

DESN 230

Computer Modeling and Animation

Instructor

Spring 2013

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Office Hours: By Appointment

COURSE NUMBER: DESN 230

PREREQUISITES: DESN 103 CAD Fundamentals

SCHOOL: Technology

PROGRAM: Design Technology

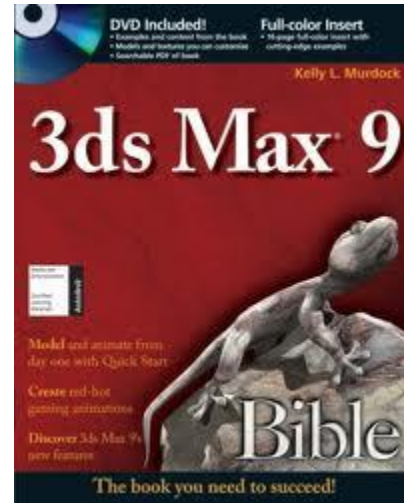
Class Hours : Thurs 1-4:50 pm

Class Location: Technology Building 1425

Text and Materials

3ds Max 9 Bible

Sketchbook



CATALOG DESCRIPTION: This course contains an historical overview of the development of computer-generated imagery, including CADD, computer animation, computer art and visualization. This course will cover various aspects of 3-Dimensional modeling, lighting, and camera placement, as well as compositional and design aspects for presentation. Computer animation techniques such as keyframing, inverse kinematics, and simulation will be introduced. The course also includes an overview of storyboarding, scene composition, and lighting

COURSE CONTENT: Topical areas of study include -

Creating objects

Transforms

Modifying objects

Animation

Editing shapes

Lights

Creating materials

Rendering and final output

Historical perspective on animation

Viewport navigation and display

Object selection and display

Editing meshes

Compound objects

Cameras

Working with texture maps

MAJOR COURSE LEARNING OBJECTIVES: Upon completion of this course, the student should be able to:

1. Evaluate and critique academic, commercial and laboratory contributions to the field of computer-generated imagery (CGI).

2. Relate activities to gain an understanding of the evolution of CGI.
3. Trace the roots of CGI institutions and activities.
4. Develop an understanding of the theories and methodologies which are tuned to the capabilities and qualities inherent in software, hardware, and animation techniques, by examining the contributions of principals in the field in the context of the time.
5. Critically review advances and contributions from technical, artistic and aesthetic perspectives.
6. Define computer graphics terminology.
7. Demonstrate basic 3D modeling techniques and processes.
8. Use appropriate vocabulary and graphical conventions of animation.
8. Understand splines, Booleans and modifiers and how they apply in a 3D environment
9. Understand the importance of lighting and cameras in a 3d space
10. Application of design elements and principles

ATTENDANCE POLICY: You are expected to attend every class period. If you miss a class, you are responsible for obtaining any lecture notes from a fellow student, and are responsible for being prepared for the next class session- including having your Lab Exercise or Project read to submit.

ACADEMIC HONESTY STATEMENT: The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement. Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

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ADA STATEMENT: Ivy Tech Community College seeks to provide effective services and accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, you are required to register with Disability Support Services at the beginning of the semester. If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classrooms.

DISABILITY SERVICES CONTACT INFORMATION:

Ivy Tech Community College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services. If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.

RIGHT TO REVISION: This is a tentative course syllabus. The instructor reserves the right to make changes to the syllabus at any time. You are responsible to know and comply with all of the information contained in this syllabus and, if necessary, any revisions announced or handed out in class.

Tentative Class Schedule

Week 1 – Jan 17th - Course Description/Overview/Introduction to 3Ds Max/Viewport Configuration/ Saving and Scene Setups / Cloning /Link and Unlink/ Transforms and Pivots / Subtraction

Week 2 – Jan 24th - Selection/Geometry Theory/Primitives/Grids and Snaps/ Modifiers/ Booleans/Layers

Week 3 – Jan 31st – Splines/Extrude and Bevel/Lofting

Week 4 – Feb 7th – Project One: Part One Due

Week 5 – Feb 14th – Cameras

Week 6 – Feb 21st – Lighting/Rendering

Week 7 – Feb 28th – Materials and Bitmaps

Week 8 – March 7th – Project One Due

Spring Break March 10th – 16th

Week 9 March 21st – Character Modeling

Week 10 March 28th – Character Modeling continue

Week 11 April 4th – Rigging

Week 12 April 11th – Animation

Week 13 April 18th – Final Project Part One Due

Week 14 April 25th – Open Week

Week 15 May 2nd – Work Week

Week 16 May 9th – Final Project Due

Grading Weights

Participation	10%
Storyboards/thumbnails	10%
Lab Exercises	30%
First Project	30%
Final Project	20%

Late Work Policy

The department policy is that no late work will be accepted.

Grading Scale

- A: 90 - 100% Superior student work, professional quality**
- B: 80 – 89.99% Above average student work**
- C: 70 – 79.99% Average student work**
- D: 60 – 69.99% Below average student work**
- F: Below 60% Unacceptable quality and/or requirements not met**