EGDT 1020 Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: https://catalog.uvu.edu/

Semester: Spring
Year: 2025
Course Prefix: EGDT
Course and Section #: 1020-003, 004, X03
Course Title: 3D Architectural Modeling
Credits: 3

Course Description

Utilizes a Building Information Modeling system (BIM) to design 3D architectural models. Covers 3D modeling design theory, parametric modeling methods, generation of residential and commercial construction plans and details, building components and systems, and manipulation of model information. May be delivered hybrid and/or online.

Course Attributes

This course has the following attributes:
☐ General Education Requirements
☐ Global/Intercultural Graduation Requirements
☐ Writing Enriched Graduation Requirements
☒ Discipline Core Requirements in Program
☐ Elective Core Requirements in Program
☐ Open Elective
Other: *Click here to enter text.*

Instructor Information

Instructor Name: Robert Price

Student Learning Outcomes

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

Examine typical building materials & techniques applied to a 3D architectural model
Compose both basic and complex residential building projects in a 3D model
Create Building Information Models (BIM) for specific architectural projects in a residential context
Generate floor plans, elevations, sections, details, and 3D views from a 3D architectural model

Course Materials and Texts

Required materials, fees and technology
Textbook: Exploring Autodesk Revit 2024 for Architecture, Sham Tickoo
Access to a computer and a reliable internet connection
Revit Building Information Modeling Software
NOTE: Revit does not have a Mac version. It is possible to partition your drive using Boot Camp or install Parallels Desktop with Microsoft Windows to run a PC version of Revit on a Mac.

Course Requirements

Course Assignments, Assessments, and Grading Policy

Getting Started Assignments and Announcement Quizzes

One of your first assignments is to complete the syllabus quiz. It is important that you familiarize yourself with the syllabus (this document) and all the information in the Course Orientation module. This quiz is multiple/choice, true/false and must be taken as many times as necessary to receive a perfect score. This will ensure that course expectations are clear. Other getting started assignments include getting the software, textbook, updating your profile and notifications, introducing yourself to your classmates, and learning how to use the Assignment Navigator. Additionally at the end of the course you will have the opportunity to complete a Student Rating of Instructor (SRI) assignment. Course announcements are made on a weekly basis. A critical part of staying informed and fully participating in this course is to read each announcement. At times there will be critical information passed on that will not occur in any other way. An Announcement Quiz will be assigned in each module. Answering the Announcement Quiz acknowledges you have read and understand all the details of the Announcement. Do not just hunt for the Announcement Quiz answer.

Assignments

Assignments consist of textbook activities that reinforce the basic skills of the software. The Assignment Navigator will help you locate the information by page number in the textbook to complete these activities.

Projects and Project Checks

There will be several check-in type assignments to ensure you are progressing through the course toward three (3) separate culminating projects. The first two projects are prescribed residential and commercial building plans. The third project will be your choice of either a residential or commercial building plan and an opportunity for you to design something meaningful to you.

Discussions

Discussions will be forums to ask for and receive help from other students on architectural modeling topics. These Students Helping Students discussions are optional and ungraded. Be sure to ask your questions early on so there will be time for others to respond.

Quizzes and Exams

There will be a chapter quiz for most modules to check your understanding of the textbook readings. Quizzes are multiple choice, multiple attempt and open book. Your highest score will be recorded. The midterm and final exams are timed application exercises where you will complete an architectural drawing with provided specifications to show what you have learned in the preceding modules. Exam Reviews are provided to help you prepare.

Grading Scale:

The following grading standards will be used in this class:

Grade	Percent
A	94-100
A-	90-93
B+	87-89

B 83-86
B- 80-82
C+ 77-79
C 73-76
C- 70-72
D+ 67-69
D 63-66
D- 60-62
E 0-59
Grading Categories:
Getting Started Assignments and Announcement Quizzes 5%
Assignments 15%
Projects / Project Checks 35%
Discussions (Optional) Students Helping Students 0%
Chapter Quizzes 10%
Reviews / Exams 35%

Late Work Statement:
The best way to be successful in this course is to submit all assignments by their due date. All assignments are available from the beginning of the term, and you are allowed to work ahead. Discussion participation must occur per the current module of the class.

