CHIPOLA COLLEGE
COURSE SYLLABUS
Chipola's website: www.chipola.edu

COURSE TITLE: **COURSE NUMBER:**
3D Visualization   ETD 1842

COURSE DESCRIPTION (with prerequisites):
This course is an introduction to the creation of 3-dimensional industrial modeling and presentations. This course will use the software 3ds Max Design 2013 to create various forms of industrial models such as mechanical parts, architectural structures and topographic landscapes. The primary functions relating to the preliminary areas including modeling methods, application of materials, lighting techniques, cameras controls animation techniques and will be addressed. Topics will include a description of the software interface, and an understanding of the workflow to create a presentation of a product. Discussions and projects will be developed in line with the features used to create geometry, modify geometry, import geometry, create surface shaders, create illumination schemes. These projects will then be used to create full color still image renderings and computer-generated animations develop motion paths and render single images as well animated sequences. Prerequisites**:** None *(Note: A basic understanding of the windows operating system and use of the mouse is helpful.)*
3 semester credit hours

NAME(S) OF INSTRUCTORS:
Olabode Ogedengbe, Workforce Development Building, Room 123, phone 718-2390, OgedengeO@chipola.edu.

EFFECTIVE ACADEMIC YEAR:
2023-2024

REQUIRED TEXTBOOKS AND INSTRUCTIONAL MATERIALS:
Autodesk 3ds Max Design 2020 Fundamentals, SDC Publications, Training Guide for Software. ISBN: 9781630572884

GRADING POLICY:
The standing of a student in each course is expressed by one of the following letters and corresponding grading system:
A – 90 – 100
B – 80 – 89
C – 70 – 79
D – 60 – 69
F – 59 or less
The Chipola Catalog provides policies and procedures regarding the grading system. A student's Grade Point Average is derived from the grading system/quality point scale.

ATTENDANCE AND WITHDRAWAL POLICIES:

Chipola College expects regular attendance of all students, and all instructors record attendance daily. Students who are absent from classes for any reason other than official college activities must satisfy the instructor concerned that the absence was due to illness or other clearly unavoidable reasons. Otherwise, the student may suffer grade loss at the discretion of the instructor. Chipola policy allows each instructor to specify in the Instructor First Day Handout whether or not an absence is excusable and what affect the absence or tardy may have on the grade.

A student is allowed to repeat a course a maximum of three (3) times. **On the third attempt a student (1) must bear the full cost of instruction (unless waived by Student Services), (2) cannot withdraw, and (3) must receive a grade.**

MAKE-UP POLICY:

Chipola allows each instructor to specify in the Instructor First Day Handout the makeup policy.

ACADEMIC HONOR CODE POLICY:

Students are expected to uphold the Academic Honor Code. Chipola College's Honor Code is based on the premise that each student has the responsibility to (1) uphold the highest standards of academic honesty in his/her own work; (2) refuse to tolerate academic dishonesty in the college community; and (3) foster a high sense of honor and social responsibility on the part of students. Further information regarding the Academic Honor Code may be found in the Chipola Catalog, Student Governance section.

STUDENTS WITH DISABILITIES POLICY:

Chipola College is committed to making all programs and facilities accessible to anyone with a disability. Chipola's goal is for students to obtain maximum benefit from their educational experience and to effectively transition into the college environment. Students with disabilities are requested to voluntarily contact the Office of Students with Disabilities to complete the intake process and determine their eligibility for reasonable accommodations.

NOTICE OF EQUAL ACCESS/EQUAL OPPORTUNITY AND NONDISCRIMINATION:

Chipola College does not discriminate against any persons, employees, students, applicants or others affiliated with the college with regard to race, color, religion, ethnicity, national origin, age, veteran's status, disability, gender, genetic information, marital status, pregnancy or any other protected class under applicable federal and state laws, in any college program, activity or employment.

Wendy Pippen, Associate Vice President of Human Resources, Equity Officer and Title IX Coordinator, 3094 Indian Circle, Marianna, FL 32446, Building A, Room 183C, 850-718-2269, pippenw@chipola.edu.

LIBRARY AND ON-LINE REFERENCE MATERIALS:

The library is a comprehensive learning resource center providing information in print, electronic, and multimedia format to support the educational objectives of the College. On-line catalogs, e-books and electronic databases can be accessed by using the *LINCCWeb* icon on the Chipola Library website at www.chipola.edu/library. If you have questions about database usage consult the "How to Use the Chipola Databases" on the Library website or call the Library at 850/718-2274 during regular hours. Library hours are posted each semester at the building entrance and on the Library website. See your Instructor First Day Handout for individual instructor recommendations and resources.

TECHNOLOGY RESOURCES:

The college's learning management system is **Canvas**. Classes become available on Canvas on the first day of the semester. It is the student's responsibility to log onto the Canvas system the first day of class to establish the first day of attendance and to check announcements. All official class communication must be through Canvas. For further information, contact your instructor or the Director of eLearning. The Canvas support hotline is available online in live chat and on the phone, toll-free, at 855-308-2812 for any issues in accessing or utilizing Canvas. The **Technology Center**, located in the library, is equipped with computer workstations. Lab hours are posted each semester at the building entrance and on the Library website.

