



GREAT NECK PUBLIC SCHOOLS

"Where Discovery Leads to Greatness"

#DiscoverGreatness

Phipps Administration Building
Office of Instruction
345 Lakeville Road
Great Neck, New York 11020

516.441.4009
516.441.4010
Fax 516.441.4992

Curriculum Profile: Advanced Architectural Drawing

<u>Department</u>	Technology Education	
<u>Course Name</u>	Advanced Architectural Drawing	
<u>Course Length</u>	½ year	
<u>High School Credits</u>	.5 unit of credit	
<u>Description</u>	This class is designed to give additional exposure in the Architectural field of study. For years, our Architectural Drawing Program has given a wide variety of students at all grade levels an introduction to the world of Architecture. This class is for students who want a deeper study in the field. In this class, additional study, more detailed drawing, hand drawing, model making, and landscape design are areas where advanced students can challenge themselves and become more equipped to handle the coursework that they might come across at a higher level of education. This class may be taken for additional credit. This fulfills ½ the Art, Music and Drama requirement or ½ the Computer requirement. The course is run in conjunction with Farmingdale State College (SUNY). Students can earn 3 college credits for the successful completion of this course and the Architecture Drawing course.	
<u>Target/eligible students</u>	11,12	
<u>State Learning Standards Link(s)</u>	https://www.nysed.gov/career-technical-education/technology-education-learning-standards	
<u>Primary texts and materials</u>	Architecture Residential Drafting and Design -Clois E. Kicklighter Residential Design, Drafting, and Detailing -Alan Jefferis and Janice A. Jefferis Time-Saver Standards for Landscape Architecture -Charles W. Harris and Nicholas T. Dines	
<u>Scope/Sequence</u>		
<u>Week 1</u>	Day One Introduction Handout – Package, Course of Study. Review Chief Architect. Fill out information sheet. Identify Study guide. Day Two Review Role of the Architect – License procedure. Homes from the beginning of time to now. Explain Homework, full scale, scale, proportion. Homework - online search of architect licensing procedure Day Three Review Homework.	

	Locate "My Room" file of the floorplan. Discuss framing and framing techniques. Develop framing of bedroom from existing file.
<u>Week 2</u>	Day Four Discussion of scale. Discussion of elevations and rendering techniques. Create elevations from floor plan. Day Five Assist in drawing, make corrections and share problems with class. Work on elevations and renderings. Day Six Introduce textbook. Chapter on framing. Continue work on elevations and renderings. Day Seven Review work, discuss student concerns. Continue work on elevations and renderings. Day Eight Discussion on electrical applications and use of electric symbols. Incorporate electrical elements into drawing.
<u>Week 3</u>	Day Nine Discuss presentation techniques. Assist in finalizing projects. Complete elevation and rendering drawings. Day Ten Introduction to architectural model building. Discuss scale, framing, materials and models. Note taking, practice cutting balsa wood. Day Eleven Explain and demonstrate how to create and layout framing plans using Chief Architect. Layout and begin printing plans for reference. Day Twelve Demonstration on scale floor plan, utilizing foam core to create base. Begin cutting foam core and laying out floor plan.
<u>Week 4</u>	Day Thirteen Monitor student work. Continue work on foam core base. Day Fourteen Introduce framing techniques using balsa wood. Begin framing by laying out walls and constructing using pin techniques.

	Day Fifteen Monitor student work. Work on framing and wall construction. Day Sixteen and Seventeen Monitor student work. Work on framing and wall construction.
<u>Week 5</u>	Day Eighteen Demonstrate assembly of wall to base. Monitor student work. Work on framing and wall construction. Day Nineteen Anatomy of a wall. Sheathing, insulation, siding. Discussion of roof materials. Monitor student work. Work on framing and wall construction. Day Twenty-Two Monitor student work. Work on framing and wall construction. Presentation of final project.
<u>Week 6</u>	Day Twenty-three Residential framing vs. commercial framing. Future framing innovations. Composites, etc. Monitor student work. Work on framing and wall construction. Day Twenty-four Lesson on presentation techniques. Monitor student work. Work on framing and wall construction. Day Twenty-five Monitor student work. Work on framing and wall construction. Presentation and critique of projects. Day Twenty-six, twenty-seven Lead presentation and critique process. Presentation and critique of projects.
<u>Week 7</u>	Day Twenty-eight Introduction to commercial building and plot plan project. Begin researching local businesses. Day Twenty-nine Discussion of types of commercial buildings. Form versus function. Attached versus stand-alone structures. Continue research and discussion. Day Thirty Introduction to Google Earth. Introduction activity using Google Earth

