DTC 201 - Tools & Methods for Digital Technology

Section 2, 3 credits
Fall 2017: Tuesday/Thursday 2:50-4:05pm, VMMC 111
Professor Brenda Grell
brenda.grell@wsu.edu
Email policy: I will only respond to email originating from WSU accounts.
Office: VMMC 26 (In “The Digs”)
Prof. Grell’s Office Hours: Tuesday & Thursday: 12pm-1pm; Wednesday: 11am-noon & by appointment
Course website: http://dtc-wsuv.org/wp/dtc201/
CMDC website: http://dtc-wsuv.org/cmdc/
Class Server Space (access through Cyberduck or another open source FTP program): dtc-wsuv.org
user: dtc201
password: TBA! You will receive an email with this info.

NOTE: All aspects of this course may change at the instructor's discretion. Changes will update the course webpage. Check there often for the most current information.

Course Fees
Beyond tuition and required course materials, no course or other special fees are required for this course.

Course Content, Structure, and Expectations
The catalog describes this course as an “[i]introduction to tools and methods of production for multimedia authoring in digital contexts.” During the semester, you will learn important concepts like bitmap and vector images, working with media on a timeline, 2D content development, sound production, storyboarding, and web-based coding languages, as well as managing and exhibiting your media files. We will be using the digital design tools of Photoshop, Illustrator, Garageband/Audacity, Premiere, After Effects, and TextWrangler to develop designs and media objects for multimedia environments.

The course is organized so that tools and methods are layered carefully in a way that introduces media design techniques and encourages creative and critical thinking, with a goal of the development of a final media project that encapsulates what you have learned in the course. Information will be presented via in class lectures and assigned Lynda.com video tutorials. Hands-on in class studio time will provide opportunities to apply what you are learning to course assignments.

Your developing knowledge will be assessed through assignments and a capstone project. Some work time will be available during some classes, but you must expect to complete most of your course work outside of class. To complete all of these requirements, students are encouraged to take advantage of the VMMC 111 computer lab that is equipped with all of the software required to complete work for this class. Be aware that other computer labs on campus will not have all software required to complete assignments.

The more time and effort you invest in this course, to show up and actively participate, the better your opportunities for earning higher grades. Kindness, civility, respect, and tolerance are expected from and for everyone. Your response to these expectations will have consequences.

Course Schedule
Lectures, assignments, and activities may change. See course webpage for current information.

Course Materials Required
- 3 month Lynda.com Basic subscription – purchase online $19.99/month online or free via a Multnomah County Library Card membership. Please check https://multcolib.org/ to make sure you meet eligibility.

Course Materials Highly Recommended
- 3 month Adobe.com Student Creative Cloud subscription to ALL programs - $19.99/month online.
Student Outcomes
This course is aligned with three of the seven University and five of the ten CMDC Program goals. Pay attention to the CMDC learning goals as you will be asked to account for your achievement of each in the DTC 497 Senior Capstone course. These are:

Goal 1: Demonstrate competency with computers for designing, distributing, researching, retrieving, and preserving digital works in various mediums for humane and effective human-computer interactions
A. Produce web pages and other digital interfaces and/or environments for effective and functional human-computer interactions
B. Employ web and other digital interfaces and/or environments that respond to specific audience needs, as well as usability and accessibility issues
C. Raise awareness of Fair Use and privacy and intellectual property issues as they apply to media objects
D. Learn various methods of researching for online information, such as databases, wikis, and websites, and of evaluating its credibility

Goal 2: Synthesize media forms for multimedia contexts
A. Organize multimedia for web pages and other digital interfaces and/or environments using various graphics, sound, and video authoring tools
B. Develop a multimedia project that incorporates various media objects, such as video, animation, sound, and still images.

Goal 4: Understand the production and assessment of media objects
A. Understand basics of front end design as well as composition strategies for digital texts and environments
B. Demonstrate an overall understanding and utilization of appropriate textual content for various forms of interactive media
C. Produce and evaluate effective textual content that promotes interaction, functionality, and usability by different readers and needs.

