

**Midland College**  
**Syllabus**  
**DFTG 1302**  
**Intro to Technical Animation and Rendering**

**Course Description:**

This course deals with special problems associated with computer graphics. Specialized software will be used to explore animation and rendering techniques. Assignments will provide the student with a full working knowledge of animation techniques, including lights, camera settings, paths, and advanced modeling procedures.

**Prerequisite(s): DFTG 2340**

**Text, References, and Supplies:**

Software: 3D Studio Max, Blender

NOTE: Students will be advised of the software version on the first day of class.

**Students Learning Outcomes and Core Competencies:**

The following list of course goals will be addressed in the course. The goals are directly related to the performance objectives. Upon successful completion of the course the student will:

1. *Manage files* within the 3D software being used.
2. Understand *viewing* and *navigating* in 3D space.
3. Understand general *Viewport* concepts.
4. Understand *Perspective Views*.
5. *Set Viewport Layout*.
6. Use *Standard View* navigation.
7. Understand *Object Selection*.
8. Understand *Sub-Object Selection*.
9. Understand *Using Groups*.
10. Apply *Transforms*.
11. Transform *Managers*.
12. Specify a *Transform Coordinate System*.
13. Explain *Precision Tools*.
14. Define *Units*.
15. Define *Grids*.
16. Use the *Create Panel*.
17. Use the *Modify Panel*.
18. Modify multiple objects.
19. Explain techniques for cloning objects.
20. Explain editing spline segments.
21. Explain editing splines.
22. Create shapes for Loft Objects.

23. Loft with Get Path.
24. Loft with Get Shape.
25. Control surface appearance.
26. Generate a path.
27. Create and edit NURBS models: Objects and Sub-Objects and edit NURBS curves.
28. Apply and use Edit patch.
29. Define Editing Meshes.
30. Use Mesh-Based Modifiers.
31. Create Booleans.
32. Create Shape Merge Objects.
33. Create a Particle System.
34. Choose a Particle Shape and Size.
35. Control a Particle Motion.
36. Be able to Light a Scene.
37. Create Light Objects.
38. Set Ambient and Global light values.
39. Cast Shadows.
40. Understand setting up cameras and characteristics of cameras.

### **Student Contributions, Responsibilities and Class Policies:**

- Students are responsible for maintaining, organizing, and backing-up copies of all digital files. Failure to maintain an up-to-date backup may result in data loss.
- Students are expected to exhibit professional and courteous behavior on campus, in the classrooms and labs.
- Cell phones should be silenced while in class.

### **Attendance Policy**

Regular and punctual attendance is expected of all students in all classes for which they have registered. It is the obligation of the student to notify the instructor of all absences as soon as possible and make up all missed work. All absences are considered to be unexcused until a valid reason is provided. It is the responsibility of the instructor to judge the validity of any reasons given for an absence.

### **Withdrawal Policy**

It is the student's responsibility to initiate the withdrawal in the Office of Student Services. Students must complete an official withdrawal form either in person in the Student Services office, online or by written request. Failure to do so may result in the student receiving a grade of "F."

The last day for withdrawal for each registration period is published in the catalog and the current course schedule. Online withdrawal requests must be made on or prior to the dates listed.

**Scholastic Dishonesty & Academic Misconduct**

Midland College encourages high academic standards, including student responsibility for original work. As a part of this stance, Midland College endorses specific definitions and guidelines regarding scholastic dishonesty and academic misconduct, including the areas of cheating, plagiarism, and collusion.

Definitions and full policy can be found in the Student Rights & Responsibilities section of the online catalog at [catalog.midland.edu](http://catalog.midland.edu).

**Evaluation of Students:**

<i>Punctual Attendance</i> .....	10%
<i>Assignments</i> .....	40%
<i>Periodic Tests</i> .....	10%
<i>Final Project/Exam</i> .....	40%

<i>90 and above</i>	<i>A</i>
<i>80-89</i>	<i>B</i>
<i>70-79</i>	<i>C</i>
<i>60-69</i>	<i>D</i>
<i>0-59</i>	<i>F</i>

**Course Schedule:**

This course meets two or four times a week, for a total of two (2) lecture hours and four (4) lab hours.

Due dates for class assignments will be announced throughout the semester. This will be subject to the progression of the class; therefore, attendance is very important.

**AMERICANS WITH DISABILITIES ACT (ADA):**

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must visit [www.midland.edu/accommodation](http://www.midland.edu/accommodation) and complete the Application for Accommodation Services located under the Apply for Accommodations tab. Services or accommodations are not automatic, each student must apply and be approved to receive them. All documentation submitted will be reviewed and a “Notice of Accommodations” letter will be sent to instructors outlining any reasonable accommodations.

**NON DISCRIMINATION POLICY:**

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individual has been designated to handle inquiries regarding the non-discrimination policies:

**Tana Baker**

Title IX Coordinator/Compliance Officer

3600 N. Garfield, SSC 131

Midland, Texas 79705

(432) 685-4781

[tbaker@midland.edu](mailto:tbaker@midland.edu)

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

**Faculty Information:**

Department Chair/Professor: Derek Gasch  
Phone: O: 432-686-4809  
Office Hours: TBD

Office: 235 LRC  
Email: [dgasch@midland.edu](mailto:dgasch@midland.edu)

Professor: Vanessa Hyatt  
Phone: O: 432-681-6304  
Office Hours: TBD

Office: 132 ATC  
Email: [vbaker@midland.edu](mailto:vbaker@midland.edu)

Adjunct Instructor: Sean Chaney  
Phone: O: 432-685-6807  
Office Hours: TBD

Office: 193 TC  
Email: [schaney@midland.edu](mailto:schaney@midland.edu)

Adjunct Instructor: Kevin Starnes  
Office Hours: TBD

Email: [kstarnes@midland.edu](mailto:kstarnes@midland.edu)

Students are encouraged to contact the instructor at any time; however, making an appointment will guarantee the instructor's availability at a specific time.

**Division Information:** Applied Technology

Division Dean: Curt Pervier  
Division Secretary: Lisa Hays

TC 143      Phone# 432-685-4676  
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