

DTC 435 – Advanced Digital Animation

- 3 credits
- Spring 2021: Tuesday/Thursday 10:35-11:50am, synchronously via Zoom link found on Canvas site.
- Professor Brenda Grell
- brenda.grell@wsu.edu - Instructor will not respond to email over the weekend.
- Prof Grell's Office Hours via Zoom – Tues 1-3pm, Thurs 1-2pm & by appointment.
- Office: via the CMDC's Slack — [dtc435-spring2021](#) channel in [cmdcprogram.slack.com](#). You will receive an email with the Slack invite.
- Course Canvas: <http://canvas.wsu.edu/>— Grades, zoom class link & class recordings.
- Course website: <http://dtc-wsuv.org/dtc435/> - Homework & Project descriptions, links, and resources.
- CMDC website: <http://dtc-wsuv.org/cmdc/> - Resources for DTC majors and minors.
- Class WSU OneDrive folder: Homework & projects submitted here. You will receive an email invite to the folder. Please make sure you put your work in the proper homework folder.

NOTE: All aspects of this course may change at the instructor's discretion. **Changes will be updated on 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

This course will be covering the creation of advanced digital animations using 2D and 3D animation software, with an emphasis on creativity, aesthetics, storytelling, and problem-solving techniques. During the semester, you will learn important concepts about animation principles, as well as storyboarding and storytelling techniques. We will be using Photoshop, Adobe After Effects, and Autodesk Maya to develop 2D and 3D animations.

The course is organized so that animation principles and exploration of aesthetics are layered carefully in a way that introduces 2D and 3D modeling techniques and processes while developing creative and critical thinking through the creation of these animations. The final project of the class will allow for the synthesis that encapsulates the 2D and 3D animation techniques of what you have learned in the course. Information will be presented via in class lectures and assigned Lynda.com video tutorials (when applicable). Hands-on in class studio time will provide opportunities to apply what you are learning within class time to course assignments.

Your developing knowledge will be assessed through assignments, presentations, and a final 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 request loaner "DTC laptops" from the Library with permission from IT to install software on the laptop.

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 website for current information.

Course Materials Required

- **Lynda.com 4 month Basic subscription** – Free via a Fort Vancouver Library Card membership. Please check <http://www.fvrl.org> for more info.
- **Adobe.com 4 month subscription** – FREE for DTC 435 students enrolled in the class for Spring 2021. You can purchase online a \$52.99/month to month or one-year student plan for \$19.99/month for a one year student contract.
- **Maya 2020 student subscription** – free! Register using your WSU email and allow enough time for student verification.
- **Thumb Drive** – at least 64GB (\$15)

Student Outcomes

This course is aligned with two of the seven University and seven 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.

Goal 2: Synthesize media forms for multimedia contexts.

Goal 3: Employ the principles of visual form for sophisticated image manipulation.

Goal 4: Understand the production and assessment of media objects.

Goal 6: Question the way digital media functions in multiple cultural contexts

Goal 8: Appreciate the history of technological development, from local to global perspectives, and its implications for a variety of mediums

Goal 10: Be practiced and capable communicators in all mediums.

Learning Goals & Outcomes for this Course

University Learning Goals:	At the end of this course, you should be able to:	Required Course Activities that Advance Learning Goals and Method of Assessment:	CMDC Learning Goals:
<p>Critical and Creative Thinking</p>	<p>Define, analyze, and solve problems</p> <p>Integrate and synthesize knowledge from multiple sources</p> <p>Assess the accuracy and validity of findings and conclusions</p> <p>Understand how one thinks, reasons, and makes value judgments, including ethical and aesthetical judgments</p> <p>Combine and synthesize existing ideas, images, or expertise in original ways</p> <p>Think, react, and work in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking.</p>	<p>Weekly Homework Assignments</p> <p>In Class Presentation</p> <p>Animation Project #1 and #2</p>	<p>Goal 1, Goal 2, Goal 3, Goal 4</p>
<p>Information Literacy & Communication</p> <p>Students will use a disciplined and systematic approach to accessing, evaluating, and using information.</p> <p>Students will write, speak, and listen to achieve intended and meaningful understanding.</p>	<p>Determine the extent and type of information needed</p> <p>Access information effectively and efficiently from multiple sources</p> <p>Assess credibility and application of information sources</p> <p>Use information to accomplish a specific purpose</p> <p>Access and use information ethically and legally</p> <p>Communicate in various "authored" digital formats, & both formal & informal speech to convey meaning, significance, views, and values in peer groups & beyond.</p> <p>Visually express ideas in coherent, concise, and technically correct forms effective with audiences in a variety of digital, multimodal texts.</p> <p>Identify, explain, compare, apply, argue, interpret, and evaluate information in a variety of digital forms.</p> <p>Engage effectively with diverse groups through listening & speaking one-on-one, in small groups, & in large groups, both online & face to face.</p>	<p>In class discussions and critiques, presentations, and project production statements</p>	<p>Goal 3, Goal 4, Goal 6, Goal 8, Goal 10</p>

