# GAME 250 : Character & Creature Modelling

# Section 501, CRN 70140

Fall 2020

Instructor: Ian Burch

E-Mail: ianburch@unm.edu

Office and Hours: Online on Zoom & Learn (TBD)

## Course Goals:

Learn how to design, model, texture, rig, and animate 3d characters. We will use the open source modelling software Blender for this. Emphasis is

#### Learning Objectives:

By the end of the course, students will:

- Be able to model, rig, sculpt, and texture in Blender
- Understand model topology
- Know the 12 principles of animation
- Bake normals and other similar techniques
- How to use their models in engines like UE4 and Unity

#### Materials:

You *must* have:

- Internet Access, for Learn, Zoom, and Youtube.
- Blender (<u>https://www.blender.org/</u>)
- Notebook / Sketchbook
- Optional: Unreal Engine 4 (<u>https://www.unrealengine.com/en-US/</u>)
- Optional: Unity (<u>https://unity.com/</u>)

#### Expectations:

Students are expected to conduct themselves in a professional and collegial manner. During Zoom meetings, be professional, appropriate, and mute when not speaking. When posting on discussion boards, be polite, concise, and avoid using internet slang. If you need an extension on an assignment, please email or message me before it is due.

#### **Course Content**

This course will mainly be project based, with the first two units teaching the fundamentals, the next two being chosen by you all, and the last project being open-ended. For each project you'll

have to periodically post your progress to the course discussion board and give constructive criticism with peers.

#### **Project Schedule**

#### Weeks 1 - 4: Modelling

*Fundamentals of design, modelling, and sculpting, with a focus on interesting character designs, technical skills, and good topology* 

#### Weeks 5 - 8: Animation

Animating characters, how to rig and animate, the 12 principles, using animations in-engine, and other considerations

#### Weeks 9 - 10 : Student Topic I, TBD

Weeks 11 - 12 : Student Topic II, TBD

#### Weeks 13 - 16 : Final Project

Design, model, texture, rig, and animate a character.

#### Grade Breakdown:

Modelling	20%
Animation	20%
Student Topic I	10%
Student Topic II	10%
Final Project	30%
Participation & Activity	10%

Letter grades will be given as follows, with + or - given for the highest and lowest 3% in each range, respectively:

90% - 100% A 80% - 89% B 70% - 79% C 60% - 69% D 0% - 59% F

## Late Work / Absences:

Homework past the due date will not be accepted without an emailed or written request prior to the deadline. If you're going to miss a zoom meeting, please let me know in advance.

# **Disability Statement:**

In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor's attention, as I am not legally permitted to inquire. Students who may require assistance in emergency evacuations should contact the instructor as to the most appropriate procedures to follow. Contact Accessibility Resource Center at 277-3506 or arc.unm.edu for additional information.

If you need an accommodation based on how course requirements interact with the impact of a disability, you should contact me to arrange an appointment as soon as possible. At the appointment, we can discuss the course format and requirements, anticipate the need for adjustments and explore potential accommodations. I rely on the Disability Services Office for assistance in developing strategies and verifying accommodation needs. If you have not previously contacted them I encourage you to do so.

# Academic Integrity:

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or otherwise fails to meet the standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.

Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

# **Credit-hour Statement:**

This is a three credit-hour course. Class meets for two 75-minute sessions of direct instruction for fifteen weeks during the Fall 2020 semester. Students are expected to complete a *minimum* of six hours of out-of-class work (or homework, study, assignment completion, and class preparation) each week.

#### Title IX :

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see:

https://policy.unm.edu/university-policies/2000/2740.html

**Citizenship and/or Immigration Status:** All students are welcome in this class regardless of citizenship, residency, or immigration status. Your professor will respect your privacy if you choose to disclose your status. As for all students in the class, family emergency-related absences are normally excused with reasonable notice to the professor, as noted in the attendance guidelines above. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community. The Administration's welcome is found on our website: http://undocumented.unm.edu/.