DIG6906 INDEPENDENT STUDY

Instructor
Aaron C. Karlson

Phone
(352) 294-2000

Email
Canvas Mail

Office Location
NRG-Front Desk

Office Hours
Wednesdays 3 – 4 PM
(Tentative)

Course Number
DIG4306

Semester/Year
Spring 2021

Course Credits
3 credits

Course Location
NRG 0120 (ORC)
ONL - Sync

Course Meeting Times
TUE Period 4
THURS Periods 4/5

Course Description
This course focuses on advanced work in the practical principles and techniques of 3D software animation environments. Includes quad mesh design and editing for complex motions, shading techniques and lighting, various camera projection models, rendering techniques, and efficient use of GPU resources for photorealistic real-time 3D animation.

Pre-Requisites
DAS major and DIG 3305C with minimum grade of C or written permission of Instructor.

Objectives: By the end of this course, students will be able to:
- Demonstrate a complete workflow for 3D character animation in the film and game industries
- Articulate the differences between animation aesthetics for motion graphics and film
- Create a simple motion graphics/effects animation using Cinema 4D
- Create a key framed animation with complex body motion

Required Materials
- Cinema 4D R20 (Educational version is free for students plus $2.99 service fee) DOWNLOAD
- Autodesk Maya 2020 (Educational version is free for students) DOWNLOAD
- Adobe Photoshop CC
- Adobe After Effects CC
- Adobe Media Encoder
- Two-monitor setup for software instruction (ONLINE students only)
- 3 Button Mouse

Recommended Materials
- *The Animator's Survival Kit – Revised Edition: A Manual of Methods, Principles and Formulas for Classical, Computer, Games, Stop Motion and Internet*
Williams, Richard 2012, 2nd 978-0865478978

Course Schedule

This schedule is only a guide and is subject to change. Unless otherwise indicated, assignments and readings are due the day they are listed on the syllabus, not the following day.

Week	Subject	Assignment/Quizzes	Assignments Due
Week 1	Course Objectives Overview of course and objectives Intro to the Cinema 4D interface • Cinema 4D • Recommended reading • Online Help	Review the class lecture Getting ready for the first assignment Course Policies and Procedures Quiz	
Week 2	Cinema 4D interface continued and intro to modeling • 3D motion graphics applications • Parametric modeling Vs polygonal modeling • Organic modeling	Assignment 1: Basic 3D Environment	
Week 3	Modeling in Cinema 4D continued • Splines, NURBS, hyperNURBS, booleans • Materials, lighting, and rendering		
Week 4	Animation in Cinema 4D • Setting keys • Introduction to Expresso	Assignment 2: Animation in Cinema 4D	Assignment 1: Basic 3D Environment
Week 5	Animation in Cinema 4D continued • Animation styles and aesthetics • Dynamics and particle effects		
Week 6	Maya review and reintroduction • Creating project directories • Animation dailies format • Helpful hotkeys • Advanced animation rig intros • Animation pickers	Assignment 3: Expressive Idle Animation Maya Basics Quiz	Assignment 2: Animation in Cinema 4D
Week 7	Idle Animation Part I • Acting and reference review • Character motivations • Advanced character posing • Blocking review		Dailies Group A Presentation

Week	Subject	Assignment/Quizzes	Assignments Due
Week 8	Idle Animation Part II • Dailies Group A in Class Review • Professional scene analysis	Assignment FP1: Final project Treatment	Dailies Group B Presentation
Week 9	**SPRING BREAK**		Assignment 3: Expressive Idle Animation (Rolling Deadline, final submission due at the end of spring break.)
Week 10	Advanced Action Part I • Blocking Stage • Draw a planning sheet • Final project proposal review	Assignment 4: Advanced Action	Assignment FP1: Final project Treatment
Week 11	Advanced Action Part II Dailies Group B in Class Review • Adding in-betweens • Refining animation		Dailies Group B Presentation
Week 12	Advanced Action Part III Dailies Group A in Class Review • Rendering and Finalizing • Getting ready for the Final Project		Dailies Group A Presentation
Week 13	Final Project Part I		Dailies Group A Presentation
Week 14	Final Project Part II • Stage setup for a final scene • Setup lights		Dailies Group B Presentation
Week 15	Final Project Part III • Demo Reel Setup		
Week 16	FINAL PROJECTS DUE Final movie file and/or project folder must be submitted by Due Date		Final Project Due