FREE TUTORING RESOURCES:

The Academic Center for Excellence (**ACE)** Lab, located in Building L, offers free tutoring from 8 a.m. to 5 p.m. and is equipped with computer workstations. ACE lab hours are posted each semester at the room entrance and on the website. Additionally, live online tutoring conferences and individual tutoring sessions are available for a variety of courses through ACE@Home. For a conference schedule or to schedule an individual appointment, visit "ACE Tutoring" in the left navigation from any course in Canvas.

ELECTRONIC DEVICE USAGE STATEMENT:

Classrooms should be free of all unnecessary distractions from the task of learning. Therefore, as a general rule, students should silence and avoid use of all electronic devices (laptops, phones, tablets, etc.) not being used for coursework. Consult first-day handouts for any specific policies related to the use of electronic devices in the classroom, as they may vary depending upon the nature of the course or the guidelines of the instructor. Faculty reserve the right to regulate the use of electronic devices and their accessories in class.

DISCIPLINE SPECIFIC COMPETENCIES / LEARNING OUTCOMES:

To make use of technology to organize, acquire, and convey information. Assessment will be recorded based on the creation of the Room Scene to be completed near the mid-term of the class.

LINKING COURSE-LEVEL STUDENT LEARNING OUTCOMES WITH DISCIPLINE-SPECIFIC COMPETENCIES, ASSESSMENT METHODS, AND ARTIFACTS			
COURSE-LEVEL STUDENT LEARNING OUTCOMES FOR ETD 1842	**DISCIPLINE-SPECIFIC GENERAL EDUCATION COMPETENCIES**	**ASSESSMENT METHODS FOR COURSE LEVEL STUDENT LEARNING OUTCOMES**	**LEARNING ARTIFACTS FOR AA PROGRAM ASSESSMENT**

At the completion of the course, the student will be able to: • Demonstrate the ability to create detailed 3d models through polygonal and NURBS based modeling techniques • Demonstrate the ability to create and apply material shaders through UV texturing • Create and adjust various lighting techniques • Create animation through key frame and controller based movement • Output single images and animated scenes through a variety of rendering processes • Develop and enhance their basic personal computing skills, • Use technology to organize, acquire, convey, and present information in the digital pipeline in regards to an animation project • Apply critical thinking skills through problem solving activities • Communicate with clarity and precision regarding basic drafting concepts..	Demonstrate mastery of computer aided drafting (CAD) by constructing engineering, mechanical, and geometrical drawings. Demonstrate ability to sketch, letter, and generate line-work to describe various objects. Demonstrate ability to read and produce drawings involving orthographic projection, sections, pictorial and auxiliary views. Demonstrate a wide range of mathematical skills including plane trigonometry, strength of materials, technical, and other engineering problems, including theories learned in engineering mechanics. Demonstrate ability to use standard surveying equipment to make measurements and calculations to run a traverse, establish levels, keep notes and produce required drawings. Demonstrate ability to analyze physical and mechanical properties of soil and concrete. Demonstrate ability to solve basic hydraulic problems using the theory of incompressible fluids. Demonstrate on-site skills required to establish grades, locate property lines and utilities and produce plots and calculate cut and fill by average-end-area	Assessment methods used are: Q, UT, SD, SP, Proj, F		
**Assessment Codes				

T = Tests **Pre/Post** = Pre- and Post-Tests **OT** = Objective Tests **UT** = Unit Tests **Q** = Quizzes **F** = Final Examination **CF** = Cumulative Final **EX** = Departmental Exam **SE** = Nat'l or State Standardized Exam	**RPT =** Report/Presentation **SP** = Skills Performance **SD** = Skills Demonstration **W** = Writing Assignments **E** = Essays **DE** = Documented Essays **RP** = Research papers **J** = Jury **R** = Recital	**Proj**. = Projects **Exp.** = Experiments **Cap. Proj.** = Capstone Project **Cap. Course** = Capstone Course **Prac.** = Practicum **Intern**. = Internship **H** = Homework **PS** = Problem Solving **DB** = Discussion Board	**BO =** Behavioral Observation **Clin.** = Clinicals **CS =** Case Study **CP =** Case Plan **Port.** = Portfolio **Obs.** = Teacher Observation **Sk. Check** = Skills Check-off Curriculum Frameworks **JP** = Judged Performance/Exhibition

MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

Learning outcomes are determined by measuring the ability of each student to retain the learning objectives of the course. Performance-based methods, such as completion of assigned projects, general knowledge tests, oral and written presentations of assignments, group discussions, observation of mastery of critical skills and analysis of the final product will determine the final grade on this course.

ASSIGNMENT AND/OR COURSE OUTLINE

See your Instructor First Day Handout for individual instructor assignment schedule.