

INT 346 Video Production

This course is a basic primer in how to communicate using modern digital media tools. Students will learn the art, science, and social science of communication, and will show that knowledge by producing three works of digital media, culminating in a video that uses all of the techniques shown in the class. For the purposes of this course, students will be working with actuality media including journalism and documentary production.

Meeting Time: T-H - 12.30p - 1.45p

Meeting Place: EGNR 006

Office Hours: T-H 3-5p

Office Location: TBA

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Table of Contents:

<i>Course Objectives</i>	2
<i>Time Management</i>	2
<i>Learning Outcomes</i>	2
<i>Learning Cluster One: Digital Photography</i>	2
<i>Learning Cluster Two: Digital Audio</i>	3
<i>Learning Cluster Three: Digital Video</i>	4
<i>Required Materials</i>	6
<i>Classroom Policy</i>	7
<i>Course Schedule</i>	9
<i>Grading This Class</i>	11
<i>Assignments</i>	12
<i>Photographic Essay</i>	13
<i>Audio Package</i>	14
<i>Video Package</i>	15
<i>Professionalism Grade</i>	16

Course Objectives

The intent of this course is to teach students to use digital media that they will encounter in a wide range of situations, from web design, audio production, video production, and publishing. This course is an active-learning, service learning class. That means that students will demonstrate mastery of the subject by actually making media that can be used in their community. This has multiple advantages: it builds your resume, and it puts you in the thick of professional production early in your career where learning occurs “under fire.” The instructor is dedicated to seeing each student reach their creative and professional potential.

This course is an actuality course. That means that all of your productions are real-life events, people, or places, and you are reporting on them like a news person. Your work WILL be judged based on the accuracy of your content - if you make things up or do not check your facts you risk failing the assignments.

Time Management

Although time management is not part of the learning outcomes of the class, the instructor feels it is an essential skill to understand in order to successfully complete this course. Most of us have busy lives, including responsibilities outside of this class. For that reason the instructor wants to extend to each student, especially adult and non-traditional students, a helping-hand in developing time management skills to cope with the intense workload that the communication industry can throw at us, and which this class simulates through a challenging production schedule. Students who feel they may have issues with time management are encouraged to meet with the instructor at the beginning of class to arrange for a work schedule that, if followed, will result in maximizing your chances of success.

Learning Outcomes

The four major learning outcomes are divided into clusters: Photography, Audio, Video, and Editing. Each cluster is associate with an assignment. Completing your projects with a “pass” in each area allows the student to get 25 points for the area (see grading). Students should take note of these learning outcomes since each one can have a significant affect on the grades for any assignment turned in.

Learning Cluster One: Digital Photography

1. The student will demonstrate a working knowledge lens-based photo-graphics. This will include how light works and how it interacts with glass lenses used in modern photo-graphics to create still and temporal images.
2. The student will show they understand the concepts of lead room, rule of thirds, dynamic instability, depth of field, framing, closure, symmetry, eye line, and balance.
3. The student will understand lighting of images including contrast ratio, color temperature, blur, bloom, and flare.
4. The student will show they have a complete knowledge of digital image theory, including understand the concepts of color depth, pixel count, and compression.
5. The student will show they have a basic understanding of Adobe Photoshop.

6. The student will be able to manipulate still images including blurring, sharpening, changing contrast and color ratios, cutting, pasting, and cropping, and be able to apply text layers to existing images or introduce copied image segments to another image.
7. The student will show they can output a still image for print, the web, or digital video using basic digital tools.

