

THE ILLINOIS INSTITUTE OF ART CHICAGO

Course Syllabus: Media

Course Title: 3D Modeling
Course Number: MAAB213

Course Title: Short Format Storytelling
Course Number: MAAB112

Class Meetings: Mondays & Wednesdays
Session/Year: Spring 2015

Instructor Name: Allen Tieri
Email Address: atieri@aii.edu
Instructor Availability Outside of Class: (Upon request)

3D Modeling

Course Description: Through critical analysis, the student will apply basic design principles to the solution of visual problems using elements of 3D design. The student will conceptualize 3D coordinate systems, construct 3D models, and apply them to geometric construction.

Prerequisite(s): *Animation Principles*

Corequisite(s): *None*

Instructional Contact Hours/Credits:

Course Length: 11 Weeks
Contact Hours: 66 hours
Lecture: 33 hours
Lab: 33 hours
Credit Values: 4.0 Credits

Quarter Credit Hour Definition:

A quarter credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

- (1) One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for 10-12 weeks, or the equivalent amount of work over a different amount of time; or

- (2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

Media Objectives

- Industry knowledge: graduates will accurately use marketing and management terminology, principles, and concepts to analyze and meet client needs.
- Technology: Graduates will demonstrate proficiency with common business computer programs including inventory management, presentation, spreadsheet, and Web software.
- Planning and problem-solving: Graduates will demonstrate the ability to plan and analyze key marketing and management processes, including an ability to analyze, formulate and implement innovative solutions.
- Communication: Graduates will demonstrate professional oral, written, and visual communication skills and organizational skills according to industry expectations.
- Context: Graduates will understand the broader context of their professional knowledge in relation to history, literature, mathematics, psychology, economics, culture, U.S. and international law and policies, and the history of design and typography.
- Professionalism: Graduates will have developed an appropriate professional demeanor, an understanding of the nature and culture of the profession, an understanding of possible careers and career paths, and a clear understanding of professional ethics and standards.

Conceptualize 3D coordinate systems and construct 3D models

- Identify elements of 3D software
- Conceptualize 3D coordinate systems
- Apply design principles to 3D space
- Build 3D Models to scale and proportion

Produce 3D objects using industry standard techniques

- Construct 3D models from reference
- Employ different types of geometric modeling
- Create models that are efficient in their use of geometry
- Determine appropriate amount of detail for given subject matter

Apply texture and UV coordinates

- Create basic texture maps
- Edit basic texture maps

Instructional Materials and Reference:

Textbook(s):

Poly-Modeling with 3ds Max: Thinking Outside of the Box. Todd Daniele Focal Press, ISBN-10: 0240810929.

How to Cheat in 3ds Max 2009: Get Spectacular Results Fast. Michele Bousquet
Publisher: Focal Press, ISBN-10: 0240810325

Technology Needed: Either Window computers running XP or Macintosh computers running MacOS10.x with an Internet connection, printers, software including image manipulation, 3D software, audio editing & virus utilities. Students should have removable hard or flash drive for personal file storage, and paper and drawing utensils.

Instructional Methods: (Instructional methods include, but are not limited to simulations, case studies, discussion, group work, questioning, presentations, journals, individual projects, etc.)

Class Participation - is affected by attendance but also credited by contributing to in-class discussions, presentations, critiques and critiquing.

Assignments - included in this grading block are: homework assignments, lab-work, quizzes, group projects, and presentations.

Mid-Quarter Exam/Project & Final Exam/Project - Both Mid-Quarter and at the end of the quarter you will have either an exam, project or combination of both depending on what is appropriate.

**Assessment Criteria and Methods of Evaluating Students:
Basis for determination of final grade**

<u>Grading Scale</u>	
93-100%	A
90-92.9%	A-
87-89.9%	B+
83-86.9%	B
80-82.9%	B-
77-79.9%	C+
73-76.9%	C
70-72.9%	C-
67-69.9%	D+
63-66.9%	D
Below 63.0%	F

Student Evaluation / Grading Policies: The evaluation process is described below and—like this syllabus—is subject to change by the instructor's discretion, and any changes will be announced in class. Students are encouraged to consult the instructor on any/all explanation(s) of each project/exam grade acquired.

Details on all assignments, projects, quizzes and exams will be made available in your eCompanion as wells discussed in class. Students are encouraged to consult the instructor on any/all explanation(s) of each assignment or project grade acquired. If you are absent from a class, it is your responsibility to secure missing notes and/or assignments, and it is highly recommended that you develop a buddy system for contacting fellow classmates regarding missing material(s).

ALL projects will have a DEADLINE and PROJECTS MUST BE HANDED IN ON TIME OR YOU WILL RECEIVE NO CREDIT. LATE WORK WILL NOT BE ACCEPTED. Attaching any project to e-mail will not be accepted unless given permission by the instructor.

All work in this course must reflect your own efforts. While group collaboration is encouraged a student must clearly demonstrate personal competence and individual expression in all assignments.

Ai Unearned F (UF) Grade Definition

Unearned F Grade: students who failed the course AND did not complete the final assignments in the course. Final assignment include, but is not limited to a final exam, final project, final paper, portfolio presentation, capstone project or any other assignment due in the last week of the course. If a student completed some or all of the other requirements in the course but did not complete the final assignment of the course and failed the course, the F grade will be considered unearned. An unearned F grade will be reflected as a "UF" grade on the transcript. The course's instructor will award this grade when appropriate.

Plagiarism Policy

Plagiarism is the act of obtaining credit for work by dishonest, deceptive, or fraudulent means. It is the act of taking ideas, words, images or specific substance of another and offering these as one's own.

The Tinley Park campus has a strict policy against plagiarism:

Academic Failure: the student may receive an "F" for the course for a second offense of plagiarism.