Goal 7: Recognize various forms of language processing and their implications for media authoring
A. Use digital media terminology and concepts, such as medium, media, multimedia, mass media, remediation, repurposing, translation, text, textuality, language, and code, appropriately in presentations and projects
B. Employ various types of texts, such as visual, auditory, kinetic, and kinesthetic texts, for appropriate mediums
C. Study, create, and critique digital text and its central role in human-computer interactions
D. Employ textual content in web pages and other digital interfaces or environments that respond to specific audience needs

Goal 10: Be practiced and capable communicators in all mediums
A. Create a digital text in a variety of mediums
B. Construct and deliver an argument focusing on the way the medium affects the message, audience, and other rhetorical components
C. Evaluate the effective use of language in a digital text
<table>
<thead>
<tr>
<th>University Learning Goal:</th>
<th>At the end of this course, you should be able to:</th>
<th>Topics that advance learning goals:</th>
<th>This goal will be evaluated by the following assignment(s):</th>
<th>CMDC Learning Goals</th>
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<tbody>
<tr>
<td>ULG1. Critical and Creative Thinking</td>
<td>Produce an informative or expressive multimodal text developed through effective research methods. Locate, synthesize, interpret, and evaluate a wide variety of digital and print-based texts.</td>
<td>Bitmap vs. vector graphics</td>
<td>Create launcher icon for a mobile app</td>
<td>Goal 1, Goal 2, Goal 4, Goal 7</td>
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<td>Methods of image production</td>
<td>Create vectored 2D imagery</td>
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<td>Remixes and mashups</td>
<td>Produce audio and video mashups and remixes</td>
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<td>Recording and manipulating audio</td>
<td>Create 2D animation narrative</td>
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<td>Time-based media</td>
<td>Produce a simple webpage</td>
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<td>Techniques for non-verbal narrative</td>
<td>Develop cohesive design across multiple social media platforms</td>
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<td>Editing content for narrative structure</td>
<td>Create a capstone project that can be used to host your multimedia work</td>
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<td>Web content for various mediums and methods of display and exhibition Integrating various forms of media</td>
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<td>ULG3. Information Literacy</td>
<td>Identify, explain, compare, apply, argue, interpret, and evaluate information in a variety of digital forms. Create multimodal texts using digital methods.</td>
<td>Evaluating media needs for multi-media projects Locating copyright-free and public domain audio &amp; video files for projects</td>
<td>Audio mash-up project Video mash-up project</td>
<td>Goal 1, Goal 2, Goal 4, Goal 7</td>
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<td>Students will use a disciplined and systematic approach to accessing, evaluating, and using information.</td>
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<td>ULG4. Communication</td>
<td>Communicate in various “authored” digital formats, &amp; both formal &amp; informal speech to convey meaning, significance, views, and values in peer groups &amp; beyond. Visually express ideas in coherent, concise, and technically correct forms effective with audiences in a variety of digital, multimodal texts. Engage effectively with diverse groups through listening &amp; speaking one-on-one, in small groups, &amp; in large groups, both online &amp; face to face.</td>
<td>Be able to manipulate images, sound, video and animated text for various contexts Understand the various purposes and audiences of social media environments Know how to present your work in a cohesive way to a wide range of audiences</td>
<td>Formal presentations of work In-class critiques Capstone project</td>
<td>Goal 7 Goal 10</td>
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### UCORE /Written Communication Goals & Outcomes

