

# ARTG 118 - Character Creation for Video Games

Summer 2023

Online Synchronous (Zoom Class)

Tuesday 6:00 pm - 7:30 pm

Thursday 6:00 pm - 7:30 pm

Instructor: **Ed Gregor**

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Office hours: Wednesdays and Fridays 4-5pm via Zoom in Canvas

## Syllabus

*Course Description:* This course is intended to prepare students, primarily Art for Games and Playable Media and Art majors. Technical aspects of instruction will focus on using digital means to create 2D and 3D visuals oriented toward the context of computer games. Throughout the course there will be lectures, demos, assignments, critiques and lab time to explore the wide variety of methods and tools to create 2D and 3D game art successfully.

Beyond lectures and demonstrations, we will also think actively and critically about issues relating to the ways in which art aimed at computer game design functions as visual art in contemporary culture. These issues will include the following:

- Critical analysis of styles, visual languages, and their expressive possibilities in fostering different kinds of engagement in computer games
- Relationships between visual images and the player's experience of the game's narrative; how do players "write" themselves into the game in their personal internalized experience, which is mediated by visual images; the social and cultural functions of play; critical issues of interpretation, role playing, psychology, and fantasy
- How does game art reference culturally established visual languages and expression (e.g., photography, cinema, cartoons, animation, drawing/painting, digital rendering)
- How to work as an engaged member of a collaborative group; developing effective communication among artists and engineers
- Creation of concept art from sketch to finished, detailed work
- Advanced techniques of 3D modeling, texturing and animation.
- New issues facing technical artistry, such as Artificial Intelligence.

- Awareness of central technical issues: digital imaging tools, testing developing game art in the dynamic visual context of the game, game art as formal and conceptual medium in its own right (drawings, paintings, prints with game-world references)

**Weekly class sessions will include:**

- Instructor-led technical demonstrations and hands-on practice in a broad range of techniques and concepts in handling digital equipment and software for creating interactive digital assets
- Project assignments to develop skills and imaginative faculties in creating digital concept art, 3D models, 2D and 3D animations
- Presentations and discussions by the instructor and students of critical ideas relating to digital and game art in visual culture, supported by selected readings
- Specific attention to issues of design and color theory
- Student presentation and critique of art assignments, as well as one on one time in class with the instructor and breakout rooms for lab time and critique

Possible assigned readings or videos will include theoretical frameworks that will inform the students' art production and provide a critical vocabulary for thinking about a variety of aspects relating to game art and production.

**COURSE REQUIREMENTS & ATTENDANCE**

- Commitment, motivation and hard work
- FULL participation in class discussion
- Completion of all class assignments on the scheduled due date
- Keep up with reading/video assignments and be prepared to talk about them
- Regular and ON-TIME attendance is required
- Expect to spend a minimum of 8 hours out of class per week on class assignments

GRADING: The final grade for the course will be determined by evaluation in the following areas:

Assignments and Final Project: 100% of your final grade

***Tentative Schedule***

*(subject to change according to levels of students' knowledge and the needs of team projects)*

**Week 1**

***Introductions, History of Game Art, Game Production Process:***

Syllabus review

History of game art: Videos and discussion  
Process of making game art.  
Production phases of game development  
Behind the Scenes - Production and Art: Videos and discussion  
*Assignment 01: Character Concept Sketch*

## **Week 2**

### ***Digital Painting and Concept Art:***

Intro to photoshop and drawing tablet  
Creating character concept art using comic style approach  
Advanced techniques in photoshop: mixer brush, texturing, effects, hair, fur  
Critique: Character Concept Sketch  
*Assignment 02: Character Concept Full Color*

## **Week 3**

### ***3D Modeling in Blender :***

Modeling tools: manipulating vertices, edges and faces; understanding modifiers; using extrude, inset, translate, rotate and scale tools.  
How to create a biped base mesh with box modeling following a blueprint  
Critique: Character Concept Full Color  
*Assignment 03: 3D Character Model 01 - Torso, Arms, Legs (including 2D Blueprint)*

## **Week 4**

### ***Advanced 3D Modeling in Blender :***

Advanced modeling techniques for Hands and Feet  
Modeling techniques for Clothes  
Critique: 3D Character Model 01  
*Assignment 04: 3D Character Model 02 - Hands, Feet, Clothes*