Evaluation of Grades

Assignment	Total Points	% of Grade
Participation – Students are expected to actively participate in class discussions, both in class as well as in class online forums outside class meetings. Students will be assigned a "Dailies Group" to allow them to submit project checkpoints and receive in-class feedback. All students must be active participants in the critique process.	100	10%
Weekly Assignments – Weekly assignments are due the first session of each week unless otherwise noted. The work will be uploaded to CANVAS prior to the beginning of class otherwise the work will be considered late.	100	55%
Final Project – Final Project is the final result of the semester long effort in learning. It is expected that in this final project, students employ the principles and techniques they have learned during the semester.	100	35%

Grading Scale

Letter Grade	% Equivalency	GPA Equivalency
A	94 – 100%	4.0
A-	90 – 93%	3.67
B+	87 – 89%	3.33
B	84 – 86%	3.00
B-	80 – 83%	2.67
C+	77 – 79%	2.33
C	74 – 76%	2.00
C-	70 – 73%	1.67
D+	67 – 69%	1.33
D	64 – 66%	1.00
D-	60 – 63%	.67
E, I, NG, S-U, WF	0 – 59%	0.00

More information on grades and grading policies is here:
https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Materials and Supply Fees
Material and supply and equipment use fee information is available from the academic departments or from the schedule of courses (Florida Statutes 1009.24). The total course fee for this class is $0.00.

The total course fee for each course is listed on the UF Schedule of Courses. (https://registrar.ufl.edu/soc/).

Course Polices

Attendance Policy, Class Expectations, and Make-Up Policy
We value participation more than mere attendance. The instructor is responsible for communicating the specific details of what percentage of your grade (if any) will be assigned to participation, and how class participation

will be measured and graded. Interaction with your peers and the instructor will empower you to greater achievement.

Three unexcused absences will result in the drop of one letter grade (i.e. the student will now only be able to obtain a maximum grade of 'B' for the course). Students should contact the Instructor 24 hours before class time (If possible) if they wish to be considered for an excused absence. Upon return to class, students must provide documentation for their absence. Students should communicate with the instructor about their absences and be proactive about their course work. Online student attendance will be assessed through weekly discussion posts.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Face-to-Face Instruction
We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (Click here for guidance from the CDC on symptoms of coronavirus), please use the UF Health screening system and follow the instructions on whether you are able to attend class. Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.
  - Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Find more information in the university attendance policies.

Course Technology
The students will be required to have access to and use a personal computer with the access to the Internet. Word editing software will be required for written assignments.

The University of Florida and Digital Worlds requires that students have access to and on-going use of a laptop/mobile computer for DIG courses in order to be able to function in the current learning environment. Digital Worlds requires each student's laptop computer to meet certain minimum specs for heavy graphics use, the requirements documented below must be met.

DW Technology Requirements

Course Communications
Students can communicate directly with the instructor regarding the course material through the course management system (CANVAS) using "Canvas Mail".

Course Recordings
Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Course Technology Support

The Technology Support Center provides computer support for Digital Worlds students who access Zoom, lecture recordings, student equipment, facilities and other technology-based resources.
http://digitalworlds.ufl.edu/support

For computer assistance related to Zoon, lecture recordings, student equipment, and facilities request please Submit a Help Ticket or email support@digitalworlds.ufl.edu.

For support related to account services, technical consulting, mobile device services, software services, administrative support, application support center, and learning support services, please contact the UF Computing Help Desk available 24 hours a day, 7 days a week at 352-392-4357 or helpdesk@ufl.edu.

UF Policies

University Honesty Policy
UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Class Demeanor
Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

Students Requiring Accommodations
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Netiquette Communication Courtesy
All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats, more information can be found at: http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:
http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Course Evaluation
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

Campus and Academic Resources

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints: View the Distance Learning Student Complaint Process.

Disclaimer: This syllabus represents the instructor's current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.