Suspension or Dismissal: the student may be suspended or dismissed from the college for a third offense against the plagiarism policy.

The use of copyrighted materials including the use of celebrities and athletes is strictly prohibited.

Classroom Policy: Doors will close 15 minutes after the start of class and will not open again until class break point. You will have a 10 minute break on each hour. During breaks you will be expected to manage your time and take advantage of food/ beverages and bathroom use. Students are to remain seated during class until the break or instructor dismissal. In case of an emergency you must notify your instructor before leaving the classroom.

In-Class Behavior:

You are expected to be respectful and courteous to your fellow students and instructor. The following behaviors will not be tolerated in the classroom and you may be asked to leave if you do not comply:

- Disrupting classmates i.e. being overly talkative, talking loudly, foul language and etc...
- Using computers for entertainment i.e. Watching movies, playing video games, listening to music without headphones and etc...
- Using cell phones/unauthorized personal device usage

- Sleeping
- Working on assignments for other classes.

During lab hours students must work on the current class assignment to continue their education through applied practice. (If a current class project is completed before the assignment's due date the student will use the class time to further develop the project.

Student Art Work: Is to be completed with the highest standard of integrity, Just meeting the standards will earn you a "B" However, going above and beyond will award you an "A".

Attendance Policy: The Art Institute of Tinley Park is committed to learning-centered, hands-on instruction, which can only be accomplished when students attend class. There are no excused absences. The satisfactory explanation of an absence does not relieve the student from responsibility for the course work assigned and/or due during his/her absences. A student who does not attend class during the first week of school or starts late is still held responsible for his/her absences.

It is your responsibility to stay in communication with your instructor about absences in order to stay current with assignments. You are expected to spend the entire amount of scheduled class time in the classroom. If you are dropped from the class and you have a documented mitigating circumstance, you may have the opportunity to appeal. It is your responsibility to ensure that your attendance in class is brought to the faculty member's attention if you arrive late.

Students are encouraged to make all schedule changes early in the first week of the quarter to minimize absences. Failure to sit in all classes during the first two weeks of school will result in termination from school for the quarter. Detailed information about scheduled adjustment periods can be found on the back of your official schedule or in the local Ai campus catalog.

If you are going to miss class, regardless of the reason, you should notify your instructor. You are responsible for gathering any information from the missed class period in a timely manner.

Conduct Code: Each student is responsible for adhering The Illinois Institute of Art Code of Student Conduct (as stated in the college catalog), which notes, in part, that: "The Illinois Institute of Art reserves the right to suspend or terminate any student who:

- Displays conduct detrimental to the training environment within the classrooms
- Displays conduct detrimental to the well being of fellow students and/or faculty and staff members within ILIA or at any Illinois Institute of Art sponsored activity or facility
- Causes damage to the appearance or structure of ILIA or housing facilities and/or equipment therein
- Who copies or otherwise plagiarizes the artwork or assignments/projects of other students or professionals
- Who otherwise displays conduct detrimental to his or her own academic progress or ultimate success in the field for which he or she is being educated

Students with Disabilities: The Illinois Institute of Art – Chicago provides accommodations to qualified students with disabilities. The Disability Services office assists qualified students with disabilities in acquiring reasonable and appropriate accommodations and in supporting equal access to services, programs and activities at The Illinois Institute of Art – Chicago.

Students who seek reasonable accommodations should notify the Disabilities Services Coordinator, Sara Spiegel (sspiegel@aii.edu), at 312-777-8616 of their specific limitations and, if known, their specific requested accommodations. Students will be asked to supply medical documentation of the need for accommodation. Classroom accommodations are not retroactive, but are effective only upon the student sharing approved accommodations with the instructor. Therefore, students are encouraged to request accommodations as early as feasible with the Disability Services Coordinator to allow for time to gather necessary documentation. If you have a concern or complaint in this regard, please contact the Disabilities Services Coordinator, Sara Spiegel via e-mail at sspiegel@aii.edu or at telephone number 312-777-8616. Complaints will be handled in accordance with the school's Internal Grievance Procedure for Complaints of Discrimination and Harassment.

Suggested Weekly Outline

- Week 1:** Overview of 3D terminology, modeling. Exploring the interface. File Management. Primitive Objects and Extended Primitives. Converting objects. Create a scene for each primitive type using specified dimensions and transforms.
- Week 2:** Modifying Editable Polys. Working on the sub-object level with extrusion and bevel. Intro to object Modifiers. Naming objects. Select by name dialog. Cloning objects. Normals. Modifiers: Gizmos.
- Week 3:** Working with Splines. Editable vs. Non Editable splines and converting splines into editable splines. Lofting, lathing, extruding.
- Week 4:** Compound Objects Shapes and Editing Shapes. Shape sub-object components. Review for midterm exam
***C2E2 Field Trip (Friday April 24th)**
- Week 5:** Written / Practical midterm exam. Hands-on competency exam
- Week 6:** **Monday No Class (observance Hours for C2E2)**
Polygonal Modeling techniques – continued (Character modeling). Techniques used in creation – extruding edges and polygons and faces, turning and cutting edges, dividing edges, pushing and pulling of vertices, etc.
- Week 7:** Edge modeling techniques. More Shape editing. Sub-object parameters. Using cloned objects to model. Modeling utilizing variety, unity and appropriateness of techniques to include Soft Selection. Mesh smooth and NURMS.
***ILITP Success Seminar (Thursday, May 21st)**
- Week 8:** **Monday No Classes – Memorial Day**
Wednesday No Classes – (observance hours for ILITP Success Seminar)
- Week 9:** Surface Tools and NURBS introduction. Introduction to the Material Editor and Lights. Overview
- Week 10:** Work on final project in class
- Week 11:** Critiques of finals