## **Week 5**

### ***Sculpting Detail and Retopology:***

Blender sculpting brushes and tools  
Strategies sculpting a Head and Face using Dynamic Topology Sculpting

Critique: 3D Character Model 02

*Assignment 05: 3D Character Model 03 - Head Sculpt*

## **Week 6**

### ***Head Retopology:***

Building a lower resolution version of the Head using Retopology techniques

Critique: 3D Character Model 03 - Head Sculpt

*Assignment 06: 3D Character Model 04 - Head Retopology*

## **Week 7**

### ***Head Retopology and Modeling Hair:***

Building a lower resolution version of the Head using Retopology techniques  
Modeling techniques for Hair

Critique: 3D Character Model 04 - Head Retopology

*Assignment 07: Modeling Hair*

## **Week 8**

### ***UV Mapping and 3D Texturing:***

Creating UV seams and unwrapping the mesh

Using Substance Painter to create convincing textures for your 3D models.

Critique: 3D Character Model 04 - Head Retopology and Modeling Hair

*Assignment 07: 3D Character UV Unwrap and Textured*

## **Week 9**

### ***Rigging and Weighting 3D Characters:***

Techniques for creating a skeleton for 3D meshes; IK and manipulation controls; weighting vertices to joints and creating proper deformations.

Critique: 3D Character UV Unwrap and Textured

*Assignment 08: 3D Character Rigged*

## **Week 10**

### ***3D Animation Basics and Character Run Cycle:***

Introduction to principles of animation including: squash and stretch; anticipation; staging; straight ahead action and pose to pose; follow through and overlapping action; slow in and out; arcs; secondary action; timing; exaggeration; solid drawing; appeal.

Introduction to character animation in Blender

Learning to create a run cycle for a biped character

Critique: 3D Character Rigged

*Assignment 09 - Final Project: 3D Character Run Cycle*

### **Finals Week**

All assignments and Final Project due by Last Day of Finals week

Opportunity to resubmit any incomplete assignments.

## ACADEMIC INTEGRITY

All members of the UCSC community benefit from an environment of trust, honesty, fairness, respect, and responsibility. You are expected to present your own work and acknowledge the work of others in order to preserve the integrity of scholarship.

Academic integrity includes:

- Following exam rules
- Using only permitted materials during an exam
- Viewing exam materials only when permitted by your instructor
- Keeping what you know about an exam to yourself
- Incorporating proper citation of all sources of information
- Submitting your own original work

Academic misconduct includes, but is not limited to, the following:

- Disclosing exam content during or after you have taken an exam
- Accessing exam materials without permission
- Copying/purchasing any material from another student, or from another source, that is submitted for grading as your own
- Plagiarism, including use of Internet material without proper citation
- Using cell phones or other electronics to obtain outside information during an exam without explicit permission from the instructor
- Submitting your own work in one class that was completed for another class (self-plagiarism) without prior permission from the instructor.
- Violations of the Academic Integrity policy can result in dismissal from the university and a permanent notation on a student's transcript. For the full policy and disciplinary procedures on academic dishonesty, students and instructors should refer to the [Academic Misconduct page](#) at the [Division of Undergraduate Education](#).

## ACCESSIBILITY

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please affiliate with the DRC. I encourage all students to benefit from learning more about DRC services to contact DRC by phone at 831-459-2089 or by email at [drc@ucsc.edu](mailto:drc@ucsc.edu). For students already affiliated, make sure that you have requested Academic Access Letters, where you intend to use accommodations. You can also request to meet privately with me during my office hours or by appointment, as soon as possible. I would like us to discuss how we can implement your accommodations in this course to ensure your access and full engagement in this course.

- **DRC online:** <https://drc.ucsc.edu>
- **DRC Frequently Asked Questions for prospective and current DRC Students, faculty and Staff, and parents:** <https://drc.ucsc.edu/resources-and-forms/faqs.html>
- **Frequently Asked Questions regarding Service and Support animals:** <https://drc.ucsc.edu/services-and-accommodations/sa-overview/other-accommodations/service-animals-faqs.html>
- **UC Santa Cruz Service/Support Animal Policy:** <https://policy.ucsc.edu/policies/student-affairs/dss-0003.html>

## RELIGIOUS ACCOMMODATION

UC Santa Cruz welcomes diversity of religious beliefs and practices, recognizing the contributions differing experiences and viewpoints can bring to the community. There may be times when an academic requirement conflicts with religious observances and practices. If that happens, students may request the reasonable accommodation for religious practices. The instructor will review the situation in an effort to provide a reasonable accommodation without penalty. You should first discuss the conflict and your requested accommodation with your instructor early in the term. You or your instructor may also seek assistance from the [Dean of Students office](#).