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<tr>
<th>UCORE Inquiry in the Creative and Professional Arts Goal</th>
<th>At the end of this course, you should be able to:</th>
<th>Topics that advance learning goals:</th>
<th>This goal will be evaluated by the following assignment(s):</th>
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<td>1. Perform, produce, fabricate, or generate an aesthetic object, installation, presentation, composition, performance or other creative work, either as an individual or as part of a collaborative. Students must also demonstrate that their creative work is grounded in existing historical, critical, or methodological scholarship.</td>
<td>Express yourself using multimedia content, including images, sound, video, and animation, with a variety of tools for different mediums and for a wide range of audiences. Understand how to plan and execute multimedia work through methods such as storyboarding Compose and distribute non-verbal narratives with various tools and distribution channels</td>
<td>Methods of image production Methods of time-based production Integrating media</td>
<td>Create launcher icon for a mobile app Create vectored 2D imagery Produce audio and video mashups and remixes Create 2D animation narrative Create a website that can be used to host your multimedia work</td>
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<td>2. Critically analyze, interpret, and/or evaluate the creative activities or accomplishments of others, past or present. Students must also demonstrate that their analysis and interpretation is grounded in existing historical, critical, or methodological scholarship.</td>
<td>Critically analyze multimedia texts for strategies used in order to address purpose and audience of/for text. Ground analysis of others, own, or own, texts through rhetorical analysis.</td>
<td>Sharing in-progress and completed work both informally in small groups and more formally in class presentations.</td>
<td>Formal presentations of projects as well as in-class critiques in which critical analysis is expected to be demonstrated.</td>
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<td>3. Have students demonstrate understanding of some form of creative expression as it relates to a significant historical period, their own or other cultures, particular artist or creative work, or other relevant inquiry.</td>
<td>Create images, webpages, videos, and sound files. Understand the constraints of proprietary software programs as they play out culturally and aesthetically.</td>
<td>Production of media objects. In-class tutorials of tools and methods.</td>
<td>Professor and peer critiques of work. End-of-semester class presentation of work.</td>
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<td>4. Have students solve a problem, conceptualize an issue, or convey a concept, formal or theoretical.</td>
<td>Demonstrate competency with computers for designing digital works in various mediums for humane and effective human-computer interactions. Synthesize media forms for multimedia contexts. Employ the principles for sophisticated manipulation of various forms of digital media. Understand the production and assessment of media objects.</td>
<td>Media production for multimedia environments Interactivity Multimedia design principles.</td>
<td>Daily in-class activities. Capstone Project.</td>
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**Assignments**

The course is organized so that you are responsible for an activity nearly each day of class. Additionally, there is one capstone project worth 48% of your overall grade for the course.

**Activity #1:** Resize three images to reflect various modes and resolutions
Activity #2: Create a launcher icon for a mobile app in Photoshop
Activity #3: Draw an image with the pen tool in Illustrator
Activity #4: Create an infographic and prepare Illustrator files for various types of display
Activity #5: Manipulate sound files on a timeline, multi-track, mashups and remix of sound to create a mash up
Activity #6: Record sounds, develop into sound file, and save as .MP3, .wav, and .aif files
Activity #7: Manipulate video file on a timeline and combine video files for a remix, utilizing what you have learned about Fair Use, copyright, and the Creative Commons
Activity #8: Shoot and edit together a 30 second video of making eggs
Activity #9: Manipulate video and image files with After Effects and combine archive audio and video files for a mash up, utilizing what you have learned about Fair Use, copyright, and the Creative Commons
Activity #10: Create a storyboard for a 45 sec. informational graphic animation
Activity #11: Working with different file types, create a 15-second informational graphic animation
Activity #12: Working further with your same topic, develop a 45-second informational graphic animation
Activity #13: Produce a blog post that contains one image, five tweets, and two links for a wide audience that includes potential employers, family members, and community leaders, as well as your friends
Activity #14: Develop a draft of a basic website hand-coded in HTML with CSS
Activity #15: Complete a three-page website that includes three images, five internal and five external links, and a YouTube video
Activity #16: Work in Progress of two media objects for Capstone Projects

Grades
Mid-term and final grades are determined from your attendance, participation, and success earning points for various graded course components. I am eager to talk with you at any time throughout the course about your grades and/or other matters associated with your success. I am reasonable and fair, but I am the final authority on all matters related to grading.