Late work on assignments, chapter quizzes, and Project 1 and 2 is accepted but penalized at 10% per day. If you turn in one of these more than 10 days late you will not receive credit. Announcement quizzes, the Midterm Exam, Final Project (Project 3), and Final Exam cannot be turned in late for any circumstance.

If a serious unforeseen circumstance arises that may cause more than a couple of days late penalty, contact your instructor as soon as possible. You will be expected to provide appropriate documentation and some of the late penalties may be waived.

Required or Recommended Reading Assignments
Selected Chapters from course textbook. See the course schedule.

General Description of the Subject Matter of Each Lecture or Discussion
Course Schedule
This is an outline of the course assignments by module. Refer to the assignments for specific due dates. If this course is delivered on a block schedule, expect to cover the material in half the time.

Orientation:
Update Profile/Notifications
Get Course Software
Get Textbook and Assignment Navigator
Syllabus Quiz
Introduce Yourself

Module 1:
Assignment 1 (Set Up Project Files)

Project 1 (Set Up)
Ch02 Quiz (Basic Program Concepts)

Module 2:
Assignment 2 (Modeling Walls)
Assignment 3 (Placing Doors/Windows)
Project 1 (Exterior and Interior Walls)
Project 1 (Doors and Windows)
Ch03 Quiz (Basic Wall Concepts)
Ch04 Quiz (Basic Building Components)

Module 3:
Assignment 4 (Editing Tools)
Assignment 5 (Creating Grid/Section Views)
Project 1 (Revision to Master)
Project 1 (Levels, Footings, and Foundation)
Ch05 Quiz (Editing Tools)
Ch06 Quiz (Datums and Standard Views)

Module 4:
Assignment 6 (Roofs and Floors)
Project 1 (Floors, Ceilings, and Roof)
Project 1 (Drawing Set Up)
Ch07 Quiz (Basic Building Components II)
Submit Project 1

Module 5:
Assignment 7 (Curtain Walls)
Project 2 (Introduction)
Ch08 Quiz (Basic building Components III)

Module 6:
Project 2 (Levels and Grids)
Project 2 (Walls, Foundation, Floor Slab Edge)

Module 7:
Project 2 (Curtain Walls)
Project 2 (Split Face, Paint, and Wall Sweeps)
Project 2 (Columns, Pile Caps, and Beams)

Module 8:
Midterm Review
Midterm Exam

Module 9:
Assignment 8 (Dimensions and Tags)
Project 2 (Mezzanine Floor and Stairs)
Project 2 (Dimensions)

Ch11 Quiz (Annotations and Dimensions)

Module 10:
Assignment 9 (Schedules)
Project 2 (Mezzanine Floor Detail - Drafting View)
Project 2 (Door Schedule)
Ch12 Quiz (Details and Schedules)

Module 11:
Assignment 10 (Drawing Views)
Project 2 (Site)
Project 2 (Roofs)
ch09 Quiz (Site Features)

Module 12:
Assignment 11 (Massing)
Project 2 (Drawing Set Up)
Ch10 Quiz (Massing Tools)
Ch13 Quiz (Drawings)
Submit Project 2

Module 13:
Assignment 12 (3D Views)
Assignment 13 (Rendering
Project 3 (Introduction)
Project 3 (Proposal)
Project 3 (3D Views and Exterior Renderings)
Project 3 (Interior Renderings)
Ch14 Quiz (3D Views)
Ch15 Quiz (Renderings and Walkthroughs)

Module 14:
Project 3 (Custom Walls)
Project 3 (Complicated Roofs)

Module 15:
Submit Project 3
Project 3 (Self-Assessment)

Module 16:
Final Exam
SRI

Required Course Syllabus Statements

Generative AI
The use of generative AI tools is not permitted in this course.

Using Remote Testing Software
☒ This course does not use remote testing software.

☐ This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

Required University Syllabus Statements

Accommodations/Students with Disabilities
Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU Accessibility Services at accessibilityservices@uvu.edu or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

Academic Integrity
At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in UVU Policy 541: *Student Code of Conduct*.

Equity and Title IX

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – TitleIX@uvu.edu – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at accessibilityservices@uvu.edu. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a specially dedicated space for meditation, prayer, reflection, or other forms of religious expression.