## **ALL-GENDER RESTROOMS**

UC Santa Cruz is committed to the well-being of all students and cares about all students feeling safe and welcome, regardless of their gender identity, expression, and/or embodiment. The [Lionel Cantú Queer Center](#) has worked with students and campus staff to create more safe and accessible restrooms for transgender and genderqueer students, staff, faculty, alumni, and UCSC visitors. A [complete list of all-gender restrooms](#) on campus was compiled and is maintained by the Cantú Queer Center.

## **UC POLICY ON SEXUAL VIOLENCE AND SEXUAL HARASSMENT / RESOURCES**

### **TITLE IX/CARE ADVISORY**

UC Santa Cruz is committed to providing a safe learning environment that is free of all forms of gender discrimination and sexual harassment, which are explicitly prohibited under Title IX. If you have experienced any form of sexual harassment, sexual assault, domestic violence, dating violence, or stalking, know that you are not alone. The Title IX Office, the Campus Advocacy, Resources & Education (CARE) office, and Counseling & Psychological Services (CAPS) are all resources that you can rely on for support.

Please be aware that if you tell me about a situation involving Title IX misconduct, I am required to share this information with the Title IX Coordinator. This reporting responsibility also applies to course TAs and tutors (as well to all UCSC employees who are not designated as “confidential” employees, which is a special designation granted to counselors and CARE advocates). Although I have to make that notification, you will control how your case will be handled, including whether or not you wish to pursue a formal complaint. The goal is to make sure that you are aware of the range of options available to you and that you have access to the resources you need.

Confidential resources are available through [CARE](#). Confidentiality means CARE advocates will not share any information with Title IX, the police, parents, or anyone else without explicit permission. CARE advocates are trained to support you in understanding your rights and options, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more. You can contact CARE at (831) 502-2273 or [care@ucsc.edu](mailto:care@ucsc.edu).

In addition to CARE, these resources are available to you:

- If you need help figuring out what resources you or someone else might need, visit the [Sexual Violence Prevention & Response \(SAFE\) website](#), which provides information and resources for different situations.
- [Counseling & Psychological Services \(CAPS\)](#) can provide confidential counseling support. Call them at (831) 459-2628.
- You can also report gender discrimination and sexual harassment and violence directly to the University's [Title IX Office](#), by calling (831) 459-2462 or by using their [online reporting tool](#).
- Reports to law enforcement can be made to the UC Police Department, (831) 459-2231 ext. 1.
- For emergencies, call 911.

### **DIFFICULT CONVERSATIONS**

In our in-class and online discussions and dialogues, we will have the opportunity to explore challenging, high-stakes issues and increase our understanding of different perspectives. Our conversations may not always be easy. We sometimes will make mistakes in our speaking and our listening. Sometimes we will need patience or courage or imagination or any number of qualities in combination to engage our texts, our classmates, and our own ideas and experiences. We will always need respect for others. Thus, an important aim of our classroom interactions will be for us to increase our facility with difficult conversations that arise inside issues of social justice, politics, economics, morality, religion, and other issues where reasonable people often hold diverse perspectives. This effort will ultimately

deepen our understanding and allow us to make the most of being in a community with people of many backgrounds, experiences, and positions.

### **REPORT AN INCIDENT OF HATE OR BIAS**

The University of California, Santa Cruz is committed to maintaining an objective, civil, diverse and supportive community, free of coercion, bias, hate, intimidation, dehumanization or exploitation. The Hate/Bias Response Team is a group of administrators who support and guide students seeking assistance in determining how to handle a bias incident involving another student, a staff member, or a faculty member. To report an incident of hate or bias, please use the following form: [Hate/Bias Report Form](#).

### **GENERAL CONDUCT**

In this class we abide by the **UCSC Principles of Community**, so please familiarize yourself with these: <https://www.ucsc.edu/about/principles-community.html>.

### **STUDENT SERVICES**

Counseling and Psychological Services

Many students at UCSC face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation.

### **Student Success and Engagement Hub**

The Division of Student Success provides campus-wide coordination and leadership for student success programs and activities across departments, divisions, the colleges, and administrative units.

