



South Central College

ARCH 1302 Revit 2 BIM Management

Common Course Outline

Course Information

Description Intermediate building information modeling (BIM) course that expands on Revit for Architecture. Focus on establishing company standards and an in-depth practice of template creation. Deep exploration of Revit families, custom family creation, and the practice of creating parametric entities. Discussion of online Revit content resources is also included.

Total Credits 2

Total Hours 48

Types of Instruction

| Instruction Type | Credits/Hours |
|------------------|---------------|
| Lecture | 1/16 |
| Lab | 1/32 |

Pre/Corequisites

ARCH 1202 Revit 1 Fundamentals

ARCH 1301 Studio 3

Institutional Core Competencies

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Outcomes

1. Create custom templates with annotation styles, title blocks and custom element types

Learning Objectives

Build custom REVIT templates

Create review templates

Configure your REVIT templates with consistent annotations

2. Create schedules including material takeoff schedules with formula

Learning Objectives

Demonstrate an understanding of importing and exporting schedules
Demonstrate an understanding of filtering, sorting and formatting schedules
Generate REVIT schedules with correct field parameters

3. Create custom wall, roof and floor types

Learning Objectives

Create component families
Demonstrate an understanding of modifying component families
Understand the basics of component families

4. Demonstrate an understanding of component family fields with a parametric framework

Learning Objectives

Create component families
Demonstrate an understanding of modifying component families
Understand the basics of component families

5. Create family geometry

Learning Objectives

Understand the process of adding solid geometry
Review geometries that display in certain view types, specific levels of detail, and visibility parameter settings

6. Create family types

Learning Objectives

Load families into your project based on their category
Demonstrate an understanding of advanced family techniques: controls, connectors and openings
Demonstrate an understanding of families in design projects

7. Create specific families, including in-place families, profiles, annotations and parameters

Learning Objectives

Demonstrate an understanding of system, in-place and component families
Create new types of these families by modifying existing parameters using element properties
Demonstrate an understanding of host-based families

SCC Accessibility Statement

Disability Services provides accommodations and other supports to students with permanent and temporary disabilities that affect their SCC experience. Disabilities may include mental health (anxiety, depression, PTSD), ADHD, learning disabilities, chronic health conditions (migraine, fibromyalgia), sensory disabilities, and temporary disabilities (broken arm, surgery). Common accommodations are extended test time, private room for testing, audiobooks, and sign language interpreter.

Contact us: Faribault A116 (507) 332-5847. North Mankato E112 (507) 389-7222. ds@southcentral.edu
www.southcentral.edu/disability

Grading Scale

Each project, quiz, activity, and assignment will have an assigned possible number of points. Points will be awarded based on correctness of work. The total of all points earned will be divided by the maximum possible to determine a percentage. Late assignments will be accepted anytime until the semesters end **Any work handed in late (regardless of duration) will incur a 10% deduct from the grade for that instance.**

Grades will be based on the following percentage of points earned

| | |
|----|---------|
| A | 92-100 |
| A- | 90-91.9 |
| B+ | 87-89.9 |
| B | 83-86.9 |

| | |
|----|---------|
| B- | 80-82.9 |
| C+ | 77-79.9 |
| C | 73-76.9 |
| C- | 70-72.9 |

Note: Grades below 70% will not count towards degree completion, course must be repeated

| | |
|----|----------|
| D+ | 67-69.9 |
| D | 63-66.9 |
| D- | 60-62.9 |
| F | Below 60 |

Attendance Expectation

Class attendance / participation contributes significantly to academic success. Students who attend classes regularly tend to earn higher grades and have higher passing rates in courses. Excessive absences may jeopardize your grades or even your ability to continue in this course. **Class participation will be part of your grade! The following will apply in all ARCH program courses:**

- An absence is excused ONLY if the student contacts the instructor BEFORE class.
- If you are absent from class for any reason, you are responsible for all missed work and for contacting the instructor promptly.
- Unexcused absences for 3 consecutive class sessions will reduce your final grade by 10% after the first occurrence and automatic course failure after the second occurrence. Overall attendance falling below 50% will result in automatic course failure.
- Online attendance is available at the instructor's discretion. It is reserved for extenuating circumstances and is NOT a replacement for attendance.