Learning Cluster Two: Digital Audio

8. The student will show a basic understanding of the concepts of sound including wave form frequency, wave form amplitude, phase cancellation, hum, roll-off, and signal to noise ratio.
9. The student will demonstrate a working knowledge of audio microphones including being able to identify dynamic, electret, ribbon, condenser, cardioid, pressure zone, lavalier, shotgun, and stick microphones.
10. The student will demonstrate a working knowledge of audio cables including being able to care for microphone cables, be able to identify classes of cable connectors (XLR, TRS, mini, RCA, digital) and understand the difference between balanced and unbalanced microphones, including being able to convert different impedance and voltage levels in field collection.
11. The student will be able to position microphones of all types effectively to collect spoken and background audio in the field.
12. The student will demonstrate basic actuality (news gathering) skills for audio collection including identifying interview subjects, writing questions, choosing interview locations, and conducting interviews.
13. The student will understand basic audio editing theories including tracking, channels, small audio board use, digital capture to audio workstations, quality levels of digital files, compression, and file formats.
14. The student will be able to combine audio collected in a wide range of circumstances, including background, interview, and stand-up, into a single audio property known as an “audio package”.
15. The student will understand the concepts of copyright and clearance of materials for commercial and news broadcast, and understand how music is regulated in the United States.
16. The student will demonstrate the use of a major audio editing software package (Adobe Audition or Audacity) and show that they can export completed audio packages to formats capable of being used in video productions, recorded media, or on the Internet.

Learning Cluster Three: Digital Video

**Note: students who have not successfully completed the digital audio and digital photography segments of this class are unlikely to be able to complete the digital video cluster, as it assumes a working knowledge of photography and audio for the completion of the final actuality assignment. For that reason, inventory items 17 and 18 require knowledge of the previous two segments to pass.

17. Students should have a comprehensive, basic understanding of photographic theory and practice.
18. The Student should have a comprehensive, basic understanding of audio theory and practice.
19. Students should be familiar with the pre-production elements of treatments, two-sided scripts, shooting scripts, storyboards, location surveys, call sheets, scheduling, production research, and site surveys.
20. Students should be able to identify and create extreme closeups, closeups, medium shots, two-shots, long-shots, extreme long-shots, establishing shots, tracking shots, zooms, pans, tilts, trucks, dollies, slides, cranes, and pedestals.
21. Students should be able to choose a location for a stand-up and an interview and identify elements of concern including security, access, electricals, safety, legals, lighting, sound, and background.
22. Students should understand the rule of 45, the rule of 180, the rule of headroom, the rule of stability, and the rule of motion when planning an interview.
23. Students should be able to plan an actuality with multiple interviews and a standup, and execute that plan in a timely fashion.
24. The Student should be able to conduct an interview, asking appropriate questions while controlling for light, sound, photographic, and shot quality.
25. Students should be able to collect appropriate b-roll in sufficient quality to enable an editor to produce a quality production.
26. The student should know how to keep shot records, and should successfully maintain media integrity and backup during the production process.
27. The students should understand how to operate a professional quality video camera including how to select lenses and associated gear, how to use positioning equipment, how to use synchronous or non-synchronous sound, how to set camera iris, speed, and shutter settings, how to use on-board camera metering for audio, video, and clip formatting, how to introduce and recover digital recording medium, and how to protect all shooting assets from weather or theft injury.
28. The student should understand the theory of digital video files including resolution, frame rate, drop-frame versus non-drop-frame, progressive and interlaced scanning, data rates, compression, and color space.
29. The student should understand file formats for different end and production uses and be able to choose one that best suits the needs of the production.
30. The student should know how to clone materials from portable media to digital video workstations.

31. The student should understand bin and tracking systems on a professional video editor (AVID Media Composer or Apple Final Cut Pro).
32. The student should understand how to format timelines for output formats.
33. The student should be able to use multiple tracks, split audio from video, color correct, apply transitions and graphics, use simple effects, and combine multiple file formats (audio, still image, and video) into a single time-line.
34. The student should be able to successfully edit a 2.5-3 minute video package, avoiding flash frames, hanging shots, audio/video mis/synch, while including graphics, b-roll, and conforming to modern understandings of video editing.
35. The student should be able to output the finished product of an edit to a product capable of being archived in high quality, used in a multi-media presentation, or uploaded to the web.
36. The student should be able to upload the video to a service such as Vimeo or YouTube.

Instructional Strategy



The course will combine hands-on in class work, demonstration of techniques using both correct and incorrect examples of work, in class differentials where students share work with others, and class lectures.

Learning Assessment

The course will test items based on two main methods: projects that require students to demonstrate inventory items, and tests which require a student to understand both abstract theory as well as concrete application of theory to actual technology.

Required Materials

Students will be required to purchase the following items. Do not substitute items as the selections below have been chosen and tested for use with the media you will be collecting in this class.

