



GREAT NECK PUBLIC SCHOOLS

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Curriculum Profile: Architectural Drawing

<u>Department</u>	Technology Education
<u>Course Name</u>	Architectural Drawing
<u>Course Length</u>	½ year
<u>High School Credits</u>	.5 unit of credit
<u>Description</u>	This is a course in architectural drafting and design. Emphasis will be placed on residential planning and construction concepts. Students will be introduced to the materials and techniques used in the construction industry. Students will learn the rudiments of computer assisted design. Students may opt for a second semester of advanced work. This course meets the graphics or C.A.D. portion of the Computer Skills requirement or the art, music, drama 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 Advanced Architecture course.
<u>Target/eligible students</u>	9, 10
<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
<u>Scope/Sequence</u>	
<u>Week 1</u>	Day One Introduction Handout – Package, Course of Study. Show Chief Architect. Fill out information sheet. Identify Study guide. Acquire ½" – 1" binder Day Two Role of the Architect – License procedure. Homes from the beginning of time to now. Explain Homework, full scale, scale, proportion. Bedroom measurement demo. Homework - online search of architect licensing procedure, measure bedroom and sketch. Day Three Review Homework. Demo floor plan. Show furniture drawing technique Finish plan of room.

<u>Week 2</u>	Day Four Introduction of scale Ex. Eiffel Tower, Computer chip and centering drawing. 17" x 22" graph paper Drawing of room in scale with furniture. Calculate centering of room. Day Five Assist in drawing, make corrections and share Draw Room, add wall thickness. problems with class. Day Six Lecture door and window symbols. Introduce text book. Chapter 15, Doors and Windows. Add windows and doors. Day Seven Review furniture drawing. Add furniture and complete drawing. Day Eight Introduce Chief Architect Experiment with Chief Architect (Don't save) Homework - Chapters 7.8.9
<u>Week 3</u>	Day Nine Demo, create files for student room. Explain homework – wish list. Create Files. Create room design with furniture. Homework – Create wish list. Day Ten Demo, create new files wish list. Create file – Wish list. Create final design. Day Eleven Introduce expandable home project – Explain Three home design techniques, Bubble Design, Main Room, Customer Preference. Homework – Six bubble designs drawn on folded white paper (six sections). Day Twelve Lecture – Living area, sleeping area, service area (luxuryplans.com). Hand in bubble designs. Homework – refine home design with doors, windows...etc.
<u>Week 4</u>	Teacher check student designs – makes changes. Final pencil home design. Day Fourteen Demo how to place design on computer File Names Ex. Demo1house. Show wall movement and sizing – place of window and doors.

	Create file for house. Start house design. Day Fifteen Intro of bathroom design and utility room. Preliminary design – windows and doors. Day Sixteen and Seventeen Work with students on basic home design, bathroom, kitchens and utility room. Students continue design and bookwork chapters 7,8,9.
<u>Week 5</u>	Day Eighteen Demo – Bedroom placement. Show use of hallways, closets and doorways Student continues to work on walls, closets etc. Day Nineteen to Twenty-two Small demos on program operations. Refine Plan – add kitchen, bathroom, and utility room.
<u>Week 6</u>	Day Twenty-three Review homework and stage one. Teacher demo file name change for stage. Review home plans. Ex. Demo1house2 Set up new stage 2 file and work on house expansion. Day Twenty-four Demo – on second construction or expansion on first floor – mention master suite. Hand sketch second stage design (continue home). Day Twenty-five Lecture on Master suite and bath. Get stage 2 approved and start computer design. Day Twenty-six, twenty-seven Assist students with designs Work on second stage design.
<u>Week 7</u>	Day Twenty-eight Assign homework. Chapters 18 (do questions) 19 review and 20 (do questions). Final up stage two – w/ furniture, etc. Day Twenty-nine Intro Stage 3 Suggestions – Deck and 2 car garages. Create new file for Stage 3 and proceed w/ expansion. Day Thirty through-Thirty-three Review Plans. Demo teaching situations. Complete stage three with furniture.

<u>Week 8</u>	Day Thirty-four through Thirty-nine Demo: Student presentations – copies for notebook, copies for display, show large format printer 11"x17" or 17"x 22". Finish up homework assignment complete home design and create presentation.
<u>Week 9</u>	Day Forty through Forty-four Critique student work and notebooks. Student presentation work for class and teacher
<u>Week 10</u>	Day Forty-five Present assignment for new project (Luxury Home). Students use computer for on-line research. Day Forty-six Lecture on home design on higher level. Homework find real estate information other than on-line. Day Forty-seven Show "Falling Waters" Newspaper real estate assignment. (Thursday). Day Forty-eight Lecture home specifications. Homework luxury home specifications (Friday).
<u>Week 11</u>	Day Fifty-four Demo "House Wizard". Explore "House Wizard". Day Fifty-five through Fifty-seven Demo house on "House Wizard", (create files). Show boxes and second (have to complete first before starting second floor). Start "House Wizard" design. Day Fifty-eight through Fifty-nine Demo and build house in "House Wizard", print demo for box and house design. Complete "House Wizard" design and print copies for notebook.
<u>Week 12</u>	Day Sixty Demo on Luxury. Design on computers! Remind to construct outer walls first! Students start home design! First floor first only. Day Sixty-one to Sixty-three Daily demo on Chief Architect. – Ex. Room organization, dining and kitchen. Critique student work on individual basis. Students work on and design first floor and garage.
<u>Week 13</u>	Day Sixty-four Demo second floor construction. Students work on second floor construction. Day Sixty-five through Sixty-eight Discuss and demo stairs, landings etc. Students to work on design of second floor.
<u>Week 14</u>	Day Sixty-nine

	Demo with floors complete, discuss living and service for design on kitchen, baths and utilities/ laundry (individual observation). Work on room design, using on-line help, textbooks, and magazine research (saving stuff in folders). Day Seventy Discuss garage design Students continue design work. Day Seventy-one through Seventy-three Individual interaction with students. Students continue design work.
<u>Week 15</u>	Day Seventy-four Demo on decks, patio, porch and pools. Students plan outside activity facilities. Day Seventy-five Demo – Landscape design create separate file for the plan. Students create landscape design. Day Seventy-six through Seventy-eight Individual student help and advice. Student work on outside design.
<u>Week 16</u>	Day Seventy-nine Lecture presentation of building and home design. Students continue work. Day Eighty Demo layout construction video. Explain how we go through this step by step. Students create layout file and experiment with layout construction. Day Eighty-one through eighty-three Demo – construction layout with class. Each will have a separate file. Students create layouts for their projects.
<u>Week 17</u>	Day eighty-four Lecture on final. Project presentations: Layout for each floor. Students create layout. Day Eighty-five through eighty-seven Review student work. Hand in work – creation nightclub for extra credit. Day eighty-eight Review for final. Study for final.
<u>Week 18-20</u>	Finals week. Hand in work. Review final. Clean – up.
<u>Additional Notes</u>	Available to receive 3 college credits when coupled with Advanced Architectural Drawing