Course Syllabus 3D Foundations
Fall 2019

Instructor: Ms. Joyce Symoniak
Room: Art Studio E107
Office Hours: 2:30 – 4:30 M-F
Meeting Days A, B, C and Mod 6

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Course Level: Beginning Level  Prerequisite: None

This course will introduce the basics of three dimensional design and processes. It will cover topics in three-dimensional design in which students will explore the principles of visual perception and the meaning of form, space, function, mass and structure as they relate to three-dimensional design. Varied use of materials as well be incorporated to develop the students’ ability to analyze the relationships between form and space.

Text(s) / Materials: Students will receive a series of teacher generated handouts and worksheets. Supply fee may be required.

**Students will need safety glasses and a 3 ring binder.**

Essential Content
- Technical Proficiency: Identify fundamentals and develop muscle memory/automatically through practice
- Production Technique: combining and processing cognitive skills on a continuum
- Problem Solving: inquiry, experimentation, application and transfer of knowledge
- Collaborative Learning: Teamwork and leadership opportunities within the parameters of an ethical framework
- Aesthetic Development: Explore creativity through the interconnections of culture, design, and historical genre
- Aesthetic Appreciation/Lifelong learning: magnify personal perception of beauty, meaning, value, intent, & emotional content
- Aesthetic Experience: Synthesize the identified core elements into the resultant product.
- Standards: National Standards:
- Artistic Process: Creating: Conceiving and developing new artistic ideas and work.
- Artistic Process: Responding: Understanding and evaluating how the arts convey meaning.
• Artistic Process: Connecting: Relating artistic ideas and work with personal meaning and external context.

Student Outcomes: Upon completion of this course, students will have completed the following:
  ● Develop vocabulary of art and technology terms and techniques.
  ● Develop an understanding of the principles of design in relationship to form, space and mass.
    ● Identify relationships in form, space, and color.
    ● Effectively experiment with a variety of materials and techniques in art.
    ● Students will recognize and apply the fundamental elements of art
    ● Develop critique criteria and words in 3D techniques using terminology and techniques learned.
  ● Student recognizes and differentiates the styles and mediums of important artists
  ● Student experiences creative challenges that develop critical thinking, spatial understanding and problem solving

3D Design Foundation’s projects are executed from the following techniques:
  ● Clay and foam.
  ● Wire/Mesh.
  ● Air Dry Polymers
  ● Pencil Sketching
  ● Mixed Media
  ● Cardboard
  ● CC cutter
  ● Solid Works

Objectives:
  • Develop automaticity in skills, concepts & processes that support & enable complex thought:
  • Developing muscle memory and repetition in order to fabricate a piece of art.
  • Students construct questions which further understanding, forge connections, & deepen meaning.
  • Students search within themselves to ask meaningful questions. Students work to answer these questions, finding new ways to express themselves through the process of art making.
  • Students create rough sketches before creating artworks, then record their processes and subsequent changes in their sketchbooks.
  • Use appropriate technologies as extensions of the mind.
  • Selecting equipment & tools that will allow for creative endeavors.
  • Recognize, pursue, and explain substantive connections within and among areas of knowledge; having the ability to recognize connections between the arts and other content-based curricula and cultural relationships to extend understanding and lifelong learning.
  • Students see the importance of the relationships between space and form.
  • Recreate the “beautiful conceptions” that give coherence to structures of thought.
  • Students create works of art that have been constructed by meanings that comes from within their subject or artifact. Students learn to recognize that all individuals have different constructions, styles and depictions and all are valid.
Technical Proficiency:
Students will learn to correctly use all the tools and supplies used in the art.

Production Technique:
Students will learn the importance of form and space in the arts.

Problem-Solving:
Art techniques engage problem solving skills as no other subject can. Students who are linear thinkers will be challenged in a school where linear thinking is pre-dominant. A course such as 3D Design Foundations will allow our students to diversify their problem-solving skills using spatial reasoning and hands-on learning.

Collaborative Learning:
The Art lab offers tremendous collaborative opportunities for students to communicate, critique, watch, learn, discuss, and create.