Qty	Description	Picture
1	<p>SanDisk Extreme 32 GB SDHC Class 10 UHS-1 Flash Memory Card.</p> <p>Available from:</p> <p>Amazon</p> <p>BHphotovideo</p> <p>Students are encouraged to keep this flash card for future classes.</p>	
2	<p>Kingston Digital DataTraveler SE9 32GB USB 2.0 Flash Drive</p> <p>Available from:</p> <p>Adorama</p> <p>Amazon</p> <p>BHPhotovideo</p> <p>Newegg.</p>	

Classroom Policy

1. **Tardiness and Absence Policy:** Each student may take 3 absences for any reason. On the fourth and each subsequent absence they will lose a letter grade from their final score. Students who must take more absences for reasons of health or family crisis will be allowed to withdraw from the class. Tardiness may be regarded as an absence at the preference of the instructor. Despite this policy, work must be turned in prior to the due date to be accepted for full credit.
2. **Learning Agreement:** Students must sign a learning agreement to take this class. Failure to sign this agreement will result in the student being dropped from the class.
3. **Visitors:** Visitors to the class are not permitted except with permission of the instructor. Visitors to the class who act in a disruptive manner will be asked to leave.
4. **Disruptive Behavior:** Disruptive behavior in class will result in the student being asked to leave and being denied access to the class in the future. Disruptive behavior is defined as any purposeful act that disturbs the free flow of lectures and discussions at the discretion of the professor. This includes refusing to leave the classroom when requested to leave by the instructor.
5. **Respectful Behavior:** Respectful behavior is expected at all time between students, between students and teaching assistants, and between students and the professor. Respectful behavior is defined as behaviors which encourage learning by allowing access to discussions, lectures, and materials by all students.
6. **Alcohol and Drug Policy:** There is a zero tolerance policy of any form, and students who are found to be intoxicated will be removed from class.
7. **Cell Phones:** Using cell phones in class or any other electronic device except a device approved for note taking, talking in class, disruptive behavior, or actions that make learning hard for others will result in loss of 1/2 of a letter grade. In extreme cases you will be asked to leave class.
8. **Open Source and Fair Use:** Students may use of a small amount of open source or fair use material in papers, especially historical diagrams or images taken by the U.S. Or other government agency, or taken prior to 1922 as long as they have made a reasonable attempt to verify the copyright status of the materials. Where it is possible, this material should be thoroughly cited, and the students should be able to demonstrate why they feel it is open source or public domain, or why they believe they are making fair use of the material. As always, written permission to use materials is the safest way to make use of images and diagrams. Under no circumstances should students attempt to take credit for images that are open sources or fair use unless they have undergone substantial modification by the students, and even then the original document should be cited.

9. Disabilities: If you are a student with a disability, it is your responsibility to inform your instructor and register with the Office of Disability Services at least one week prior to a needed service so reasonable accommodations can be made..

10. Communication: Students are required to check their e-mail each day for communications about the class agenda.

11. Professional Behavior: This policies recognize that unusual circumstances occur, and that mistakes happen. The student should understand that the goal of the class is learning, and that many mistakes can be made good by communicating the mistake to the professor, and seeking to make the mistake good by learning from it. The professor will always attempt to find a way to accommodate a student who recognizes a problem and seeks to fix it as long as the fix represents an attempt at professional academic behavior and seeks to work toward the common goal of education and original thinking.

12. Changing the Syllabus: Modifications to this syllabus will, when possible, be provided in writing as soon as they can be determined, except for changes in lectures due to illness, emergency, or failure to meet learning objectives. Changes can include adding or removing tests, changing paper deadlines, or changing the order or content of readings.

13. There is a limited amount of equipment. Failure to return equipment on time and in good condition will result in an "F" for the assignment the equipment was used for IF another group of students are delayed in their own work through the oversight. Damage or loss of equipment is the sole responsibility of the student, who will be required to pay for losses.

