The Art Institutes International Minnesota℠

Winter Quarter 2010 Syllabus

Course # Course Name:	**CA2429 Introduction to 3-D Modeling**
Meeting Times and Location:	Monday and Wednesday, 11am-2pm (with appropriate breaks) Room 231
Instructor Name & Contact Information:	Name Steve Paul Phone 612.965.1816 Email sdpaul@aii.edu My mailbox is in room 341, in the cubby under my last name.
Office Hours:	11am-12pm, Tuesdays and Thursdays (or by appointment) Room 303
Course Description:	This is an introductory course in geometric construction. Through critical analysis, students conceptualize 3D coordinate systems and construct 3D models in a computer environment. Students also identify the differences and similarities of 3D modeling with sculpting, 3D design and character design techniques. Prerequisite: GD1400 Computer Applications
Course Length:	11 Weeks
Instructional Contact Hours:	60 (20-lecture, 40-lab)
Credit Value:	4 Quarter Credits
Course Competencies:	The student will: **Conceptualize 3D coordinate systems, construct 3D models and perform mathematical computations** • Recognize multiple axes geometric representation of a three dimensional image • Construct simple geometric shape in X, Y and Z axes using computer animation software • Quantify grid size to establish perspective views • Identify the basic principles of 3D modeling • Identify and select appropriate images for modeling reference. • Comprehend which modeling technique and tools to use under different circumstances. • Understand the importance of good model topology. • Acknowledge various methods of model creation. • Comprehend the differences in low/high poly modeling. • Model a character that is animation ready. • ***Articulate critical ideas for surface treatment, lighting and motion of 3D models*** • Apply natural conditions in developing surface treatment • Observe and explain differences between natural light and artificial light • Evaluate the effect of light in various surface treatments • Apply various lighting techniques to create a desired mood in computer

animation
- Create a 3D model
- Integrate the basic visual elements of design (light, shape, texture, composition and color) into the complexity of three-dimensional space
- Apply advanced knowledge of unity, variety, contrast, dominance, appropriateness, balance and harmony to three-dimensional space

Required Materials: Handouts will be supplied by instructor online.
Sketchbook and note taking supplies.
Removable storage media, (portable hard drive, flash drive, writable CD/DVD)

Technology Needed: **Windows, connection to the internet, Photoshop, 3ds max version 2010** *(required)*, AIM email account

Instructional Methods & Resources: This course will challenge you to develop professionally-relevant knowledge and skills. Course information will be presented in many forms, including lecture, class discussion, demonstration, case studies, simulations, field projects, and studio or lab projects. Students will use library and community resources, including research and reference materials, gallery exhibitions, industry events, and guest speakers. Materials can be obtained from other libraries using the interlibrary loan program.

Estimated Homework Hours: 6-9 hours per week.

STUDENT EVALUATION AND GRADING

Successful professionals require a supportive environment. In-class discussions and/or critiques of other students' work and ideas is a chance to help each other grow as conceptual and critical thinkers.

Student Evaluation:	***Course Activities***	***% Points Available***
	Speed-modeling	5
	Many Clocks	15
	Toy/Gadget	20
	5th Level Review	25
	Organic	20
	Class Participation	20
	Total:	100

Points Distribution	**GRADING SCALE**

Speed-modeling	05%
Many Clocks	15%
Toy/Gadget	20%
5th Level Review	25%
Organic	20%
Class Participation	20%

A	**100 – 93%**
A-	**92 – 90%**
B+	**89 – 87%**
B	**86 – 83%**
B-	**82 – 80%**
C+	**79 – 77%**
C	**76 – 73%**
C-	**72 – 70%**
D+	**69 – 67%**
D	**66 – 60%**
F	**Below 60%**

MILESTONE: This is a milestone. This means students must earn a final grade of C or better to pass.

The academic programs at Art Institutes International-Minnesota are designed to prepare you for your future career. Your future will be wrought with deadlines and time clocks, so this class will require real world punctuality. If you are absent or late for class, you may not be able to make up points associated with in-class activities, including quizzes, tests, presentations, and critiques. Tardy students are responsible for making their presence known to the instructor at an appropriate time. (See the Attendance Policy below for more information.)

Homework and other preparatory work must be done before class meets and is due immediately at the beginning of class, unless the instructor publishes other requirements.

A WORD ON DEADLINES - Late work is not acceptable. In the business world, deadlines are rarely pushed back. Work submitted after deadline will earn 0 points. Your instructor may make an exception in cases of severe personal illness or death in the family. Technology, transportation, relationship, and childcare problems are not the basis for an exception.

Because group effort may be required, attendance is mandatory. Unexcused absences will result in a lower grade. Excused absences may be permitted, but students are expected to let the instructor know in advance. If you miss a particular class, it is also your responsibility to contact a peer (or peers) to get notes and any assigned work.

