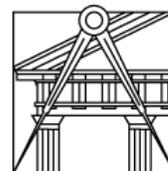


REPRESENTAÇÃO DIGITAL

Mestrado Integrado em Arquitetura | 1º Semestre | 2023/2024

Margarida Cabral | 20211423 | Turma 2J

Docente – Nuno Alão



FACULDADE DE ARQUITETURA
LISBON SCHOOL OF ARCHITECTURE
UNIVERSIDADE DE LISBOA

ÍNDICE

- Semana 1 – Slide 3 e 4
- Semana 2 – Slide 5 a 8
- Semana 3 – Slide 9 e 10
- Semana 4 – Slide 11
- Semana 5 – Slide 12 a 14
- Semana 6 – Slide 15 a 17
- Semana 7 – Slide 18 a 20
- Semana 8 – Slide 21 a

Semana 1

Criação do site do aluno, onde serão entregues os trabalhos.

Programas usados:

- Brackets – usado para a edição do ficheiro html;
- Filezilla – usado para fazer upload do ficheiro html no servidor da Faul;

```
index.html
1 |<!DOCTYPE html>
2 |<html lang="en">
3 |<head>
4 |   <meta charset="UTF-8">
5 |   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6 |   <title>Margarida Cabral</title>
7 |   <style>
8 |     body {
9 |       background-color: #d3d3d3;
10 |      font-family: monospace sans-serif;
11 |      text-align: center;
12 |      color: white;
13 |      margin: 0;
14 |    }
15 |
16 |    .logo {
17 |      display: block;
18 |      text-align: center;
19 |      margin: 20px auto;
20 |    }
21 |
22 |    .logo img {
23 |      width: 500px;
24 |      height: auto;
25 |    }
26 |
27 |    .profile-photo {
28 |      border-radius: 50%;
29 |      width: 200px;
30 |      height: 200px;
31 |      object-fit: cover;
32 |      margin: 20px auto;
33 |      box-shadow: 0 0 10px rgba(0, 0, 0, 0.2);
34 |    }
35 |
36 |    .profile-name {
37 |      font-size: 30px;
38 |      color: white;
39 |      margin: 10px 0;
40 |    }
41 |
42 |    .transparent-button {
43 |      background: transparent;
44 |      border: 2px solid white;
45 |      padding: 10px 20px;
46 |      margin: 20px;
47 |      cursor: pointer;
48 |      font-size: 15px;
49 |      color: white;
50 |    }
51 |
52 |    .contact-link {
53 |      text-decoration: none;
54 |      color: white;
55 |      font-size: 15px;
56 |      margin: 10px;
57 |    }
58 |
59 |    .contact-link:hover {
60 |      text-decoration: underline;
61 |      color: white;
```

Semana 1



FACULDADE DE ARQUITETURA
LISBON SCHOOL OF ARCHITECTURE
UNIVERSIDADE DE LISBOA



MARGARIDA CABRAL

20211423 | TURMA 2J

[PDF CASA SIZA](#)
DWG CASA SIZA
BLOG
MAIL
BACK

Semana 2

Introdução ao AutoCad;

Comandos usados:

L (line)– Criar linha;

PL (polyline) – Criar linhas agrupadas;

O (offset) – Criar paralelas;

M (move) – Mover;

CO (copy) – Copiar;

DI (dist) – Medir distâncias;

CL (close) – Fechar desenhos abertos;

TR (trim) – Apagar;