### **Tutoring and Learning Support**

At Learning Support Services (LSS), undergraduate students build a strong foundation for success and cultivate a sense of belonging in our Community of Learners. LSS partners with faculty and staff to advance educational equity by designing inclusive learning environments in Modified Supplemental Instruction, Small Group Tutoring, and Writing Support. When students fully engage in our programs, they gain transformative experiences that empower them at the university and beyond.

### **Slug Support Program**

College can be a challenging time for students and during times of stress it is not always easy to find the help you need. Slug Support can give help with everything from basic needs (housing, food, or financial insecurity) to getting the technology you need during remote instruction.

To get started with SLUG Support, please contact the Dean of Students Office at 831-459-4446 or you may send us an email at [deanofstudents@ucsc.edu](mailto:deanofstudents@ucsc.edu).

### **Slug Help/Technology**

The ITS Support Center is your single point of contact for all issues, problems or questions related to technology services and computing at UC Santa Cruz. To get technological help, simply email [help@ucsc.edu](mailto:help@ucsc.edu).

### **On-Campus Emergency Contacts**

For all other help and support, including the health center and emergency services, Click here to go to UCSC's Emergency Services page. Always dial 9-1-1 in the case of an emergency.

### **MATURE COURSE CONTENT**



In university courses you may be assigned images, films or other material that could contain difficult ideas, uncomfortable language, or graphic depictions of sex or violence. You will be asked to treat these portrayals critically, to consider what is being expressed by the maker, or to examine the potential social impact, and to evaluate the works in a given context. Instructors are always happy to speak with you about the course content and/or your work, and might direct you to CAPS (Counseling and Psychological Services) at 831-459-2628 or the Disability Resource Center ([drc@ucsc.edu](mailto:drc@ucsc.edu), 831-459-2089) should you need additional support in order to participate and do your best work.

### **GRADE DISPUTES**

If you have questions about the grading of your work, please make arrangements to meet with your teaching assistant (TA) if the course has one. If the course does not have a TA, or if your questions are not resolved, please see the course instructor during office hours. If the matter still remains unresolved, you will be advised on further options.

### **ACADEMIC MISCONDUCT POLICY**

Academic misconduct includes but is not limited to cheating, fabrication, plagiarism, or facilitating academic dishonesty. Acts of academic misconduct during the course, including plagiarism, can and usually do result in failure of the course, at the sole discretion of the instructor of record. Your case will be reported to the College Provost as per the Academic Integrity guidelines found on the web at: [https://www.ue.ucsc.edu/academic\\_misconduct](https://www.ue.ucsc.edu/academic_misconduct)

### **STUDENT EXPERIENCE OF TEACHING SURVEYS (SETs) (FORMERLY ONLINE COURSE EVALUATIONS/OCEs)**

The Theater Arts Department collects feedback from students at the end of each course in the form of Student Experience of Teaching Surveys (SETs). You will receive an email when the evaluation/survey is available. The email will provide information about the evaluation as well as a link to it online. When you receive the email, please click the link, log in, and complete the evaluation. Student submissions are anonymous and confidential. Instructors cannot identify which submissions belong to which students and will only be able to review the data collected after all grades have been submitted. Please give serious thought to your comments. This survey will become part of the instructor's personnel file to be reviewed by colleagues and administration when considering the instructor's future teaching assignments and promotions. Your comments will be available by the instructor only after grading your work and may be used to improve future offerings of the course.

### **LAPTOP COMPUTERS AND MOBILE DEVICES:**

Laptops can be a useful tool in the service of teaching and learning when used productively and respectfully.

A few common sense rules:

1. Always set up your laptop before the beginning of class. Setting up the computer and booting it up can take a few minutes depending on what applications are set to open at startup. Turn off all other mobile devices before lecture begins.
2. Disable sound.
3. During lecture and classroom discussion, you should not be connected to network resources. Being online invites many distractions - web surfing, email, chats, etc. Chatting or emailing during class is no more acceptable than talking on a cell phone during class time. Additionally, your networked screens are distracting to those sitting near and behind you.

If you are found to be doing anything other than note-taking (or sanctioned network activity) you will be asked to leave the class immediately and will be marked as absent for that day. Your instructor reserves the right to further limit laptop use in their classes. For example, you may be asked to close your computer during screenings or be asked to sit in a certain area of the room if you are actively using your laptop.