Assignments

The course is organized so that you are responsible for an assignment nearly each week of class.

- 2 Assigned Projects
- 1 In-Class Presentation on an Animator
- 7 Weekly Assigned Homework Exercises
 - Homework #1: 3-sec Animated GIF
 - Homework #2: 15-sec Image and Sound Animation
 - Homework #3: 5-sec Walk Cycle
 - Homework #4: Storyboard for Project #1
 - Homework #5: Storyboard for Project #2
 - Homework #6: 3D model of Project #2 character
 - Homework #7: Playblast of Project #2

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.

Component	Points	Basis for Assessment
Attendance	5	<p>Individual. Regular online attendance to every class is required.</p> <p>All students must attend with webcam on and audio mic working during designated class time (see Participation below). Absent students remain responsible for all assignments, capstone project, and/or changes in the course schedule. Make up opportunities are not guaranteed.</p> <p>After three absences, three additional points will be deducted for each subsequent absence. If students miss more than three weeks in a row, for any reason, students will be asked to drop the course and retake it when they are better able to participate.</p> <p>Arriving late and/or leaving early more than three times counts as absence. The course professor is the final authority on all matters related to attendance.</p>

Participation	5	<p>Individual. Active engagement with the activities, expectations, and requirements of this course.</p> <p>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.</p> <p>The following heuristics will be applied to assessment of participation:</p> <ul style="list-style-type: none"> • Works collaboratively and respectfully with others both in class and online • 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 • Meets or exceeds expectations and requirements of specific assignments or capstone project • 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 <p>The CMDC aims to achieve three main goals:</p> <ol style="list-style-type: none"> 1. Provide students with knowledge and skills for developing their own knowledge-making 2. Facilitate exploration 3. Prepare students for the field and the world beyond <p>As best professional practice and to achieve these goals, students are expected to be engaged with their CMDC classes via video and audio whenever possible. That said, the program understands that at certain times students may need to leave their screens to deal with any number of issues, including stress. We also ask that when in class students are not to be in motion—driving a car or walking for exercise. We ask you to pay attention and treat your classes as you would any class in "normal" times.</p> <p>Know that CMDC faculty teach because they want to make a positive difference in their students' lives, so please know that they will approach any conversation about Zoom in that spirit.</p>
Assignments	35	7 assignments – 7 graded x 5 points Individual. Assessment as outlined above.
Presentation	5	Presentation on an Animator = 5 points
Project 1 + 2	25 + 25	Project 1 = 25 points Project 2 = 25 points Individual. Assessment 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, attendance, and participation. Final grades are based on this scale. **DTC majors must earn 70% or above in order to pass the course.**

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

University Policies

Reasonable Accommodation

Reasonable accommodations are available for students with documented disabilities or chronic medical conditions. If you have a disability and need accommodations to fully participate in this class, please visit the Access Center website to follow published procedures to request accommodations: <https://studentaffairs.vancouver.wsu.edu/access-center>. Students may also either contact or visit the Access Center in-person to schedule an appointment with our Access Center Coordinator. Location: Classroom Building, Room 160; Phone: 360-546-9238; Email: van.access.center@wsu.edu. All disability related accommodations MUST be approved through the Access Center. Students with approved accommodations are strongly encouraged to visit with instructors early in the semester during office hours to discuss logistics.

Recording Sensitive Topics

In this class, students are encouraged to both express and evaluate multiple points of view. A key aspect of a college education is exposure to and engagement with the complexity of various issues. Therefore, it is important that we listen and respect one another. We do not have to come to consensus, but we do need to agree to honor the privacy and educational processes of our classmates. Because this class is virtual, that commitment includes digital privacy, meaning that students are not allowed to make, remix nor share or post course recordings, nor in any way capture, manipulate, or circulate the likeness of a classmate.