You may be evaluated individually and as a member of a team on a variety of learning experiences. Different testing methods afford you diverse opportunities to demonstrate your skills and knowledge, including field assignments, tests, presentations, papers, projects, quizzes and more. Final grades will be determined by scores on your individual assignments, assessments, and classroom participation. Your final grade may also be influenced by group-based activities.

If you disagree with a grade in this course, you may take these steps:

Step 1. Make an appointment with me to discuss your situation. Bring your graded work, the assignment sheet and this syllabus to the meeting. If you feel the issue is not fully addressed, proceed to

Step 2. Submit a written appeal to me, explaining why you believe your grade is wrong. You should justify your opinion with information from the assignment sheet and/or syllabus. If you feel the issue is not fully addressed, proceed to

Step 3. Make an appointment to discuss your concerns with your Academic Director. If you feel the issue is not fully addressed, proceed to

Submit a written account to the Dean of Academic Affairs. The written account should indicate your name, phone number, and ID#, and discuss the steps you have taken to remedy the situation. The Dean may convene an appeals committee. Be prepared to produce your graded work, the assignment sheet and this syllabus.

ACADEMIC POLICIES

Discrimination Policy

It is AI Minnesota policy not to discriminate against qualified students with documented disabilities in its educational programs, activities, or services. If you have a disability-related need for adjustments or other accommodations in this class, please contact Becky Lothe, 612-656-6866, rlothe@aii.edu, or visit Becky in Pence room 209. Any accommodations will be authorized by Becky—no exceptions.

Attendance

Regular, on-time attendance is both courteous and professional. The Art Institutes International Minnesota expects students to demonstrate professionalism by attending all classes as scheduled, arriving on time, and remaining for the full duration of the class. Outside employment should not be scheduled during class hours.

Students should be aware that even if there is no "attendance" grade per se for a class, it is difficult to succeed in class without regular, on-time attendance. Individual faculty may determine the impact, if any, of absences on grades. The Art Institutes International Minnesota supports the attendance policy for each class as it is described in the syllabus. The full AiM attendance policy is found in the Student Handbook.

Academic Dishonesty

At the Art Institutes International Minnesota, plagiarism is a cumulative offense; each act of plagiarism is documented in the student's academic record until degree completion. Violations of this policy will be handled in accordance with the disciplinary procedures outlines in the Student Code of Conduct Policy.

Examples of plagiarism include paraphrasing an original document or piece(s) of an original document and not citing the original author's name and publishing year, using direct quotes from an original document and not citing the original author's name and year, and using written documents, still or moving images, original ideas, research information, audio samples and music clips, and failing to cite the original author's name and publishing year.

Cheating is the action to deceive or alter the perception regarding the author or originator of student work and is a violation of the Student Code of Conduct. Cheating includes the duplication of written or electronic assignments, exams or documents either in whole or in part and submitted as an original piece of work; the exchange of answers with others either giving answers or receiving answers during an in-class assignment, test or exam, or take-home assignment or exam.

Typical disciplinary sanctions for a first offense of plagiarism or cheating includes automatic failure of the assignment/exam with no opportunity to re-do or make up the plagiarized/cheating work. Sanctions for the second offense include automatic failure of the course. Subsequent incidents will result is dismissal from the school. [From the 2008/09 AiM Student Handbook

section on Academic Integrity, beginning on page 35.]

CLASSROOM COURTESIES AND PROFESSIONAL EXPECTATIONS

Collaboration and Communication

The learning environment should provide a business-like approach to getting the job done, so any behavior that would be deemed as inappropriate for the typical work environment will put the student at risk. Examples include disrespectful language, passive-aggressive behavior, lack of commitment to personal or team success, and any other behaviors that disrupt the learning environment for other students. Additionally each team member is responsible for the academic integrity of the group.

YOU MUST USE YOUR SCHOOL EMAIL ACCOUNT, or forward your school email to another personal account**.** You must be able to accept and respond to email on a daily basis.

Academic Resources

YOU ARE ACCOUNTABLE FOR REQUIRED ACADEMIC SKILLS. Successful students possess course-appropriate reading comprehension, critical thinking, research, writing, presentation, and communication skills. If you or your instructor determine that you have a need for additional resources beyond those offered in class, there are several options available to you.

- **The Academic Achievement Center** is located in room 320 (across from the Academic Advising office). The Academic Achievement Center houses peer tutors in program areas and general education.

- **The Interior Design Skills Center** houses Interior Design peer tutors and general education. The Skills Center is located in room 011, in the basement of the LaSalle building.

Peer tutors assist students with subject/content area academic support, as well as, study skills and organizational tips. Peer tutors are current AIM students in good academic standing-(a CGPA of 3.5) with a desire to assist others in their academic progress. All peer tutors receive mandatory tutor training.

Students (tutees) who seek academic support may visit each of the centers to receive tutoring assistance in a wide variety of subject areas. Each tutor schedule (located outside of the center door) identifies the tutor and their specific areas of expertise. Some Peer tutors also serve as Teaching Assistants, where their role is to work alongside an instructor during lab/group hours of a class.

