

## Architectural Design and BIM

Course Guidelines and Goals

Mr. Brunelle – room E118

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This course will introduce you to the field of Architecture using traditional hand sketching and BIM (Building Information Modeling). During this course, you will learn to create floor plans, become proficient in American residential architectural design styles, and become proficient in basic *Autodesk Revit* procedures and techniques.

By the end of this course, you will be able to:

- Survey housing styles, basic designs, construction drawings and site considerations.
- Explore design criteria and special planning solutions for the three basic residence areas.
- Survey topographical symbols/features found in a plot plan.
- Become proficient in perspective sketching
- Become proficient in *Autodesk Revit BIM* architectural design software.
- Design a two story single family house using “form follows function” criteria.

Text Books (Online)

- Architecture: Residential Drafting and Design, 12th Edition, *Kickleigher and Thomas (Chapters)*
- Residential Design Using Autodesk Revit 2018 (**Lessons**)

Timeline/Classes

1 – Introduction  
2 – Rules and Procedures  
3-7 Perspective Sketching/ Chapter 1  
8– Lab Practices/Chapter 2  
9-10– Lesson 1  
11-18– Lesson 2/Chapter 3  
19-24 – Lesson 3/Chapter 6  
25-29 – Lesson 4/Chapter 7  
30-34 – Lesson 5/Chapter 8  
35-39 – Lesson 5/Chapter 9  
40-49 – Lesson 6  
50-59 – Lesson 7  
60-69 - Lesson 8  
70-90 – Final Project

**Chapters** deal with academic lessons in Architectural Design.

- Styles and Designs
- Planning Considerations
- Areas of a house – Living, Sleeping and Service areas

**Lessons** deal with learning Autodesk Revit BIM software

- Wall and Floor structure and planning
- Object planning
- Site Planning and implementation

Grading:

- Projects – 65%
- Class Participation: 15%
- Homework: 10%
- Tests/Quizzes: 10%

Name\_\_\_\_\_ Date\_\_\_\_\_

**Homework** will be accepted on the due date **ONLY** for full credit. If you are absent on the day homework is due, it is your responsibility to turn in your homework on the next class day that you are in school. You are allowed to miss ONE homework assignment. Each assignment missed after that will result in detention.

Missed **quizzes** and **tests** must be made up within two days of returning to school, unless there are extenuating circumstances and approval of the teacher.

Please contact me if you have any questions.

Parent/Guardian Name\_\_\_\_\_

Email\_\_\_\_\_

Signature\_\_\_\_\_