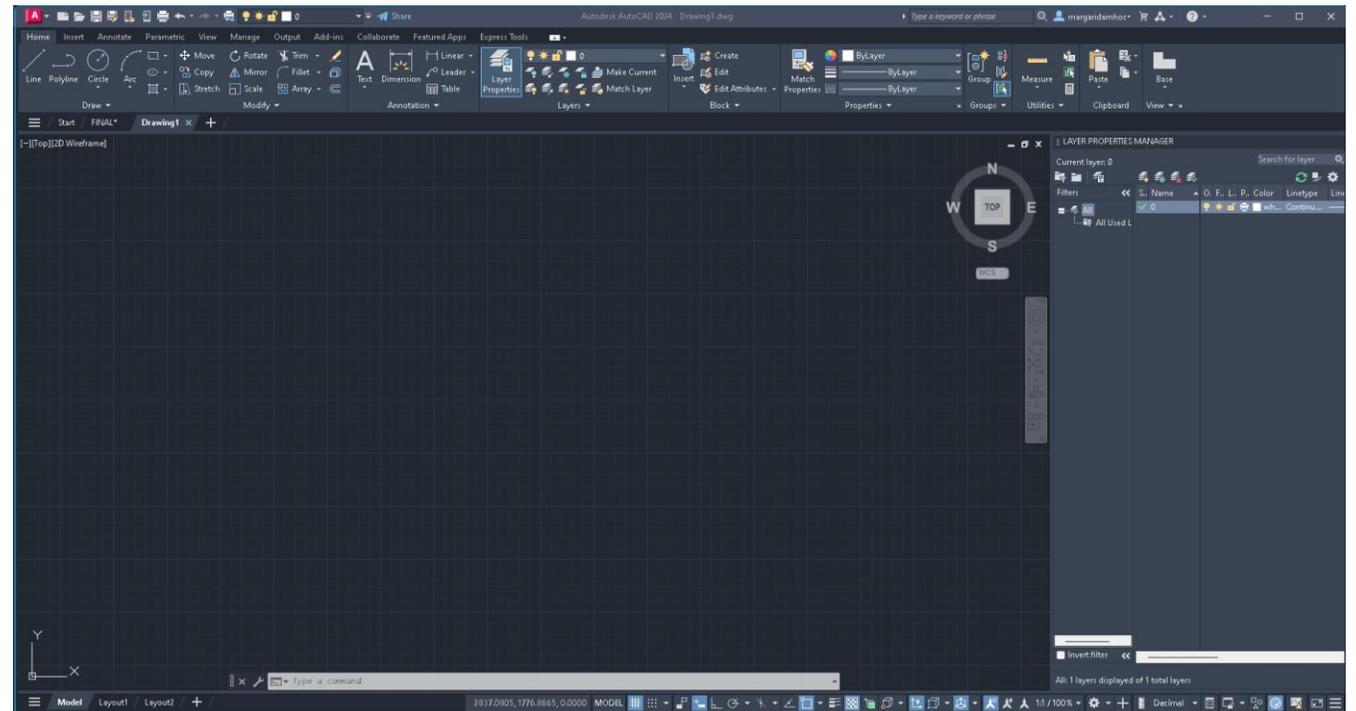
H (hatch) – Colorir;

STR (stretch) – Mover apenas vértices e extremidades;

RO (rotate) – Rodar;

