB&WD P
B. Tonal distribution - MB&WDP - levels & shadows/highlights

Lab Experiment with A&B

Class 5 Breaking Photography Down - Light Science and Magic

A. Copy Photography - balanced light
B. Improvised Lighting - the ‘family of angles’
C. In the Lab
D. In the Field
E. Shiny Objects
F. Glass and Liquids

Handout: Family of Angles - Light - Science and Magic, p.36-63

Lab Practice A-F

Class 6 Continuous Light Lighting - Learning to Light

Chiaroscuro lighting - drama and clarity [ chairo (light) & scuro (dark) ]

A. Available light - domestic lamps (what we normally see)
B. Specialist lighting - studio flash (what we create)
C. Fill lighting - flash and incident (reflective lighting) - outdoor use to control detail
D. Metering Light

Lab Metering and accurate use of lighting are the two areas of archaeological photography that archaeologist learn to control properly – Use lab time to practice and use photo paper to print out your best efforts to show in class next week.

Studio Flash

A. Basic Setup for small artifacts
B. Elements of artifact photography
C. Capturing texture
D. Minimalist perspectives
E. Metering flash lighting

Lab The ability to use the controlled environment of a studio set-up is one area of recording archaeological data is one area in which we all need practice. Work with all aspects of A-E.

Class 7 PhotoModeler / STRATA Foto 3D

A. Familiarization with current 3-dimensional imaging software.
B. Emphasis to be placed on application for archaeological documentation.

Lab With these programs, an accomplished archaeologist can turn a series of good photographs into a virtual three-dimensional artifact. Practice is essential.

Class 8 Micro Photography – truth is in the details

A. Digital camera settings *(dependant on your camera)*
B. Brightfield illumination
C. Darkfield illumination
D. Microscopes
E. Photomicrographic lighting
F. Phase / contrast - polarization

Lab Practice

Class 9 Macro Photography

A. Set-up - tripods - backgrounds - lenses
B. Fixed focal length lenses (p.26)
C. Macro zoom lenses
D. True macro lenses
E. Extension tubes - rings

Lab Practice photographing a variety of archaeological artifact. Print your best images. If you do not have access to artifacts, numerous professors may be able to assist you, if you offer them copies of your completed images.

Class 10 Bone and Other Organic Material - in the field & in the lab

A. Thin sections
B. Gross section photography

Lab Practice photographing a variety of archaeological artifact. Print your best images

Class 11 Geologic Formations

A. Stratification
B. In-situ photographic record
C. Perspective views
D. Geological Formations can only be photographed in place - in the field means carrying equipment - what we need in the field

Lab Assemble a list (to start) and then work with the class to assemble a working field-pack for archaeology

Class 12 Stratification and Geological Formation (time to hit the field)

Lab This entire class is a lab class. We will meet at Riverside Campus to work with archaeologists at the Conservation Research Lab, photographing material culture throughout the conservation process. This is a genuine challenge! Next week, print your best images.

Class 13 Black-and-White Film Photography

A. Processing Film
B. Fundamentals of enlarging, cropping and printing

Lab Practice - shoot at least (1) 24-exp T-MAX 100 (400) roll of film (supplied); we will develop our films.

Class 14 Individual Work Day - No Class

Spring 2007 Semester Calendar as Posted

January 12 Friday, 5 p.m. Last day to register for spring semester classes and pay fees.
January 15 Monday. Martin Luther King, Jr. Day. Faculty and Staff holiday.
January 16 Tuesday. First day of spring semester classes.
January 22 Monday, 5 p.m. Last day for adding/dropping courses for the spring semester.
January 26 Friday, 5 p.m. Last day to apply for all degrees to be awarded in May.
March 5 Monday, noon. Mid-semester grades due in Office of the Registrar.
March 12-16 Monday-Friday. Spring break.
March 14-16 Wednesday-Friday. Faculty and Staff holiday.
April 2 Monday, 5 p.m.
   · Last day for all students to drop courses with no penalty (Q-drop).
   · Last day to change Kinesiology 198/199 grade type.
   · Last day to officially withdraw from the University.
April 6 Friday. Reading day, no classes.
April 12-27 Thursday-Friday. Preregistration for the 2007 first term, second term, 10-week summer semester and fall semester.
April 21 Saturday. Muster. Campus ceremony.
April 30 Monday. Dead day, classes meet but no major exams.
May 1 Tuesday.
   · Last day of spring semester classes.
   · Redefined day, students attend their Friday classes.
   · Dead day, classes meet but no major exams.
May 2-3 Wednesday-Thursday. Reading days, no classes.
May 4, 7-9 Friday, Monday-Wednesday. Spring semester final examinations for all students.
May 11 Friday, 5 p.m. Last day for May undergraduate degree candidates to apply for Tuition Rebate.
May 11-12 Friday-Saturday. Commencement, Commissioning, and Final Review.
May 14 Monday, noon. Final grades for all students due in Office of the Registrar.
*All dates and times are subject to change.

NOTE........
Near the end of each spring semester, the students in the Visualization Program, College of Architecture, conduct a two-day event called Viz A GoGo. This is a must see event for all students interested in any aspect of imaging. Details for the 2007 event have not been posted yet.