- **Academic Advising** is located in room 316 in the LaSalle building. Academic Advisors are available to assist you in identifying areas or patterns of academic weaknesses, and to put into place any support resources a student may need.

You are also responsible for executing tutorial recommendations made by your instructors. Remember, your instructors and Academic staff are here to help you find the resources you need.

- **The Library** is located on the second floor in the LaSalle building. The library is open 79

hours per week and is currently processing an average of 5,000 circulation transactions per month. The collection is comprised of books, newspapers, journals and magazines, videos, DVDs, and CDs that support the curricula. The collection currently numbers over 23,000 volumes with and an additional 189 periodical subscriptions. Materials also include royalty-free music/sound effect CDs, art history and interior design slides, and copies of computer software manuals utilized within the College. Textbooks and reserve materials are available for in-house use, and many academic and industry databases are available, including WilsonWeb, Proquest, AccuNet / AP, Gettyimages, Electronic Library for Minnesota, Grove Art Online, Hoover's Online and Oxford Reference Online.

Student Life

The Student Affairs Office is located in room 209 in the Pence building. There you can find information, services and program that can help you to extend and integrate academic content and life experiences.

Community Resources

This course will engage community resources, including local libraries, galleries, exhibitions, guest speakers and industry tours. Your active participation is important and expected.

Additional Class Policies

If you have missed 12 hours of class total, you will fail the class.
This includes time counted off for lateness.
You must be present at the beginning of class.

Accountability: Each student registered for this class will be held accountable for successfully demonstrating the course competencies, course skill sets, and course knowledge set up by the instructor at the beginning of the quarter*. This includes coming to class, participating in class discussions, taking notes, as well as doing the assignments*. All work for this class must be created by the individual student. The use of downloaded 3D models is considered cheating and will not be tolerated. Anyone caught using work that is not their own will face explusion from the class and possibly from the school.

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Weekly Course Schedule

This schedule is subject to change!

Week	Day 01	Day 02 ***(Assignment due)***	% points
01	Hour 1: Introduction to the class Introduction and Review of modeling in 3DS Max Speed modeling assignment given. Hours 2 & 3: Working on Speed-modeling assignment	Hour 1: ***Speed-modeling Room challenge*** presented for review and critique. Tips and Tricks shared. Hour 2: *Many Clocks* assignment given, demonstration of working with splines, using viewport backgrounds and referencing. Hour 3: Working in teams to begin building "Many Clocks"	5
02	Hour 1: Demonstration of how to work with accuracy, using units, snaps, importing, merging, x-ref (?), reference images, etc. Hour 2: Demonstration of Lathe, Extrude, and Loft modifiers, use of clone, mirror, and array tools. Hour 3: Working on "Many Clocks"	Hour 1: Discussion on working in teams, production pipelines, sharing assets, merging, export/import, and x-ref. Hours 2 & 3: Working on "Many Clocks"	
03	Hour 1: Demonstration of grouping, attaching and using compound objects. Hours 2 & 3: Working on "Many Clocks"	Hour 1: ***Many Clocks (details, in teams, per blueprints)*** team presentations to the class. Hour 2: *Toy/Gadget* assignment given Demonstration of working with primitives and modifiers. Hour 3: Working on "Toy/Gadget"	10
04	Hour 1: Demonstration of editable polygons, cut, slice, and extrude, and symmetry modifier. Discussion of strategies for building. Hours 2 & 3: Working on the "Toy/Gadget"	Hour 1: Demonstration of editable polygon edge sub-object tools; bevel, champher, bridge. Hours 2 & 3: Working on "Toy/Gadget.	

Week	Day 01	Day 02	% points
05	Hour 1: Demonstration of smoothing groups and NURMS. Hours 2 & 3: Working on "Toy/Gadget"	Hour 1: Hour 2 & 3: Work on "Toy/Gadget"	10
06	Hour 1: Demonstration of using editable polygons to achieve organic shapes. Hours 2 & 3: Working on "Toy/Gadget"	Hour 1: Presentation of Toy/Gadget to peer critique small groups, presentation of small groups to entire class for feedback. Hour 2: Organic Model assignment and Large Thing final project given. Strategies for modeling organic objects. Demonstration of using spline 'cages' to create organic surfaces. Hour 3: Working on "Organic"	5
07	Hour 1: Demonstration of NURBS modeling in 3DS Max. Hours 2 & 3: Working on "Organic"	Hour 1: Hour 2: Discussion of appropriate references and research methods. Hour 3: Working on "Organic"	10
08	Hour 1 – 3: 5th Level Reviews	Hour 1—3: 5th Level Reviews	10
09	Hours 1-3: Individual consultation while Working on "Organic"	Hour 1: Hours 2 & 3: Working on "Organic"	10
10	Hours 1-3: Working on "Organic"	Hour 1: Hours 2 & 3: Working on "Organic"	10
11	Hours 1-3: Working on "Organic"	Hours 1-3: Presentation of "Organic" final project, review, and individual conferences.	10