Syllabus
BIM 301 – BIM Construction Documents 1

Welcome to BIM 301!
We're going to have a great time learning together!

Communication Policy
You may contact me through the messaging system. Please communicate with me early and often if you are experiencing challenges in completing course assignments on time. I will answer your messages within 24 hours or less of receiving them.

Course Description (Goals and Objectives)
This course is designed for architects, interior designers, engineers, and others involved in the construction industry looking for an overview of building information modeling (BIM) using Revit.

Using 'as-built' drawings, students will model an existing single-story building on a site model and will then create the model for a significant two-story expansion to that building model.

Included in this project will be creating demolition plans to accommodate the new construction and rendering the final model. This project scenario is typical of projects currently being handled by architectural, engineering and construction teams who are using Revit in their offices.

After following along with the videos and/or class instruction, you will have a completed model, ready for presentation, documentation, and visualization.

Course Materials and Textbooks
Recommended Text: Mastering Autodesk Revit 2018 for Architecture – 1st Edition
Marcus Kim, Lance Kirby and Eddy Krygiel

ISBN-10: 1119386721

NOTE: The same textbook is used in the BIM 101, BIM 201, BIM 301, BIM 302, BIM 303, and BIM 311 Revit courses.

Course Prerequisites
Fundamental working knowledge of the Windows environment or instructor approval. Manual drafting experience preferred.

Student Learning Outcomes/Learning Objectives

1. Apply BIM modeling tools to create an architectural model, including existing building, partial demolition and a new construction.
2. Build topography for a project using existing external files and develop a site plan, including hardscape and landscaping.
3. Graphically differentiate phasing of a project from existing construction through new construction.
4. Produce renderings suitable for presentation and documentation.

By the end of this course, students will gain valuable knowledge building a BIM project from scratch and presenting multiple views of the model on an architectural sheet.

Autodesk Certification Exam Objectives

The curriculum covered in this course includes the following Autodesk Certification Exam Objectives:

Certification Exam Objective	Description
Collaboration Professional	Import DWG and image files, Assess review warnings in Revit.
Documentation	Create and modify filled regions, Place detail components and repeating details, Use dimension strings, Work with phases, Work with phases.
Elements and Families	Change elements within a curtain wall (grids, panels, mullions), Create compound walls, Create a stacked wall, Differentiate system and component families, Work with family Parameters, Create a new family type, Use Family creation procedures.
Modeling	Create a building pad, Create a stair with a landing, Create elements such as a floors, ceilings, or roofs, Generate a topo surface, Model railings, Edit a model element's material (door, window, furniture), Change a generic floor/ceiling/roof to a specific type, Attach walls to a roof or ceiling.
Views	Control visibility, Use levels, Create a duplicate view for a plan, section, elevation, drafting view, etc., Create and manage legends, Manage view position on sheets.

Attendance

To satisfy the course attendance requirements, students are typically required to complete at a minimum, the initial graded discussion forum engagement by the 4th day of the course and the midterm before the end of the 11th day of the course. All remaining course deliverables including the second graded discussion forum engagement, quizzes and final are due before the end of the 18th day of the course. Course attendance is also evaluated by the timely submission of a student's quizzes. Students who fail to participate in the graded discussion forum or attempt their quizzes by the 8th day of class will be considered "absent" by VDCI. Specific due dates for this course can be found in "Deadlines for Submitting Project Deliverables".

Participation

Participation is evaluated by engagement in the Graded Discussion Forum. This forum encourages participation directly with instructors and students in a course. Typically, ten percent of the course grade is assigned for participation. A specific grading breakdown for this course can be found in "Weighted Grading Criteria".

Grading Policies

After you have successfully completed all the requirements for your course, you will receive a VDCI course completion certificate. If you are a VDCI Technology Certificate student, your course must be taken for a letter grade. Classes that are taken as an Audit will not qualify for a completion certificate or count towards a VDCI Technology Certificate Program or VDCI Digital Badge.

You can change your VDCI grading option from letter grade to Audit any time BEFORE the 18th day of class by contacting either the Program Manager or Program Coordinator.

Letter grades are based on the following scale. Your final course grade is based on the weighted grading criteria of the points you have earned.

Passing Grades	
A+	100%
A	93-99%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%

Non-Passing Grades	
D	60-69%
F	59% and below

Weighted Grading Criteria

Participation	10%
Quizzes	30%
Midterm Submission	20%
Final Submission	40%
TOTAL	**100%**

NOTE: Students can check their course progress in the VDCI Student Portal at any time by clicking the Progress Reports link on the right sidebar of each course page.

Deadlines for Submitting Project Deliverables

Project deliverables must be submitted to me through the Learning Hub.

1. One post in the course Graded Discussion Forum is due before the end of the first Monday (4th day) of the course. Your grade for this post will be reduced by 10% (one full letter grade) for every day the deliverable is late.
2. The midterm is due before the end of the second Monday (11th day) of the course. Your grade for this deliverable will be reduced by 10% (one full letter grade) for every day the deliverable is late.
3. All remaining course deliverables are due by the end of the third Monday (18th day) of the course. This includes the second graded discussion forum engagement, quizzes and final.
4. Course deliverables will not be accepted any later than one day after the course has formally been closed (19th day). Your grade will be reduced by 10% (one full letter grade) for being late.

IMPORTANT: Please review all course due dates in the Learning Hub.

Final Project Deliverable File Types
When you submit your Final Project to me, please upload your Final Revit Model through the end of the course.

EXAMPLE: BIM301-FirstLast.rvt

Discussion Forums/Student Engagement
Please be engaged in the Graded Discussion Forum. Your postings and responses in the Graded Discussion Forum are geared toward expanding the learning experience for you and your classmates in meaningful ways.

NOTE: The Graded Forum is a required and graded element for this course.

Please read the instructions for each Graded Discussion Forum assignment as they may differ in terms of content and response requirements.

To effectively participate in the discussion forum, you can:

1. Take a leadership role by being the first to post a topically-meaningful response in the Discussion Forum.
2. Reply thoughtfully to the postings of your classmates, including rebuttal of ideas/opinions.
3. Expand on the comments in the Discussion Forum by posing thought-provoking questions and/or providing topically-relevant/related outside links.
4. Post in a timely manner.

When I grade your Discussion Forum comments, I am most interested the quality of your postings/responses. Your contributions should add to the knowledge base of our course participants and provide substantive thought to receive points. If you are less knowledgeable about a topic, pose questions about the topic and/or share what you find when you research the topic yourself.

Academic Integrity Policy
The Virtual Design & Construction Institute (VDCI) is an institution of learning, career education, and technical skill development – a community based on academic honesty and integrity. As members of the VDCI community, faculty, students, and administrative staff share responsibility for maintaining this environment. It is essential

that all members of the VDCI community subscribe to the ideal of academic honesty and integrity and accept individual responsibility for their work. Academic dishonesty is unacceptable and will not be tolerated at VDCI. Cheating, forgery, dishonest conduct, plagiarism, and collusion in dishonest activities erode the Institute's educational, research, and social roles.

If students who knowingly or intentionally conduct or help another student perform dishonest conduct, acts of cheating, or plagiarism will be subject to disciplinary action at the discretion of VDCI.