Course Schedule

Date	Classroom	Special Event
7 January, 2014	Syllabus Review and Assignment.	Signed Syllabus Forms Due
9 January, 2014	Lecture: Digital Image Theory.	
14 January, 2014	Demonstration: Photography Kit.	
16 January, 2014	Demonstration: Adobe Photoshop.	Media Check #1
21 January, 2014	Lecture: The Physics of Light.	
23 January, 2014	Lecture: Lens Theory.	
28 January, 2014	Lecture: The Psychology of Images.	Media Check #2
30 January, 2014	Lecture: Audio Basics	
4 February, 2014	Demonstration: Audio Recorders	
6 February, 2014	Wrapping Cables	
11 February, 2014	Test: Digital Photography.	TEST
13 February, 2014	Differential: Photographic Assignment.	Photography Assignment Due
18 February, 2014	Demonstration: Audacity Audio Editing Software	
20 February, 2014	Creating the audio package	
25 February, 2014	Lecture: Microphones	
27 February, 2014	Cable Wrapping Test	TEST

Spring 2016

Date	Classroom	Special Event
4 March, 2014	Spring Break	
6 March, 2014		
11 March, 2014	Lecture: Pre-Production	
13 March, 2014	Demonstration: Video Cameras	
18 March, 2014	How Digital Video Works	
20 March, 2014	Differential: Sound Assignment.	Sound Assignment Due
25 March, 2014	Demonstration: Rigs	
27 March, 2014	Lighting Basics	
1 April, 2014	Compression and File Formats	
3 April, 2014	AVID Intake	
8 April, 2014	AVID Editing	
10 April, 2014	AVID Output	
15 April, 2014	TEST: Audio and Video	TEST
17 April, 2014	Advanced Photography	
22 April, 2014	Advanced Audio	
24 April, 2014	Advanced Editing	
29 April, 2014	Spare Day	
1 May, 2014	Differential: Video Assignment.	Video Assignment Due

Grading This Class

This course uses a standard 100 point scale for grading.

A = 91-100

B = 81 - 90

C = 71 - 80

D = 61 - 70

F = 60 or lower

Regular Grading			
Inventory Item	Due Date	Grading	Point Value
Media Check #1		Pass / Fail	5
Media Check #2		Pass / Fail	5
Photography Test		Scale	10
Photography Assignment		Rubric	10
Cable Wrapping Test		Pass / Fail	10
Audio Assignment		Rubric	10
Audio and Video Test		Scale	10
Video Assignment		Rubric	20
Video Distribution		Pass / Fail	10
Professionalism		Pass / Fail	10
		Total Points	100

Assignments

Assignments are designed to demonstrate mastery of the learning outcome inventories listed above. An assignment must be turned in at the start of class on the day it is due - projects that are not complete on the appropriate media at that time are late. Always keep a backup of your assignment as lost assignments count as not being turned in.

Assignments must be turned in properly formatted. They must be able to be opened by the professor on his workstation and reviewed using the expected software.

Students should realize the best and only way to pass this class is to successfully complete digital media assignments in an organized, professional, and thoughtful manner. Cramming an assignment the night before, allowing a wide range of errors to go unfixed, and assignments that do not show professional development of technique and style will result in lower grades and possibly failure of the course. No assignment is perfect, but the instructor will be lenient on mistakes arising from simple inexperience, and will grade down mistakes that come from lack of effort to learn the material.

Some Important Rules

- You may not use materials created before the start of this semester.
- You may not use materials created by other people.
- You must have consent to interview or photograph people. This consent can be verbal.
- You may not violate the copyright of others.
- You and the University hold joint copyright of each piece.
- You may use this piece for other purposes if you wish.
- The University will use your work only for educational purposes, never for commercial gain.
- You may not get paid by your subjects. This is ok in other classes, but here ethics forbids it.
- You will be judged on "Get." Get is the concept that your project shows ambition. Doing a shoot of your roommate is convenient and saves time, but will result in a low Get score. Doing an audio package with the Mayor (for example) requires you to do a lot more work in a very challenging time frame, giving you a great score for your Get.

Photographic Essay

Students will create a photo-essay of 25 images that tell a single “real” story. These photographs will be turned into a Microsoft Powerpoint or Apple Keynote presentation. Images should be taken on a professional grade camera - images taken on cellphones or low-end cameras will often not be of high enough quality to demonstrate your skills. All photographs should be sized in Photoshop for a 1920x1080 display and the presentation should likewise be formatted to this size.

Remember to choose your best photographs, and make sure you include no throw-away images. Your project will be graded based on the story your images tell, as well as the quality of each image. Poor images or ones who do not tell the story will detract from your production.