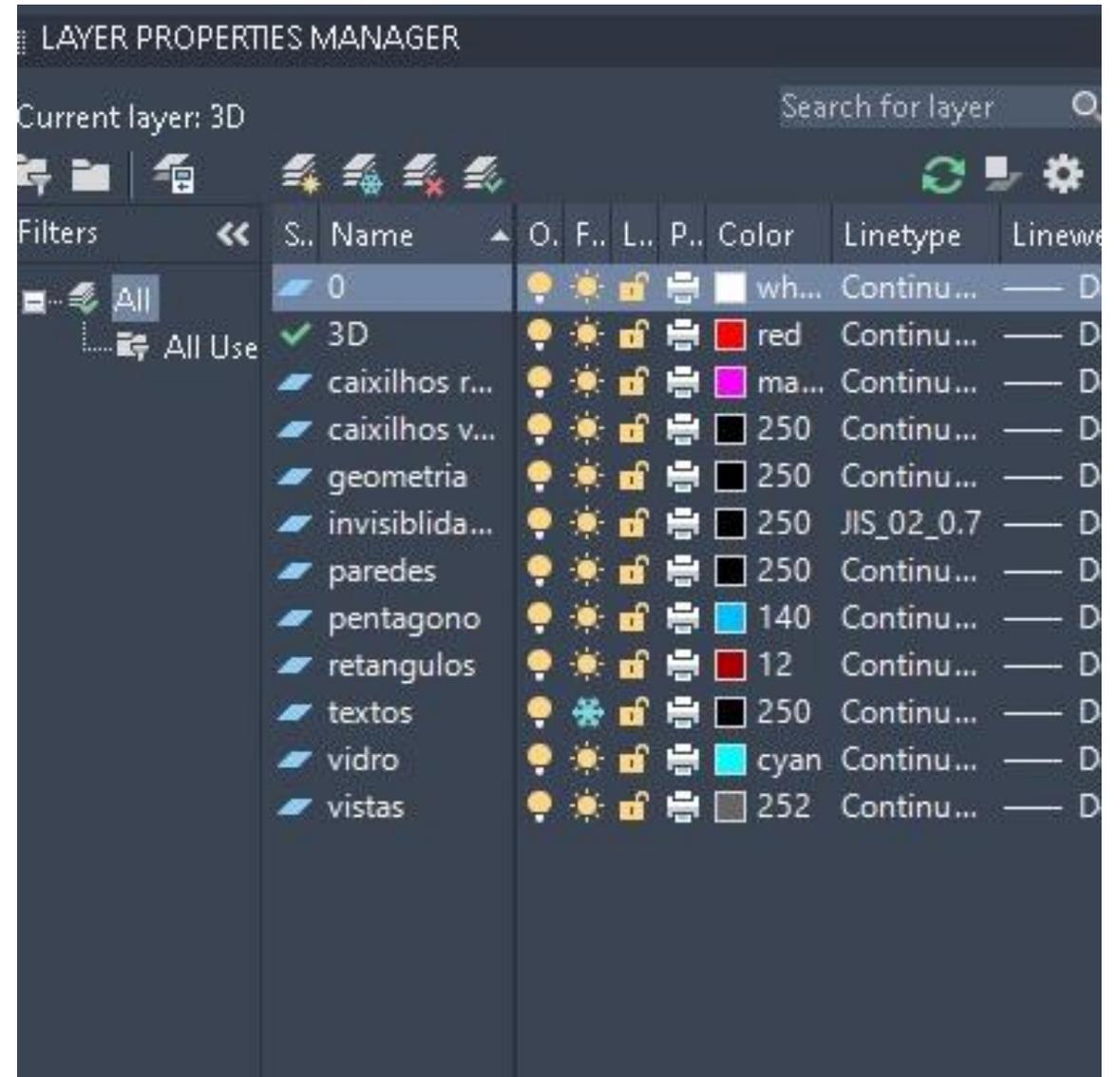
T (texto) – Texto;

C (circle) – Criar circunferências;