Aesthetic Appreciation:
Students will delve into art history, researching technologies as a communicative medium in both science and engineering. Students will learn the impacts of form on space.

Aesthetic Experience:
Students will learn that they have a personal part in leaving their imprints for future generations. Students will appreciate their artworks and have an expression of personal identity critical to artmaking, they can provide for future generations.

Instruction Design and Approach:
- Opportunities to produce solutions to design problems
- Production of artwork or artifacts.
- Lecture presentations, demonstrations, & critiques. Learning Groups Students will work individually* on most projects, collaborating in small groups at times for formative assessments and in class groups for critiques.
- The creation of artwork is problem centered. Students will explore individual approaches to materials, procedures, technology, ideology, iconography, & historical/cultural associations to create their original artworks.

STUDENT EXPECTATIONS
- Attendance: Students must make up all missed work. Numerous absences will diminish a grade.
- Late work, Academic & Personal Integrity:
- Hand in your work on time. One letter-grade reduction or a 10% grade reduction per day for all assignments.
- Always hand in original work. If you are caught plagiarizing, you will be referred to the Dean of Students.
- Students are always expected to behave respectfully and appropriately. Otherwise, dismissal from classroom. Clothing:
Please wear shoes (not sandals).
Keep purses and book bags on the floor - please do not ‘wear’ them.
Please wear clothing that allows you to work freely, without concern for art materials that may get on your clothing.
Please wear shirts or tops and pants that do not reveal undergarments.

Respect for Supplies:
- Always respect the tools we use in the process of making art - this includes conserving supplies.
- Always leave the art supplies in the art room unless you are given a ‘take-out' pack for homework.
- Students will be held financially accountable for broken, lost, or misused supplies and equipment.

Safety and Sensory issues:
Creating art can pose sensory and safety issues. If there are situations in class where safety is a concern, instructor will instruct you how to deal with these in a safe manner. If you have any sensory issues with a project procedure, you must let me know immediately.

Clean-up:
We are a community and as such, should always be willing to clean up the area both for yourself and others when they need assistance.

Assessment Philosophy:
Because this is a studio course in which production aesthetic awareness and capacity is the emphasis, assessment will be based upon a number of related factors. These factors include:
- Ability to follow instructions and meet deadlines.
- Ability to complete projects/assignments
- Tenacity (work ethic)
- Issues relating to craftsmanship
- Issues relating to creativity, aesthetics, and artistic originality
- Ability to work safely and clean up after oneself and pitch in with general studio cleanup
- Ability to self-reflect on one’s own performance and/artwork
- Ability to conserve and recycle
- Ability to use and recognize appropriate terminology and procedures
- Issues relating to attendance and ethical behavior
- Ability to discuss artwork as it reflects aesthetics and social significance

Presentation Designation aesthetic awareness and capacity is the emphasis, assessment will be based upon a number of related factors.
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• Ability to use and recognize appropriate terminology and procedures
• Issues relating to attendance and ethical behavior
• Ability to discuss artwork as it reflects aesthetics and social significance

Formative Assessments:
Methods:
• One-on-one conversations
• Small group conversation
• Individual or group critiques

Ms. Symoniak believes that Formative Assessments are more important than Summative Assessments since this give ongoing feedback to the student at any particular point in the semester. Formative assessments will be given to students both formally at times in PowerSchool, in group critiques, or individually in the classroom.

Summative Assessments:
• Summative Assessments will be given at the end of each unit or project using numerical grades in PowerSchool
• Some exams or quizzes
• Creative ‘artifacts’ produced by the student (assessments based upon specific criteria given to students at the beginning of each unit. Student will submit their own graded rubric along with their project.)
• Student will keep all their artwork/artifacts related to the course. This will be in digital format via an electronic portfolio.