Graded Course Components and Considerations
Attendance, engagement, projects, and instructor evaluation all contribute to course grades. All work must be submitted as and when required. Points will be deducted for not following directions; lateness; lack of engagement, attendance, or participation; mistakes, problems, or other factors that hamper the overall effectiveness of your work. Please submit all assignments by the beginning of class on the due day; any assignments submitted after the start of class will be considered 1 day late. If an assignment/project is turned in late, each day reduces your project grade by 10% points. For example, if you earn a 90%, your late project (by one day) would now receive 80%, or two days late will be reduced to 70%. Please communicate your situation with me in case of illness or justifiable circumstances that may prompt you to turn in late projects or miss an exam. Make up opportunities not guaranteed. No planned extra credit opportunities. No substitutions for assignments, or work not submitted.

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<tr>
<th>Component</th>
<th>Points</th>
<th>Basis for assessment</th>
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<tbody>
<tr>
<td>Attendance</td>
<td>5</td>
<td>Individual. Regular attendance is required for course success. Absent students remain responsible for all assignments, capstone project, and/or changes in the course schedule. Make up opportunities are not guaranteed. After three absences, three (3) points may be deducted for each subsequent absence. Arriving late and/or leaving early more than 3 times counts as absence. The course professor is the final authority on all matters related to attendance.</td>
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Participation 5

Individual. Active engagement with the activities, expectations, and requirements of this course. Lack of preparation, subject mastery, and/or commitment to participating in an engaging, thoughtful manner, as well as working off task (checking email, social media, playing games, etc.), may result in point deductions or notice to drop the course. The following heuristics will be applied to assessment of participation:
- Works collaboratively and respectfully with others
- Demonstrates kindness, civility, respect, and tolerance to others
- Functions under pressure, often without supervision or immediate guidance
- Solves problems, often with “just in time learning” and/or the ability to research appropriate solutions
- Meets deadlines and produces work as and when required
- Demonstrates self-motivation and independent problem solving to benefit individual outcomes
- Performs expectations and requirements of specific assigned activities or capstone project, or goes beyond them
- Develops and implements new skills as required by assigned activities or projects
- Predicts potential problems, seeks and implements solutions, and assures their success through attention to detail(s)
- Leads and inspires others by example in both thought and practice
- Implements skills learned from other CMDC classes

Activities 48

16 projects – 10 graded at random x 48 points
Individual. Assessment as outlined above.

Capstone Project 42

1 project x 10 points = 10 points
Individual. Assessment as outline above and discussed in class.

Totals 100

Professor evaluation following described criteria

Grade determination

Final grades are determined from my evaluation of your course projects minus any deductions for attendance or participation. No curving, averaging, grade bumps, or other manipulations are utilized. No extra credit opportunities are planned. Incompletes are not available. Completion of any course component does not guarantee the highest grade. Consider the level of performance expected for each grade. I encourage you to discuss your progress, performance, questions, and concerns with me. I will exercise caution and fairness in assessing your work and assigning grades but remain the final authority on all matters related to assessment and grading. Remember: the highest grades are earned by the best performance and participation.

Final grades are based on this scale. **DTC majors must earn 70% or above in order to pass the course.**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Results</th>
<th>Description</th>
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<tbody>
<tr>
<td>A</td>
<td>93 and above</td>
<td>Exemplary work</td>
<td>Goes beyond requirements and expectations; Shows a high level of engagement by student</td>
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<td>A-</td>
<td>90-92.99</td>
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<tr>
<td>B+</td>
<td>87-89.99</td>
<td>Good work</td>
<td>Good work, but not exemplary</td>
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<tr>
<td>B</td>
<td>83-86.99</td>
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<td></td>
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<tr>
<td>B-</td>
<td>80-82.99</td>
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<tr>
<td>C+</td>
<td>77-79.99</td>
<td>Acceptable work</td>
<td>Meets minimum expectations and requirements but does not go beyond them; Shows acceptable, but no more, engagement by student</td>
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<td>C</td>
<td>73-76.99</td>
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<tr>
<td>C-</td>
<td>70-72.99</td>
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<tr>
<td>D+</td>
<td>67-69.99</td>
<td>Less than</td>
<td>Less than acceptable expectations and requirements met; Less than acceptable engagement by student</td>
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<tr>
<td>D</td>
<td>63-66.99</td>
<td>acceptable work</td>
<td></td>
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<tr>
<td>D-</td>
<td>60-62.99</td>
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<tr>
<td>F</td>
<td>59.99 and below</td>
<td>Minimal work</td>
<td>Little effort, engagement, participation Failure in any or all aspects of course expectations or requirements</td>
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<td>Failure</td>
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Part 1. Acquiring an Understanding of Tools & Methods