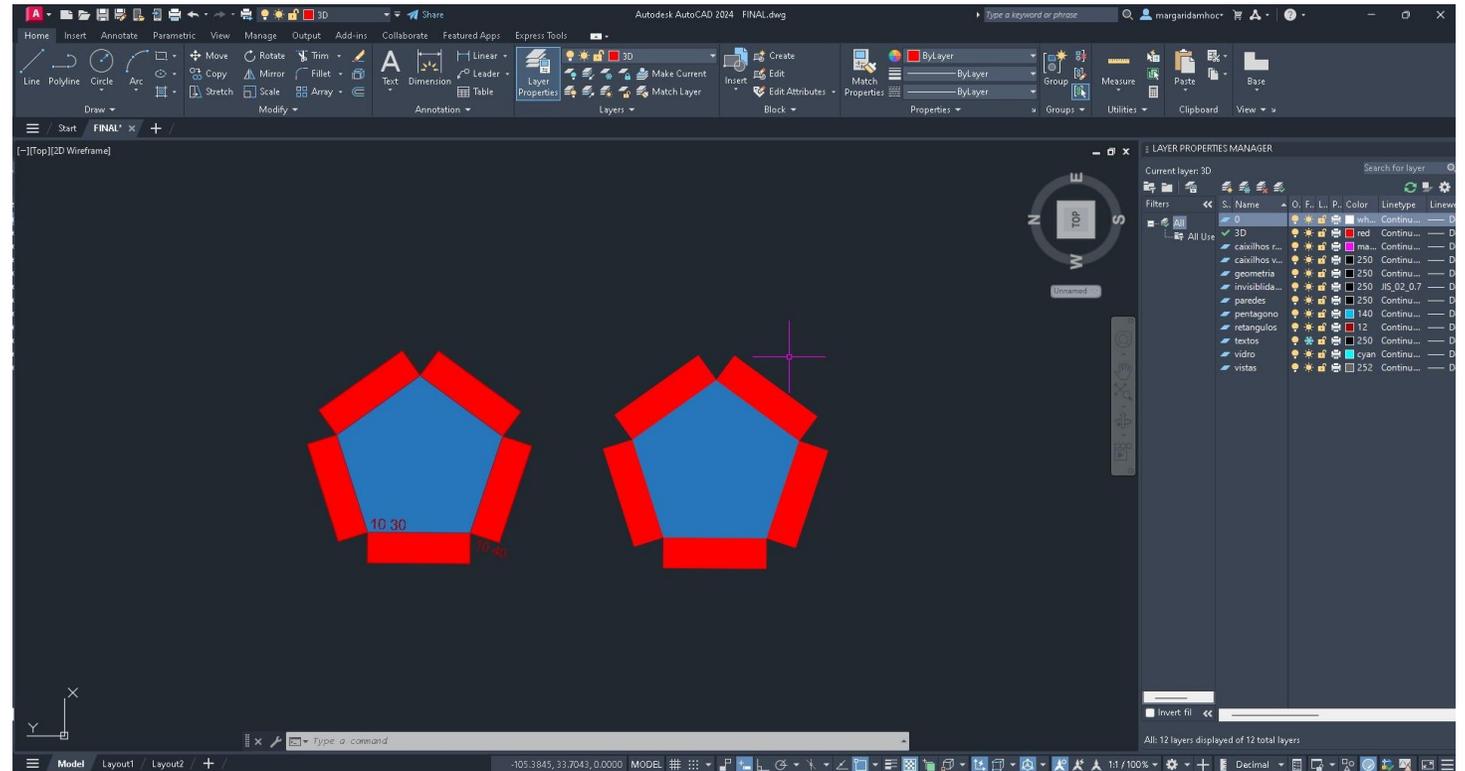
Semana 2

Criar layers;



Semana 2

Pentágonos e Retângulos;