GRADE SCALE:
A = 100-94%
A- = 93-90%
B+ = 89-86%
B = 85-83%
B- = 82-80%
C+ = 79-76%
C = 75-73%
C- = 72-70%
D = 69% >

INSTRUCTIONAL STRATEGIES: (see below)
Demonstrations
Lectures
Critiques

GRADING CRITERIA: Grades for the course will be determined in the following manner:
50%: Classroom/Group Participation
• Portfolio Presentation
• Studio Projects
  o Concepts/objectives have been met
  o Completion of project
  o Creativity, originality
  o Proper craftsmanship
- Developing manual and technical skills
- Developing perceptual skills
- Class Participation
- Daily work habits Care of supplies and equipment
- Time on task
- Group interaction
- Studio interaction
- Studio activities participation
- Attendance and promptness
- Preparation for class (materials)
- Cooperation

30%: Test, Quizzes, Individual Assessments
- Sketchbooks
- Journal
- Homework

20%: Written Components
- Class critiques
- Notebooks
- Research
- Self-evaluations
- Vocabulary
- Written critiques
- Exams
- Oral presentations

Sequence of Topics and Activities:

**Week 1:** Introduction to course, understanding materials and equipment. History of art unit and advancements, research paper on; past art sculptures and advancements into the theory of space and form, and its impacts. Start on first project to gain understanding of how to create from a 2D idea into and 3D finished creation.

**Class Layout:**
Class 1; Introduction to course
Class 2: History of art, introduction into writing an art research paper.
Class 3: Discussion on what is 3D art and how to create it.
Class 4: Project one creating boxes in the style like Lee Bontecous (or any other 3D box artist)

**Week 2:** Introduction to 3D art and design, learning about the movement from realism to walk in 3D design and installations. Project 2 is done outside of class as a research paper, project one will be completed during this week.

**Class Layout:**
Class 1; introduction to different types of 3D works.
Class 2: Start designing box in 3D format, sketch out ideas.
Class 3: Class room work.
Class 4: Class room work.
**Week 3:** Moving into making ideas into a 3D design, understanding a positive build up verses negative (removal) creations. Presentations of research paper and discussions on varied artists. Developing mass over space, with the understanding of creating form, using line.

**Class Layout:**
- Class 1: Research presentations begin, 5 minute per student.
- Class 2: Research presentations finish.
- Class 3: Start designing box in 3D format, sketch out ideas Class room work.
- Class 4: Class room work.

**Week 4:** Developing a field study of subject matter. Learning movement within build up techniques’ both by hand and computer based. Changing views and how to model different sides of creations, using 3D turn a rounds. Project 3 will be started, with review of new materials.

**Class Layout:**
- Class 1: Research presentations begin, 5 minute per student.
- Class 2: Research presentations finish.
- Class 3: Start designing box in 3D format, sketch out ideas Class room work. Turn a object into 3D image, using Photoshop.
- Class 4: Class room work, finish lab assignment and work in class room on building project.

**Week 5:** Using the CNC machine as a tool, combining 2D drawings into 3D print. Understanding the benefits of and draw backs of both. Project 4 will be involving science elements of the human figure, allowing students to think about 3D views in order to create a full dimensional artwork.

**Class Layout:**
- Class 1: Class room work on the building process.
- Class 2: Taking images of final work to process them into 3D using technology.
- Class 3: Learn how to use Photoshop programming to convert object to CnC machine for 3D printing.
- Class 4: Class room work.

**Week 6:** Creating 3D designs made with CNC machine. Will finish project 4 working the makers space.

**Class Layout:**
- Class 1: Working in computer lab to create 3D objects from our photography.
- Class 2: Class room work.
- Class 3: Working in Makers Space.
- Class 4: Project reflection, presentation and review.

**Week 7:** Working on 2 color prints using technology plates and hand plates. How technology works with the drawings, use technology as added benefit to drawings. Project 5, working negative space, students will learn how to draw in 3D format, allowing them to work in removing negative spacing.

**Class Layout:**
- Class 1: Demonstration on creating a 3D turn around.
- Class 2: Designing the 3D turn around.
- Class 3: Sketch out ideas Class room work, bring sketches into Photoshop.
- Class 4: Class room work.
**Week 8:** Introduction to 3-D drawing, creating a 2-D drawing into a 3D figure, how it works and how to create it. Exploring use of the 3D drawing tool. In this project students will be using 3D drawing tools, students will explore how to the technology of 3D drawings, creating botanical images into 3D artworks.

