



## TexPREP - Young Architects Course Syllabus - Summer 2023

**Location/Classroom:** Del Mar College Oso Creek Campus-STEM Building (Room TBD)

**Meeting Times:** Mondays and Wednesdays 11:30 – 1:00pm **(Gift Cards will be provided for lunch)**

### Meeting Dates:

Monday, June 5<sup>th</sup>

Wednesday, June 7<sup>th</sup>

Monday, June 12<sup>th</sup>

Wednesday, June 14<sup>th</sup>

**\*\*Tuesday, June 20<sup>th</sup>**

Wednesday, June 21<sup>st</sup>

Monday, June 26<sup>th</sup>

Wednesday, June 28<sup>th</sup>

Media day – Tuesday, July 18<sup>th</sup>

### Course Description:

Introduction to the field of Architecture for area youth grades 7-11. Students will explore how Architecture is part of their lives and the possibility of pursuing it as a professional career. Through the media of model making and drawing, students will explore how design affects them individually, then cooperatively with their neighbor(s), then in the community as a whole. Through this new insight, students will gain a better understanding and the education required for the architectural profession and industry.

### Required Materials as Provided by CCAIA:

Model Making Materials, Drawing Materials

### Committee Tasks:

1. Designate Location – Classroom provided by DMC General Purpose Building
2. Review Curriculum and activity schedule
3. Establish Volunteer Committee – Create a schedule of hours needed for volunteers to serve as mentors and/or lecturers during class time
4. Procure supplies needed for course