Academic Integrity

Academic integrity is the cornerstone of higher education. As such, all members of the university community share responsibility for maintaining and promoting the principles of integrity in all activities, including academic integrity and honest scholarship. Academic integrity will be strongly enforced in this course. Students who violate WSU's Academic Integrity Policy (identified in Washington Administrative Code (WAC) 504-26-010(3) and -404) will fail the course, will not have the option to withdraw from the course pending an appeal, and will be reported to the Office of Student Conduct.

Cheating includes, but is not limited to, plagiarism and unauthorized collaboration as defined in the Standards of Conduct for Students, WAC 504-26-010(3). You need to read and understand all of the definitions of cheating:

<http://app.leg.wa.gov/WAC/default.aspx?cite=504-26-010>. If you have any questions about what is and is not allowed in this course, you should ask course instructors before proceeding. If you wish to appeal a faculty member's decision relating to academic integrity, please use the form available at <https://studentaffairs.vancouver.wsu.edu/student-affairs/student-conduct>. If you have any questions about the process on the Vancouver campus, please call Eric Scott at 360-546-9530.

COVID-19 Policy

Students are expected to abide by all current COVID-19 related university policies and public health directives, which could include wearing a cloth face covering, physically distancing, self-attestations, and sanitizing common use spaces. All current COVID-19 related university policies and public health directives are located at <https://wsu.edu/covid-19/>.

WSU Attestation: All students and employees must complete a self-attestation form every day they plan to be at a physical WSU location. <https://attestation.wsu.edu/>

Policy Prohibiting Discrimination and Harassment (Executive Policy 15)

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This policy expresses WSU's commitment to maintaining an environment free from discrimination, including sexual harassment. This policy applies to all students, faculty, staff, or others having an association with the University.

Discrimination, including discriminatory harassment, sexual harassment, and sexual misconduct (including stalking, intimate partner violence, and sexual violence) is prohibited at WSU (See WSU Policy Prohibiting Discrimination and Harassment (Executive Policy 15) and WSU Standards of Conduct for Students). If you feel you have experienced or have witnessed discriminatory conduct, you can contact the WSU Office of Compliance and Civil Rights (CCR) and/or the WSU Title IX Coordinator at 509-335-8288 to discuss resources, including confidential resources, and reporting options.

Most WSU employees, including faculty, who have information regarding sexual harassment or sexual misconduct are required to report the information to CRCI or a designated Title IX Coordinator or Liaison. Visit <https://ccr.wsu.edu/> for more information.

Library Services

The Library is open to WSU students/faculty/staff for limited hours. Check the Library Hours webpage before going to campus: <https://library.vancouver.wsu.edu/library-hours>

Laptops available to WSU Vancouver students: Laptops may be picked up in the Library by WSUV students. Laptops cannot be reserved but students are encouraged to call ahead of time to determine availability.

Writing Center Services Available Online

The WSU Vancouver Online Writing Lab (OWL) is open to respond to student writing between 9 a.m. and 5 p.m. Monday through Thursday and between 10 a.m. and 2 p.m. on Friday. For more information:

<https://cas.vancouver.wsu.edu/writing-center/online-writing-lab>

Math Tutoring is Available Online via Zoom. See schedule: <https://studentaffairs.vancouver.wsu.edu/qsc-online-tutoring-schedule>

Technical Service Help Available Online

For more information: <https://www.vancouver.wsu.edu/information-technology>

Software Available on Cloud

WSU Vancouver students and employees can access software Remotely with AppStream. Software available includes Adobe CC apps (only for those with Adobe licenses); Microsoft Office apps (you'll need to log in on first launch); ArcGIS; Matlab; Mathematica; R/RStudio, and many more.

Go to: <https://www.vancouver.wsu.edu/information-technology/access-campus-software-remotely-appstream>

Cougar Food Pantry

We know that it can be hard to make ends meet when you're paying for college and living on a tight budget. If you are struggling to feed yourself or your family, the Cougar Food Pantry can help. The pantry provides free, nonperishable food items for WSU Vancouver students in need. The process is simple, anonymous and judgement-free. Learn more and request food at <https://studentaffairs.vancouver.wsu.edu/cougar-food-pantry> or stop by the Cougar Center in the Student Services Center.