The grading for this assignment is based upon [Learning Cluster One](#) . Students must demonstrate these inventory items across the length of their 25 images, but each each need not contain all elements.

Grading Standard	
Value	Description
1	The project is properly formatted.
1	The images demonstrate rule of thirds.
1	The images demonstrate dynamic instability.
1	The images demonstrate proper use of contrast ratio.
2	The images tell a cohesive story,
1	The images demonstrate closure.
1	The images demonstrate lead room.
2	The images demonstrate the concept of “Get.”

Audio Package

Produce a three minute audio package that tells a real story. This story must be well researched, include narration, interviews, and background sound, and should be turned into a 48khz two channel mono or stereo WAV file with no compression.

Audio packages are real stories from the places and people around you. For examples of them you should listen to your local NPR station for the program “All Things Considered” for the stories that stand on their own rather than are read by the commentators. These stories must be researched, supported by fact, be interesting to a radio audience, and should tell a cohesive message that results in the listener having learned something new about their world. In addition, the story should be free from either distracting audio mistakes, and not simply be three minutes of someone talking to themselves. A good audio story collects the views of several people, includes sound collected from the area the story is on (a story on a waterfall should have a chance to hear the waterfall, the story of a protest should, if possible, have the crowd included), and usually is narrated by the presented to tie together each element.

The grading for this assignment is based upon [Learning Cluster Two](#). Students must demonstrate these inventory items across the length of their three minute package, but of course some elements may only appear briefly, or are present because a mistake is absent (for example, choosing the right microphone and audio quality is detected merely because the wrong quality and microphone would sound bad.)

Like assignment one, the content of the package is important as well as the technical quality. Choose a story that you have access to (or you won’t have materials to complete your project) and make sure you get enough information to tell the entire story without wandering on tangents.

Grading Standard	
Value	Description
1	The project is properly formatted.
2	The sound is level balanced through out the piece.
1	The project demonstrates use of natural sound.
2	The project demonstrates uses good story telling techniques.
2	The story is properly cited and tagged internally.
2	The story demonstrate the concept of “Get.”

Video Package

Produce a three minute video production of a real subject. This should have a standup to identify the piece, narrative voice over, b-roll, interview cut-aways, and graphic titles. An example of an “A” effort at the sophomore level can be found [here](#). This assignment is based upon the inventory listed under [Learning Cluster Three](#).

For this project you may team up as a group of two people, and make two packages. This is because it is useful to have someone in front of the camera for one production, then switch off for the next. Every student must be in front of the camera at least once for their own production, so this in no way eliminates the need for you to try being a talent at least once in your life.

A major issue for the package is choosing a subject quickly that you have access to, that is interesting, that is cohesive, and which has available photographic potential. Doing a story on the Grand Canyon is a great idea, except that it is hard to drive to the canyon from the midwest with gear in tow to get the b-roll you will need, and you may not use commercial b-roll or materials you did not collect yourself, or even use materials you collected during your summer vacation.

When you package is completed it should be exported to a MOV format 1080p30 video encoded in ProRes 422HQ format AND a M4V format (H.264) 1080p30 video. Students looking at the sample video listed above will note it has black bar on the sides. This is because the video was created nearly 10 years ago. Your own video should have no black bar at the tops or sides. The student is also advised to keep backups of their master ProRes file as this is the highest quality version and loss of files of other quality can be replaced quickly if you have it.

Grading Standard	
Value	Description
5/5	The project is properly formatted.
4	The project uses good standards of sound.
4	The project uses good photographic style.
4	The project demonstrate extensive use of B-Roll.
2	The project shows proper use of voice over.
2	The project uses split editing.
2	The project tells a compelling story.
2	The story demonstrate the concept of “Get.”

Professionalism Grade

The professionalism grade is based on the following inventory. All questions must be answered yes to obtain this grade.

Yes / No	Question
	You are present at all significant productions.
	Your teammates know how to reach you and where you are at all times.
	You pickup and return equipment on time and in good condition.
	Your projects are completed before the deadlines and do not require last minute struggles.
	You act with integrity, telling the truth to your teammates of where you are and when you will complete projects.
	You behave with courtesy to others.