Semana 2

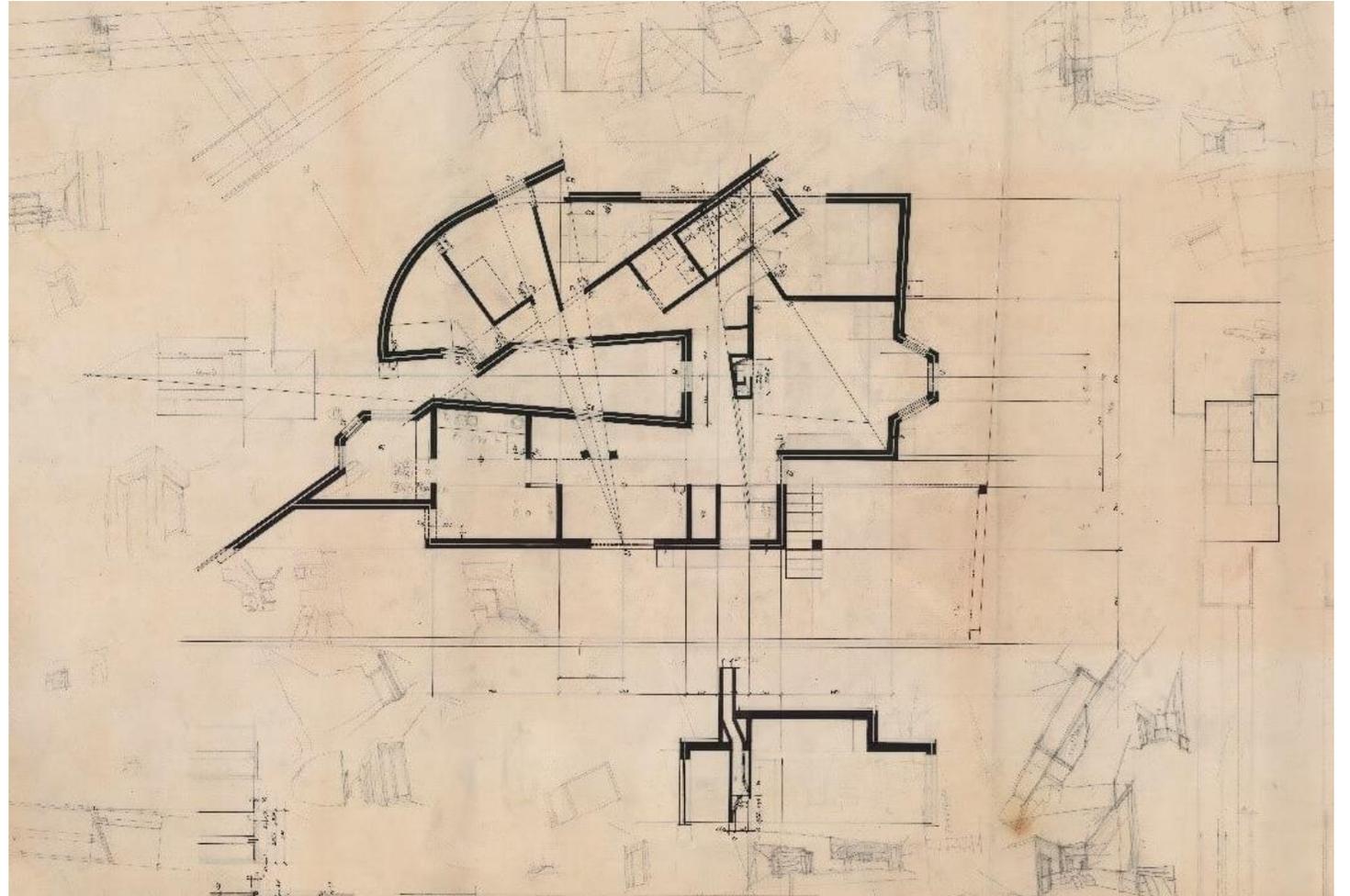
Decalque da casa Carlos António Siza do Siza Vieira à escala 1.100;

Comandos introduzidos:

SC (scale) – Definir a escala;

ATTATCH – Inserir a imagem da planta;

AL (align) – Alinhar, também pode ser usado para escalar.