### A typical day will be broken down as follows:

5 minutes – Gathering

5 minutes – Review

15 minutes – Lecture

60 minutes – Work Time

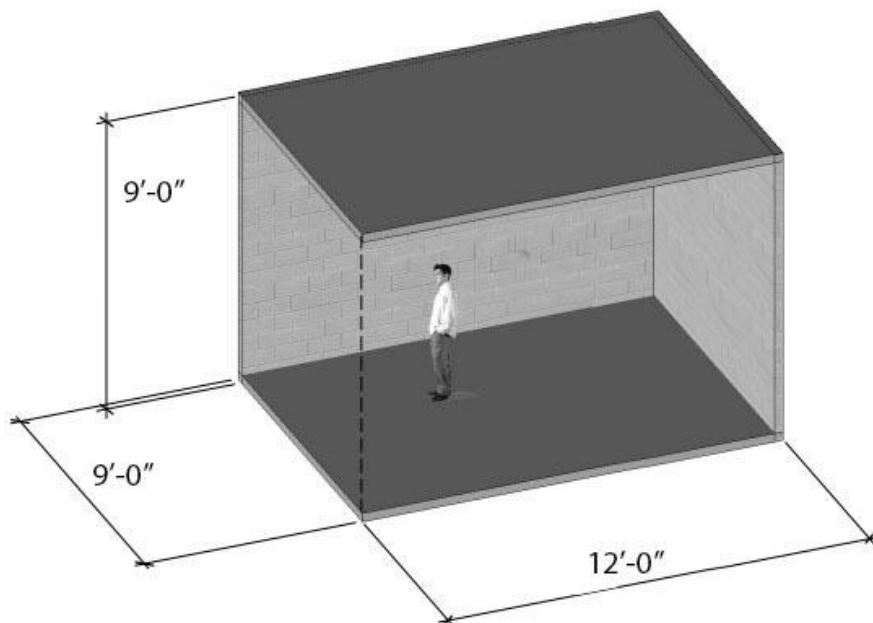
5 minutes clean-up

Program Outline		Providing Lecture	
Date	Instructors/Mentors	Activity	Supplies
Monday June 5, 2023 11:30 -1:00	1- 2- 3- 4-	1. Introduction 2. Lecture – <i>What is Architecture?</i> 3. Spaces I like Collage	Architecture Magazines, Scissors, Glue Sticks, Cardboard
Wednesday June 7, 2023 11:30 -1:00	1- 2- 3- 4-	1. Introduction 2. Lecture - <i>Spatial Relationships, Scale and Size</i> 3. Favorite Space	Measuring Tape, Scales, Graph Paper, Pencils, Erasers
Monday June 12, 2023 11:30 -1:00	1- 2- 3- 4-	1. Review 2. Lecture – <i>Community Rules</i> 3. Model <b>Your Neighborhood</b> – <i>Divide the Students into groups of 3-4, Introduce Topo Model, transfer topo scale dwg to model</i>	Measuring Tape, Scales, Graph Paper, Pencils, Erasers, Modeling Supplies – foam core, corrugated cardboard, scissors, glue, straight pins, construction paper
Wednesday June 14,2023 11:30 -1:00	1- 2- 3- 4-	1. Review 2. Finish Topo Model 3. Lecture – <i>Creative Spaces</i> – see description 4. Exercise – Client Owner Interviews 4. Start drawing floorplans	Same As Above
**Tuesday June 20, 2023 11:30 -1:00	1- 2- 3- 4-	1. Review 2. Finish drawing Floorplans and elevations 3. Model Your Space	Same As Above
Wednesday June 21, 2023 11:30 -1:00	1- 2- 3- 4-	1. Review 2. Continue and finish modeling Your Space	Same As Above
Monday June 26, 2023 11:30 -1:00	1- 2- 3- 4-	1. Review 2. Lecture – <i>Setbacks and site plan</i> 3. Continue and finish modeling your space and Neighborhood	Same As Above Colored Markers, Pencils, scales, erasers
Wednesday June 28, 2023 11:30 -1:00	1- 2- 3- 4-	1. Review 2. Continue and finish modeling and drawing Your space Neighborhood 3. Wrap-up	Same As Above
Tuesday, July 18, 2023 12:30-2:30 <i>Location TBD</i>		Media Day	
TBD		Celebration	

## Your Space

### **Problem Statement:**

Begin with a 9' wide x 12' long x 9' high space (this will eventually be modeled at 9" x 12" x 9" using a 1" = 1'-0" scale). Within the limits of this volume, design a personal space where you will feel most creative. This is not a home but a space where you can feel free to create or experience whatever you may feel passionate about. Your model and drawings will all be built and drawn at a scale of 1"=1'-0". You may carve out exterior space from your 9' x 12' space touching only two exterior sides if you desire. Eventually your space will be connected with others so one of your sides must have an entrance from a path of circulation. Initially you may sketch this out to get a rough layout, but very quickly you will begin modeling it in rough format with cardboard, changing and adapting it as the project progresses. Toward the end of our sessions, you will have the opportunity to draw a floor plan of your space in its final format.



## Spatial Relationships and Scale and Size

- First Let's look at the Architecture Scale – When Architects and Engineers design and draw Buildings, they have to put them on paper that is a reasonable size – Usually that is a piece of Paper that is 24" x 36" or 30 x 42
- It's obvious that you cannot draw a building in its true size on that paper so you have to scale it down. That means you take a fraction of an inch and make that equal to one foot so what you draw is actually smaller than the real thing.
- Look at your scale and read it from left to right. First you have Full scale or 1"=1" – There is a 16 at the left side of the full scale – It looks like a ruler.
  - Review the rest of the scales – You always read from left to right
  - At each scale the fraction of an inch is divided 12 times so you can count off the inches. The smallest scale is divided 6 times so each tick is 2 inches
  - Notice that there are 2 scales on each edge – the smaller scale will be the smaller tick and the larger the larger tick – Again you can flip it around and read left to right
  - Take a moment to look over the scale
- Scale Exercise – Using your Architecture Scale, I want you to sketch as best you can a square that in reality is 12'x12'. HOWEVER, I want you to draw it using your scale at the following scales
  - 1" = 1'-0"
  - 1/2" = 1'-0"
  - 1/4" = 1'-0"
- Note the difference in the size of your squares.
- Now, let's say a wall is 4" thick, see if you can draw another line inside your square 4 "away. You will need to look at the tick marks.
- Soon in this class we are going to start designing a space so you need to be familiar with how big things need to be so you allow enough space but at the same time don't waste it. So in our next exercise – I want you to think in your head about your favorite space – someplace you like to be in. Close your eyes for a second and visualize this space. Now on your paper I want you to try and draw this space to scale using the scale 1"=1'-0" – That is the scale we will be using from now on in this class. If you are not sure how big something in your favorite space is, think of how big it is compared to you, you might have to measure yourself to get an idea. You can also ask the instructors how big they think it might be. For instance – say my favorite space my bed – now I know that when I lie in my bed neither my head nor my feet hang off and I am 5'-3" tall, so my best guess would be my bed is at least one foot longer then me but I also know it not too much longer than that so I'm going to guess that my bed is 6'-6" long for now. I also know that I am about 1'-6" wide at my shoulders and there is room on either side of me until I get to the edge of the bed – maybe a foot or so, so my best guess is my bed is 2'-6" to 3'-0" wide. So when I draw my bed to a scale of 1"-1'-0" I can count off those distances using my scale. I don't want you just to use you bed but just imagine your favorite space and try and draw a plan view of it to scale. We have some tape measures here if you need to measure yourself or something in this room for reference. A plan View would be like you are looking down on it from above.