Accommodation for Religious Observances or Activities

Washington State University reasonably accommodates absences allowing for students to take holidays for reasons of faith or conscience or organized activities conducted under the auspices of a religious denomination, church, or religious organization. Reasonable accommodation requires the student to coordinate with the instructor on scheduling examinations or other activities necessary for course completion. Students requesting accommodation must provide written notification within the first two weeks of the beginning of the course and include specific dates for absences. Approved accommodations for absences will not adversely impact student grades. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence. Students who feel they have been treated unfairly in terms of this accommodation may refer to Academic Regulation 104 – Academic Complaint Procedures.

Safety and Emergency Notification and Inclement Weather Policy

“WSU has made an emergency notification system available for faculty, students, and staff. Please register at myWSU with emergency contact information (cell, email, text, etc.). You may have been prompted to complete emergency contact information when registering for classes at myWSU. It is rare that WSU Vancouver modifies operations for ANY weather conditions. Any closure or class cancellations campus-wide, will be posted to major news and media outlets AND listed on the WSU Vancouver home page (<https://www.vancouver.wsu.edu>) and the VanCoug Alertswebpage (<http://www.flashalert.net>). Individual class cancellations may be made at the discretion of the instructor.

Tentative Course Schedule

Always check the class website for the most up to date schedule and homework assignments

Week 1A: January 19 - Syllabus and overview of class, historical and contemporary approaches to animation, animation principles

Week 1B: January 21 – Animated GIFS, morphing and movement, Photoshop, and Wacom tablets.
Due Readings: p. 1-84.

Week 2A: January 26 – Animation to inform.
Due Homework #1: 3-sec Animated GIF

Week 2B: January 28 – Into to Illustrator and AE, Intro to Project #1: Animated PSAs.
Due Readings: p. 84-101

Week 3A: February 2 – Narrative approaches, animating in AE.
Due Homework #2: 15-sec Image and Sound Animation

Week 3B: February 4 – Motion and compositing in AE, walk cycle in AE.
Due Readings: p. 102-173

Week 4A: February 9 – Working with audio in Audition, voice overs, sound effects, and recording audio.
Due Homework #3: 5-sec Walk Cycle

Week 4B: February 11 – Working with text, cameras and lights.
Due Readings: p. 217-255

Week 5A: February 16 – Graph Editor.
Due Homework #4: Storyboard for Project #1

Week 5B: February 18 – Refining motion and easing.

Week 6A: February 23 – Studio time.

Week 6B: February 25 – NO CLASS & OFFICE HOURS – WSUV Offices remain open.

Week 7A: March 2 – **Project #1 due. Presentation and class critiques of Project #1.**

Week 7B: March 4 – **Presentation and class critiques of Project #1.**

Week 8A: March 9 – Creative Pause: Class presentations on contemporary 2D and 3D animators.

Week 8B: March 11 – Creative Pause: Class presentations on contemporary 2D and 3D animators.

Week 9A: March 16 – 3D modeling in Maya - Refresh of character modeling basics.

Week 9B: March 18 – 3D modeling and UV mapping, Intro to Project #2

Week 10A: March 23 – Animating in Maya –Character rigging techniques
Due Homework #5: Storyboard for Project #2

Week 10B: March 25 – Animating in Maya – More on rigging techniques

Week 11A: March 30 – Animating in Maya – Rigging and skinning characters.
Due Homework #6: 3D model of Project #2 character

Week 11B: April 1 – Animating in Maya – Pruning weights and refining movement

Week 12A: April 6 – Animating in Maya - Lighting, skydomes, environments

Week 12B: April 8 – Animating in Maya - Refining motion for characters

Week 13A: Apr. 13 – NO CLASS & OFFICE HOURS – WSUV Offices remain open.

Week 13B: April 15 – Animating in Maya – Refining motion for cameras

Week 14A: April 20 – Animating in Maya – Arnold render settings.
Due Homework #7: Playblast of Project #2

Week 14B: April 22 – Troubleshooting final project, in class studio time

Week 15A: April 27 – **Final Project Due. Presentation and class critiques of Project #2**

Week 15B: April 29 – **Presentation and class critiques of Project #2**