1. Methods of Image Production
   Problem to be Solved: When to use a bitmap and vector image and why.

   **Week 1: Bitmap Images**
   Goal: Be able to create bitmap images
   Aug. 22, Day 1 - Introduction to the course, course requirements, etc. Intro to bitmap and vector graphics, color mode, resolution, pixel dimensions.
   Aug. 24, Day 2 - Photoshop Overview, basic introduction to the interface and using tools and menu items. Activity #1: Resize three images to reflect various modes and resolutions.

   **Week 2: Bitmap Images to Vector Images**
   Goal: Understand when to use bitmap and vector images for projects
Aug. 29, Day 1 - Layers, grouping, and masking. Activity #2: Create a launcher icon for a mobile app in Photoshop.
Aug. 31, Day 2 – Introduction to Illustrator. Activity #3: Draw an image with the pen tool in Illustrator

Week 3: Vector Images
Goal: Be able to create vector images
Sept. 7, Day 2 - Art boards and resizing for various contexts. Exporting media. Activity #4: Create an infographic and prepare Illustrator files for various types of display.

2. Methods of Time-Based Production
Problem to be Solved: When it is best to create original media or remix/mash up borrowed media and why

Week 4: Mixing and Recording Sound
Goal: Know how to make sound files
Sept. 12, Day 1 - Principles of sound. Introduction to Garageband and to searching for online materials for mashups. Introduce the Creative Commons (CC) and other free music archives; discuss artist's rights, copyright, & fair use as well how to work with CC licensed material. Manipulate sound files on a timeline, multi-track, mashups and remix of sound to create a mash up. Visit the Creative Commons website and locate three files that can be used to combine into a mash up. Activity #5: Create the mash up and include the appropriate attribution to the artist.
Sept. 14, Day 2 - Recording raw data, recording techniques, importing and exporting files. Activity #6: Record sounds, develop into sound file, and save as .MP3, .wav, and .aif files.

Week 5: Video Editing and Production
Goal: Know how to produce and work with video files
Sept. 19, Day 1 - Introduction to Premiere, its interface and working on a timeline. Activity #7: Manipulate video file on a timeline and combine video files for a remix, utilizing what you have learned about Fair Use, copyright, and the Creative Commons. Multi-track, mash ups and remix of video. Searching for video clips.
Sept. 21, Day 2 - Storyboarding and narrative structure. Recording raw data, video recording techniques, importing and exporting files. Activity #8: Shoot and edit together a 30 second video of making eggs.

Week 6: Displaying Video Narratives and Introduction to Animation Design and Motion Graphics
Goal: Understand how to edit video for the purpose of telling a story
Sept. 26, Day 1 – Save video file to various types using Adobe Media Encoder. Uploading and using social media sites. Introduction to After Effects, its interface, importing video and images.
Sept. 28, Day 2 – More on AfterEffects. Introduction to motion graphics, layout, animating, and storyboard. Activity #9: Manipulate video and image files with After Effects and combine audio and video files for a mash up, utilizing what you have learned about Fair Use, copyright, and the Creative Commons.