	Day Thirty-one Presentation of various facades, square footage, type of building and use of structure. Research and plan three local location of business Day Thirty-two Review bubble design technique Create bubble design of business of choice
<u>Week 8</u>	Day Thirty-three Review floor plans. Students begin commercial project on chief architect Days Thirty-four through Thirty-seven Monitor students' progress Students continue work on commercial project floor plans.
<u>Week 9</u>	Day Thirty-eight Lesson on local, state and federal building codes, including ADA, NEC and EPA regulations. Note taking and continue work on commercial design. Day Thirty-Nine Lesson on elevations and exterior design. Rough sketch of exterior elevations. Day Forty Review student sketches and make suggested changes. Work on exterior sketches, and create final copy of elevation sketches to be used in presentation. Day Forty-one Monitor student work. Work on Chief Architect. Day Forty-two Monitor student work. Work on Chief Architect.
<u>Week 10</u>	Day Forty-three through Forty-five Monitor student work. Work on Chief Architect. Day Forty-six Lesson on landscape techniques for commercial structures, including sidewalk and parking lot considerations. Work on commercial structure on Chief Architect. Day Forty-seven Monitor student work. Work on commercial structure on Chief Architect.
<u>Week 11</u>	Day Forty-eight Lesson on creation of layout. Note taking, and then continue working on design.

	Day Forty-nine Monitor student work. Work on design and layout. Day Fifty through-Fifty-two Assist in creation of project layout. Work on layout of projects.
<u>Week 12</u>	Day Fifty-three Review presentation techniques and assist in creation of PowerPoint and printing of projects. Creating PowerPoint presentation and printing copy of project. Day Fifty-four Assist in creation of PowerPoint and printing of projects. Creating PowerPoint presentation and printing copy of project. Fifty-five- through Fifty-seven Lead presentation and critique process of presentations. Presentation and critique of commercial structure projects.
<u>Week 13</u>	Day Fifty-eight Introduction to group model building project Class discussion of project Day Fifty-nine Lesson on landscape architecture Create build teams and brainstorm ideas Day Sixty through Sixty-two Monitor Group Progress Students will work in teams and develop and bubble diagrams and floor plan layouts
<u>Week 14</u>	Lesson on exterior features of residential structures Students work on chief architect and develop plans of structure Day Sixty-four Lesson of Base building and wood working safety Students will start construction of base and continue design on chief architect Day Sixty-five through Sixty-seven Monitor Student Work Students continue design on chief architect and build the base for model.
<u>Week 15</u>	Day Sixty-eight Demo on model building, laying out the landscape Monitor Student work Students work on model and continue to design on chief architect Day Sixty-nine- Seventy Monitor Student work Students work on model and design on chief architect Day Seventy-one Demo- model building wall construction using foam core.

	Student work on model and design on chief architect Day Seventy-two Monitor Student work Student work on model and design on chief architect
<u>Week 16</u>	Day Seventy-three- Seventy-four Monitor Student work Student work on model and design on chief architect Day Seventy-five Demo- roof construction Student work on model and design on chief architect Day Seventy-six Lesson on final layout of group presentation Note taking, layout final presentation and continue to work on model Day Seventy-seven Monitor Student work Groups will print out final presentation and finish the model
<u>Week 17</u>	Day Seventy-eight through Eighty Lead presentation and critique process of group presentations Presentation and critique of group projects. Day Eighty-one Review for Final exam Study and review for final exam Finish group presentations Day Eighty-two Proctor final exam Final Exam
<u>Week 18-20</u>	Finals week. Hand in work. Review final. Clean – up.
<u>Additional Notes</u>	3 College Credits (SUNY Farmingdale University in the high school)