**Instructor:** Mr. O’Neil
**Email:** stephen.oneil@nhcs.net

**Room:** 207 **Grades**: 11, 12

**Phone**: 910-790-2360 x207

**Websites:**

<https://stephenoneil.wixsite.com/stephen-oneil>

**Course Description:** Prerequisite: Architecture II:

This course introduces students to advanced architectural design concepts, and Building Information Modeling (BIM). Emphasis is placed on the use of 3D CAD tools in the design and execution of site and foundation plans, electrical/lighting plans, stair/railing design, bath and kitchen details, multi-level floor systems, site development, renderings and walkthroughs, as well as small commercial building and design. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

Students are also prepared for the end of semester *Autodesk Revit****Professional****Certification as their Final Exam*, in further bolstering their online portfolio from the previous Drafting I class.

***NOTE: The Revit Certification Exam will allow for a pass on having to take the Final Exam***

The major topics to be covered are:

* Foundation Design Construction & Calculations
* Electrical Design Concepts
* Stair/Railing Design Development
* Advanced Kitchen & Bath Design
* Final Honors Project encompassing above lesson plans to include that of a commercial design
* Final Honors Project design to be presented next via website to include rendered, 3D walkthrough
* Additional topics to be introduced include, but are not limited to: Parametric Modeling and Design, Advanced Architectural Design, Project Delivery Methods

Honors Drafting: Architecture III integrates National Common Core Essential Standards reinforcing rigorous mathematics and literacy content. The honors level course and project will serve as an extension of the National Common Core English Language Arts and Mathematics, provide an outlet for creativity, and demonstrate complexity of acquired knowledge.

**Course Materials:**

* USB Drive (specifically for this class, Revit files are very large and will need to be saved on their own jump drive)
* 1 two pocket folder (not a 3 ring binder)
* Earbuds/headphones (students will need these EVERY day)
* 1 pack Plain white 8-1/2” x 11” paper
* Mechanical Pencils
* White hand held erasers

**Course Assessment:**   All classroom & project based assignments will be given a point value and all carry the same weight.  Tests & Quizzes will carry more weight than that of the work described above. Each 9 week grade will be determined by a total points earned scale.

* ***Mastering the Curriculum in terms of Practice – 40%***
	+ Project based work
	+ Classwork
* ***Mastering the Curriculum in terms of Performance – 60%***
	+ Quiz scores
	+ Test scores
* ***State Final - 20%***
	+ Autodesk Certification Exam
	+ Alternative Teacher Made Exam

Grading Scale: A 90-100 B 80-89 C 70-79 D 60-69 F Below 60

**Computer Usage:** A large percentage of this course will involve the use of computers, internet, and email. Students are expected to follow the New Hanover County Acceptable Usage Policy. Failure to do so may result in access being suspended and/or denied. Such actions may also result in grade repercussions due to nature of course.

**Classroom Rules:**

1. There will be no food, drinks, gum, or candy around the computers at any time. All drinks and food must remain in in student’s backpack, on the floor, or in a designated location, (back of the room).
2. No one will leave classroom without permission. You must sign the in/out sheet in order to leave the classroom. You must also have the bathroom pass and your ID.
3. Cell phones & Class Computers are for our class work only. You must get permission before using the computers for any outside work including internet work. Violation of this rule will result in temporary loss of computer use, and if violated again will result in a long term computers use loss.
4. Any student caught vandalizing the equipment or furniture will be prosecuted for destruction of property and referred to the administration.
5. All students must adhere to the guidelines for computer use located in the student’s handbook.
* The above rules are required in order to maintain a respectful environment for all. Failure to comply will yield the following:

First offense: Warning

Second offense: One on One meeting

Third offense: Call home

Fourth offense: Administration

**Ashley High School Attendance/Make Up Policy**

* **Make Up Work**: It is YOUR responsibility as the STUDENT to obtain all information resulting from ANY absence.
* If you are absent for any reason, you will have 5 SCHOOL days from your return to make up any missing work that was assigned on the days that you were absent.  After those 5 days, any work not made up will be entered as a ZERO.
* If you are taking a lab based course, labs missed will not be exempted, they must be made up.
* Students who are in jeopardy of failing due to absences and the failure to make up missed work will require a referral to the Student Support Team. The Student Support Team will work with students and their teachers on a plan for grade recovery.

**I have read and comply with the above Syllabus:**

Student Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**For Parent or Guardian, please make sure you have read through the sections above, complete the form below for the best contact information available, then return this last sheet only.**

Guardian Name/Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

E-Mail Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone # \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_