

Course Title: **BIMethods**
 Course Number: **ARCH 4050 | 6050-D90**
 Professor: **Jeremy L Roh**

Date Due: **Thursday, October 10, 2013 at 7:45 PM**

MIDTERM – UNIT TYPES, FAMILIES, & CD RESEARCH



Summary: During the first portion of the semester, you have learned the essential Revit skills and advanced parametric modeling of family components to make wall types, window types, door types, counters, sinks, and cabinets (the elements of a condo unit). You have also learned how to find families from other sources for items such as appliances, and you have had some exposure to reading and reviewing construction documents. The midterm is a test of your skills learned thus far and put towards a real world application (this what you would be required to do in an architectural office).

Assigned Units: Students will work separately on the two units assigned to them with each one being a separate Revit Project File (.rvt). The combined efforts of the class during the midterm will give everyone the unit types needed to eventually complete the condo buildings during the next phase of the class. The following chart indicates the two condo unit types that you will need to model for the midterm per the requirements listed below:

STUDENT NAME	UNIT TYPES		STUDENT NAME	UNIT TYPES	
Martin Andreasson	A1.2	C2-M	Victoria Pike	A4.1	A2.2
Adam Anzivino	A2.1	A5.4-HC	Geovanna Pirca	A3	A5.5-HC
Phillip Broskiewicz	A2.8	A5.2	Farley Snell	C3	A2.7
Melissa Krakowski	A5	A1.1	Steven Szitas	C1	A5.3-M
Kelsey Lane	A5.3	A1.3	Matthew Thompson	A5.5	A2.5
Samaneh Mahabadi	C2	A2.4	Sol Vittini	A4	A2.9-M
Daniel McBride	A2.1-M	C2-HC	Monica Whitmire	A5.1	A2.6
Jessica Nutz	A5-M	A2	James Wilson	A2.10	A5.2-HC

Requirements: The following requirements shall be included in the unit type models:

- 1) The lower left outside corner of each unit shall be at 0,0,0 (snap to the blue Project/Survey Base Point located in the "Site" floor plan in the Project Browser).

- 2) Unit Type plans are found on sheets A4.0 – A4.5 with additional information for wall types and exterior information found on the A3.0 series drawings (focus only on your unit type within buildings A, B, & E).
- 3) In each file the Level 1 datum will be at 0'-0" and Level 2 datum will be at 10'8-1/4".
- 4) All walls will have a base constraint set to Level 1 and the top constraint set to Level 2 with only the interior wall having a top offset set to -3/4".
- 5) All walls between units are noted as a wall type that is a double wall separated by an air space or other material. The unit plans only show the single wall; therefore, your unit type models shall modify the wall types with double walls to only show the single wall up to the air space. Wall types can be found on A0.3d & A0.3e.
- 6) Model all doors and windows associated with your unit type as parametric families. Door and window tags are found on the A3.0 and A4.0 series sheets with reference to the schedules and elevations found on A9.0 and A10.0 series sheets. Note that each unit has different windows depending on which floor it is on; therefore, your strategy should be to model the units completely and then add in the windows/doors to the exterior wall. Do a "Save As" and modify the exterior wall for the next variation.
- 7) Model all the other interior family components including millwork, casework, shelving and add in the other family components found from the default Revit library or other outside sources for appliances and plumbing fixtures.
- 8) All files will be "Author" by clicking on the "Manage" tab and then selecting "Project Information". In the dialog box next to "Building Name" type the unit designation number as indicated in the assigned unit chart above. In the dialog box next to "Author", write your name.
- 9) Do not model floors, ceilings, or railings at this time.
- 10) File naming convention shall be the word "Unit" followed by an underscore "_", then the unit number such as "A1-2", followed by another underscore "_", and then the level number. Do not use periods in the name, but instead use a hyphen. Example: Unit Type A5.2-HC found on level 1 would be named, "Unit_A5-2-HC_1".
- 11) Upload your .RVT files using the "FILE UPLOAD CENTER" on the class website at << http://www.jrohdesign.com/revit/authorized_users/file_upload-center/index.html >> and in the fields, "Select Your Name" and "Specify Assignment or Subject" select "MIDTERM" in each.

Classes Prior to Midterm:	2013-10-01:	Midterm Explanation and Project Strategies
	2013-10-03:	Questions and Answer Tutorial Reviews
	2013-10-08:	No Class (FALL BREAK)
	2013-10-10	Midterm Due at End of Class (7:45 PM) by File Upload (NO CLASS)