**Class Layout:**
Class 1: Research a botanical image and start to sketch it out.
Class 2: Create a 3D turn around of subject.
Class 3: Class room work.
Class 4: Complete 3D subject.

**Week 9:** Uncontrolled pendulum paintings. Working physics into paintings and how it works. Project catch up work allowing students to complete back works.

**Class Layout:**
Class 1: Class room work.
Class 2: Class room work.
Class 3: Start pendulum paintings, using a 3D object to create paintings.
Class 4: Class room work.

**Week 10:** 3D paintings, using laser cutter, to understand the principles behind 3D paintings. Project starting with understandings of foreground, midground, background and how they relate in perspective to each other. Perspective worksheets due prior to the start of class, with gaining understanding of how it works in 3D foundations.

**Class Layout:**
Class 1: Research subject matter to create a 3D painting.
Class 2: Learning how to use laser cutting to cut on all levels of paintings, work must be finished outside of class.
Class 3: Class work.
Class 4: Class room work.

**Week 11:** Creating a portfolio of 3D designs in a 2D format. How to create a portfolio and its importance. Introduction to final project.

**Class Layout:**
Class 1: Pulling together ideas to complete a final portfolio and move into the final project.
Class 2: Work in computer lab to pull everything together.
Class 3: Class room work.
Class 4: Class room work.

**Week 12:** Putting all the stages together. Understanding how all processes work together in completing a 3D piece of work and the value. Project 7 started, research of project and homework due.

**Class Layout:**
Class 1: Research due for development of project.
Class 2: Sketches must be completed during this class for project completion.
Class 3: Class room work.
Class 4: Class room work.
**Week 13:** Using multimedia techniques in drawings, and understanding complex forms. Building complex forms using different materials and how they relate to each other. Students will work on understanding relationships of materials and working with different technical theories to create a final artwork. Project 8 will incorporate science elements from earlier projects with the understanding the importance of such creations in relationship to science courses, elements will be based upon current course of each student, as students team to complete installation.

*Class Layout:*
- Class 1: Research on UNSG for installation project within teams.
- Class 2: Idea session and site specific drawings made.
- Class 3: In class work, sketches.
- Class 4: Making site specific show 3D in Photoshop, lab work.

**Week 14:** Development of a portfolio, revisiting the importance of form verses space, sketch books and art advancements. Final project progressing. Project involves student research, planning and leading into a final presentation.

*Class Layout:*
- Class 1: Final project design approval needed.
- Class 2: Team divides jobs for final project and sets schedule of team work.
- Class 3: Class room work.
- Class 4: Class room work.

**Week 15:** Working towards portfolio completion and final presentations.

*Class Layout:*
- Class 1: Class room work.
- Class 2: Class room work
- Class 3: Class room work.
- Class 4: Class room work.

**Week 16:** Finishing final projects and presentations.

*Class Layout:*
- Class 1: Class room work.
- Class 2: Class room work
- Class 3: Class room work.
- Class 4: Class room work.

**Week 17:** Presentations/Installations complete

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**CHEATING & PLAGERISM**
Cheating is the act of obtaining or attempting to obtain credit for work by the use of dishonest, deceptive, or fraudulent means.

Plagiarism is the act of taking ideas, words or specific substance of another and offering them as one's own.

Cheating, plagiarism, and falsification of student work, including documents will be submitted to Katie Berger for review.

Course Syllabus

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Meeting Days TBA

AGREEMENT

(please sign and return to the instructor)

I have received, read, and understand the course syllabus for 3D Design Foundations.

The instructor has, within the structure of the class, explained the material contained within the syllabus.

Student Signature: ________________________________
Printed Name: _____________________________________________

Contact Information (please print clearly):

e-mail address: __________________________________________

Alternate e-mail: __________________________________________

Cell phone number: ________________________________________