Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should <u>not</u> be used to purchase course materials.

COURSE SYLLABUS

ARTS 473
INTRODUCTION TO 3D GRAPHICS

COURSE DESCRIPTION

An introduction to 2D and 3D design concepts and terminology. Practical experience in the design and evaluation of 2D/3D still and motion graphics. Students gain practical experience by storyboarding, designing, animating, and rendering 2D/3D graphic objects, and Animations. Training in industry standard 3D graphics programs guided by principles of design. (Formerly "2D/3D Graphics and Animation")

RATIONALE

Computer graphics, 2D and 3D graphics and animation in particular, expand our ability to communicate, giving the student the tools necessary to design more effective graphics that integrate easily with other imaging software. This is a fast growing area of graphic design and visual communication in general. It can be found in formats such as television, animation, graphics, special effects, and simulations.

I.   PREREQUISITE
For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II.   REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III.   ADDITIONAL MATERIALS FOR LEARNING

A.   Computer with basic audio/video output equipment

B.   Internet access (broadband recommended)

C.   Blackboard recommended browsers

D.   Microsoft Word

E.   Three-button mouse

IV.   MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

A. Demonstrate knowledge of basic layout/design in 3D animation software.

B. Demonstrate knowledge of industry and software vocabulary.

C. Investigate solutions for various 3D projects.

D. Utilize the design process to create fully rendered projects.

E. Integrate Christian principles in the creation of 3D designs.

V.   COURSE REQUIREMENTS AND ASSIGNMENTS

A.   Textbook readings and lecture presentations

B.   Course Requirements Checklist

After reading the syllabus <u>Student Expectations</u>, the student will complete the related checklist found in Module/Week 1.

C.   Discussion Board Forums (2)

Discussion boards are collaborative learning experiences. Therefore, the student is required to complete 2 Discussion Board Forums in this course. The student is required to post 1 thread of at least 200 words. In addition, the student must post 2 replies of at least 100 words to classmates' threads. For each thread, the student must support his/her assertions with at least 1 citation in current MLA format. Replies do not need to incorporate citations. Acceptable sources include the textbook, the Bible, or the Internet, and must have been published within the last 10 years.

D.   Tutorials (7)

The student will complete each tutorial by following the step-by-step instructions given throughout the tutorial book. Completing 1 tutorial out of the multiple listed in each chapter of the tutorial book is required; however, the student will consider completing all of the tutorials per chapter for extra practice. Once the tutorial is complete, the student will export the image as a JPG and upload the digital file via the appropriate assignment submission link in Blackboard.

E.   Application Assignments (3)

Using the skills gained in the tutorials, the student will apply what he/she learned by creating a model or scene. Once the model or scene is complete, the student will export the image as a JPG and upload the digital file via the appropriate assignment submission link.

F.   Animation Creation

This assignment is completed in 3 parts to aid in the creation of an animation.

Part 1: Proposal

For this part of the Animation Creation assignment, the student will create a proposal for his/her animated movie of 1 minute or shorter. The student will storyboard what he/she plans to animate, and describe the background, texture, and lighting that will convey the look and feel of the animation. The proposal must be at least 300 words, and contain no fewer than 10 storyboard panels.

Part 2: Rough Draft

For this assignment, the student will execute the proposal for a 1-minute animated movie. This assignment will demonstrate the student's cumulative skills learned during the course. The student's animation will be submitted as a low-resolution MP4 video file.

Part 3: Final

For this assignment, the student will submit a final, 1-minute, animated movie. This assignment will demonstrate the student's cumulative skills learned during this semester. Incorporating any feedback received from the instructor after the student's draft submission is required. This assignment will be submitted as a Quicktime movie file.

VI. COURSE GRADING AND POLICIES

A. Points

Course Requirements Checklist	10
Discussion Board Forums (2 at 35 pts ea)	70
Tutorials (3 at 25 pts ea; 1 at 35 pts; 1 at 40 pts; 1 at 50 pts; 1 at 55 pts)	255
Application Assignments (3 at 100 pts ea)	300
Animation Creation	
Part 1: Proposal	100
Part 2: Rough Draft	125
Part 3: Final	150
Total	1010

B. Scale

A = 900–1010   B = 800–899   C = 700–799   D = 600–699   F = 0–599

C. Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.

Course Schedule

ARTS 473

Textbook: Tikoo, *Maxon Cinema 4D R17 Studio: A Tutorial Approach* (2016).

Module/ Week	Reading & Study	Assignments	Points
1	Tickoo: ch. 1 1 presentation 1 website	Course Requirements Checklist Class Introductions DB Forum 1 Tutorial 1: Intro	10 0 35 25
2	Tickoo: ch. 2 1 presentation 1 website	Tutorial 2: Splines Application Assignment 1: Spline Model	25 100
3	Tickoo: ch. 3 1 presentation 1 website	Tutorial 3: Polygon Modeling Application Assignment 2: Polygon Model	25 100
4	Tickoo: ch. 5 1 presentation 1 website	Tutorial 4: Texturing Animation Creation Part 1: Proposal	35 100
5	Tickoo: ch. 6 1 presentation 1 website	Tutorial 5: Lighting Application Assignment 3: Dramatic Lighting	40 100
6	Tickoo: ch. 7 1 presentation 1 website	Tutorial 6: Rigging Animation Creation Part 2: Rough Draft	50 125
7	Tickoo: ch. 8 1 presentation 1 website	Tutorial 7: Animation	55
8	1 presentation	Animation Creation Part 3: Final DB Forum 2	150 35
		Total	**1010**

DB = Discussion Board

NOTE: Each course module/week (except Module/Week 1) begins on Tuesday morning at 12:00 a.m. (ET) and ends on Monday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.