

COURSE SYNOPSIS
HONOLULU COMMUNITY COLLEGE
AEC 146, ADVANCED MODELING AND PRESENTATION

Spring 2011

INSTRUCTOR: MICHAEL JENNINGS

CLASS LOCATION: BUILDING 2, ROOM 616
CLASS HOURS: 8:30 -11:50 TUESDAY AND THURSDAY

OFFICE LOCATION: BUILDING 2, ROOM 615
OFFICE HOURS: 8:00 - 8:30 AM MONDAY - THURSDAY
12:00 - 12:30 PM MONDAY - THURSDAY
9:00 - 10:00 AM FRIDAY
AND BY APPOINTMENT

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A. PURPOSE:

This course is an introduction to Autodesk 3ds Max Design, a high-end 3D modeling and rendering program. Topics of the course include the user interface, basic modeling concepts, object and scene creation, material rendering, lighting and animation. Students construct several 3D computer models.

B. TOPICS:

1. The user interface and workflow
2. Basic modeling concepts: Primitives, Transforms, Sub-Object Mode
3. Basic scene creation
4. Creating objects in Autodesk VIZ
5. Linking and Importing Data
6. Material creation
7. Lighting
8. High resolution renderings animations and backgrounds
9. Comprehensive project

C. COURSE STUDENT LEARNING OBJECTIVES:

Upon completion of the course, the student should be able to:

1. Model 3D primitives using 3D software.
2. Create 3D objects from 2D objects using modification commands in 3D software.
3. Create 3D models using lights and material modifiers for photorealistic effects.
4. Create a simple animation using 3D software.
5. Export 3D animation movies for viewing using 3D software.
6. Create complex 3D models using additive and subtractive modeling techniques in 3D software.
7. Report to a workplace regularly and punctually, engage effectively and congenially with peers and supervisors, work from written as well as oral instructions, use assigned time efficiently for productive work and meet production deadlines.

D. COURSE STRUCTURE:

1. Introduction to Autodesk 3ds Max Design
2. Starting a Visualization Project
3. Materials
4. Introduction to Lighting
5. Lighting with Radiosity
6. Rendering and Animation
7. Final Project

E. TEXT BOOK:

3ds Max 2009, by Kelly L. Murdock, Wiley Publishing Inc., 2008
ISBN 978-0-470-38130-4

SUPPLEMENTAL REFERENCE MATERIALS:

As Required by Instructor

F. GRADING:

Model, Animation and Rendering Assignments:	=	40% of course grade
Quizzes/worksheets:	=	25% of course grade
Comprehensive Project:	=	20% of course grade
Attendance AND Participation:	=	15% of course grade

Attendance will be graded as follows:

No absences:	A+
One absence:	A
Two absences:	B+
Three absences:	B
Four absences:	C+
Five absences:	C
Six absences:	D
Seven or more absences:	F

Absences for which a medical or court appearance excuse is provided (professional letterhead is required) will be recorded but not figured in the attendance grade. Any significant tardy or early departure from class will be figured as a half absence. Since this is a technical/occupational education course, attendance is as important in class as it is in the professional workplace. Students may take ONE free absence for personal reasons without penalty if they notify the instructor before the beginning of the class period to be missed. Students whose work schedules will not allow them to attend class regularly should drop the course. It is not fair to classmates or the instructor to consistently revisit previously covered material.

G. SUPPLIES:

1- 2 GB (min.) USB Flash Drive
1 ream 8 1/2" x 11" or 11" x 17" duplicating paper for use with inkjet printer (1 per semester regardless of the number of AEC courses taken)

H. CLASSROOM POLICIES:

1. Project deadlines: All projects are to be turned in at the end of the class period on the due day unless otherwise specified by the instructor. Project assignments that are turned in late will be evaluated then dropped one grade for each calendar day beyond the deadline.

2. Clean up: Keep your own area and common areas neat and clean.
3. Radios: The operation of radios, tape or CD players is not permitted in class during lecture periods. The instructor may allow them during non-lecture periods only if headphones are used and only upon approval.
4. Food: Food and beverages shall not be consumed in the classroom except in the designated area.
5. Classroom Time: No drawing or other work is permitted during lecture or demonstration periods. Lab time shall be spent on work assigned in this class only unless you have finished all assigned work.
6. Cellular Phones: During class, all cellular phone ringers are to be set to silent or discreet settings so as to not disturb your classmates or instructor. All calls are to be taken outside of the classroom area.
7. Lab Computers: Do not install ANY software on the lab computers without your instructor's permission. This includes, but is not limited to instant messaging software, utilities, productivity software and games.
Backup all your work to removable media after EVERY class meeting. Since we teach both credit and non-credit classes, we may need to re-image the computers on short notice. This means ALL files are deleted. Your instructor will suggest a backup regime to follow.
8. Students will do assignments as given by the instructor. Substitutions to assignment parameters made by students without prior instructor approval will result in the assignment receiving an "F" grade.
9. Cheating and Plagiarism will not be tolerated. The student conduct code states: *"One or more of the following sanctions may be imposed whenever a student is found to have violated any of the rules contained in this code: warning, probation, restitution, temporary suspension, suspension, expulsion, or rescission of grades or degrees. Disciplinary procedures include temporary suspension in emergency situations, reporting of infractions, preliminary investigation, initiation of charges, administrative disposition, Student Conduct Committee disposition, a disciplinary hearing, Committee recommendations, review by the Chancellor, and the final decision and orders by the Chancellor."*

I. SAFETY PROCEDURES/CONSIDERATIONS:

1. Do not do any heavy lifting of objects by yourself. Get help.
2. Please watch for stray computer cables, if they look as though they pose a safety hazard, notify your instructor immediately.
3. Keep fingers away from cutting area when using the paper cutter.
4. Do not use any electrical equipment that has loosely connected electrical cords or frayed or exposed electrical cord. If you find any of these conditions, notify your instructor immediately.
5. Notify your instructor immediately in case of ANY injury. An accident report must be filed to protect you, your instructor and H.C.C.
6. A First Aid Kit is located in room 616. Notify your instructor if you need access to this kit.
7. Do not use additional plug power adapter/splitters on outlets and power strips in the lab.
8. Keep aisles clear of books, supplies, clothing, etc. to avoid creating tripping hazards.
9. Notify your instructor of any perceived hazards immediately upon discovering them.

J. COMPUTER LAB RULES: Violation may result in an "F" grade for the course.

1. Do not move the computer equipment without instructor approval and supervision.

2. The equipment is both expensive and fragile, do not hit, bounce or otherwise abuse any of the lab equipment. Turn it off when not in use.
3. Do not load personal software on the computers other than those authorized by your instructor.
4. Keep your CAD data safe. Don't share your data media with others.
5. Back up your files often. Save on your hard drive and at least one other location **daily!**
6. Notify your instructor immediately of any equipment malfunctions.
7. Use the equipment as it was intended. If you can't remember how to use it, ask your instructor.
8. Keep all resource materials in their proper place.
9. The labs will close no later than 4:30 pm daily. Labs are closed Saturdays.
10. Theft of computer supplies, software, hardware, etc. will result in immediate course failure and possibly additional administrative and/or legal action.
11. Ask Questions!!! This lab is a place for you to explore and learn!!
12. YOUR SUGGESTIONS REGARDING IMPROVING THE LAB ARE ALWAYS WELCOME!

K. FINAL PROJECT DUE DATE:

The final project will be submitted for grading by Tuesday, May 10th, 2011 at 11:00 am in room 616.

HAVE A GREAT SEMESTER!!!