Week 7: More on Animation Design and Motion Graphics
Goal: Know how to produce 2D and 2.5D animation

Week 8: Animated Infographics
Goal: Know how to storyboard and create 2D and 2.5D animated infographics
Oct. 10, Day 1 – More on After Effects, importing graphics, and creating graphics within AE.
Oct. 12, Day 2 - Introduction to motion graphics, layout, camera movements, depth of field, and searching for sources for animation. Activity #12: Working with different file types, create a 45-second informational graphic animation.

3. Methods of Web Production
Problem to be Solved: Evaluating a project on how best to display content in a web environment and why

Week 9: Social Media & Introduction to HTML & CSS
Goal: Understand the affordances of different social media platforms for conveying ideas and projects and how web content is created
Oct. 17 – Introduction to Twitter; approaches and strategies for its uses; populating site with media, audiences. Introduction to blogs; blog templates; uses of blogs. Activity #13: Produce a blog post that contains one image, five tweets, and two links for a wide audience that includes potential employers, family members, and community leaders, as well as your friends. Make sure the information produced for your blog post and tweets on Twitter are accessible to an audience that will include potential employers, family members, and community leaders, as well as your friends. Embed your tweets in your blog post and tag your blog post with tags assigned by the Professor.
Oct. 19 – Introduce HTML and CSS as basic tools of Web.

**Week 10: More on HTML & CSS**
Goal: Use provided content to produce webpage using HTML.
**Oct. 24, Day 1** – More on HTML and CSS. Use of inline styling vs. CSS.
**Oct. 26, Day 2** – More on HTML and CSS. Activity #14: Develop a draft of a basic website hand-coded in HTML.

**Week 11: More on HTML and CSS**
Goal: Further develop use of HTML and CSS.
**Oct. 31, Day 1** – More on HTML and CSS.
**Nov. 2, Day 2** – More on HTML and CSS. Activity #15: Complete a three-page website that includes three images, five internal and five external links, and a YouTube video.

**Part 2. Exploring Tools and Methods for Media Art Projects: Methods of Integrating Media**
Problem to be Solved: Integrating media that offers an aesthetically pleasing site that also provides a cogent message.

**Week 12: Project Planning**
Goal: Research and sketch out Capstone Project.
**Nov. 7** – Planning and identifying media needed for Capstone Project: A Social Issue.
**Nov. 9** – Sketching out design, wireframing site.

The Capstone Project is the final project for this course that encapsulates what you have learned. For this project you are asked to create a three pages website, that you create using HTML5 and CSS3 and upload to the server. Also required are two of the following media objects:

- Infographic image file
- Remixed video clip
- Animation clip

One of these media objects must be generated from original content by you. For example, you can use an infographic you drew yourself or an animation you produced from scratch. The second media object should be a remix or mash up of several files. You are expected to demonstrate appropriate knowledge of Fair Use, copyright, and attribution to the artists from whom you have borrowed the material. You will also produce for this site, an artist’s statement that articulates what you are trying to say about your social issue with your website. In sum, your Capstone Project should demonstrate an understanding of how to incorporate multiple media objects into one environment and present an aesthetically pleasing site that reflects the idea about your chosen topic that you wish to make with these media objects.

**Week 13, 14, & 15: Multimedia Content Development for the Capstone Project**
Goal: Develop content for Capstone Project.
**Nov. 14, Day 1** – Shoot, record, design, code.
**Nov. 16, Day 2** – Shoot, record, design, code, in-class critique of draft of the Capstone Project. Activity #15: Work in Progress of two media objects for Capstone Projects.

**Thanksgiving Holiday – No class on November 21 & 23.**
**Nov. 28, Day 3** – Shoot, record, design, code, fine-tune work based on critique, test usability of the site.

**Presenting Capstone Projects**
Goal: Presenting Capstone Project and Receiving Feedback.
**Nov. 30, Day 1** – Final Presentations.
**Dec. 5, Day 2** – Final Presentations.
**Dec. 7, Day 3** – Final Presentations.