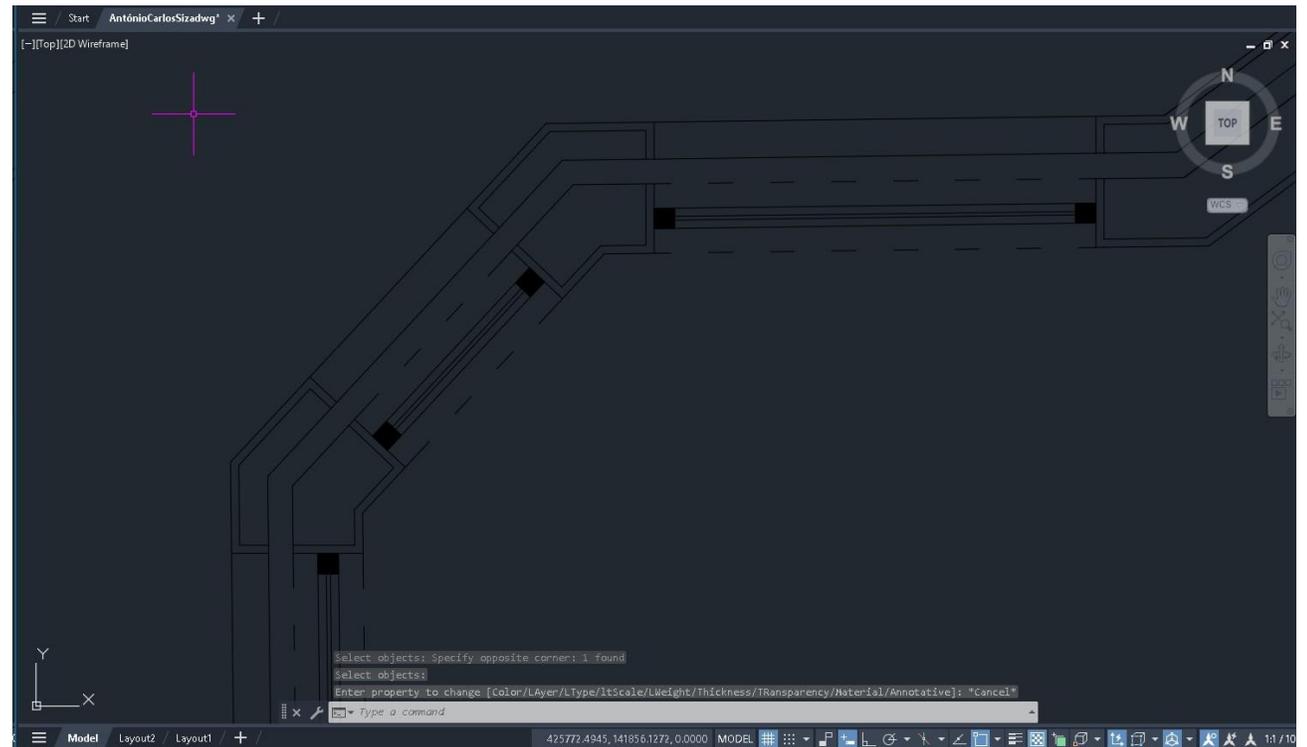
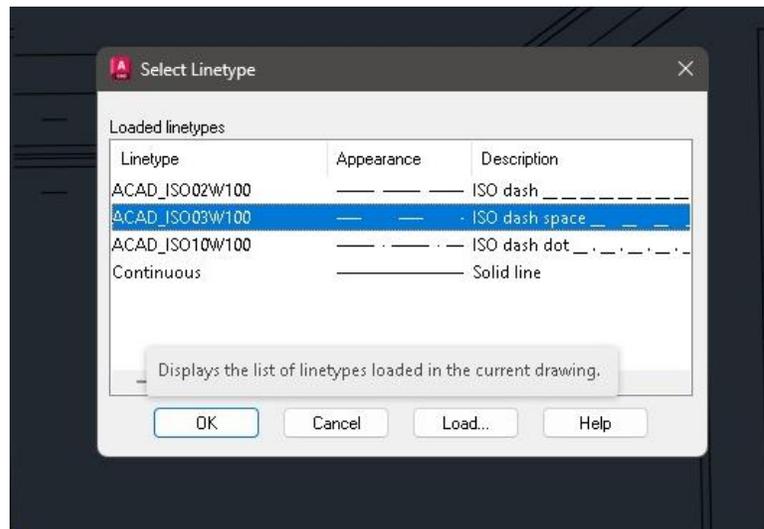


Semana 3

Decalque da casa Carlos António Siza do Siza Vieira à escala 1.100 – Vãos;

Layer properties: Linetype – definir o tipo de linhas;

CHPROP – Alterar propriedades, como a escala do tracejado;



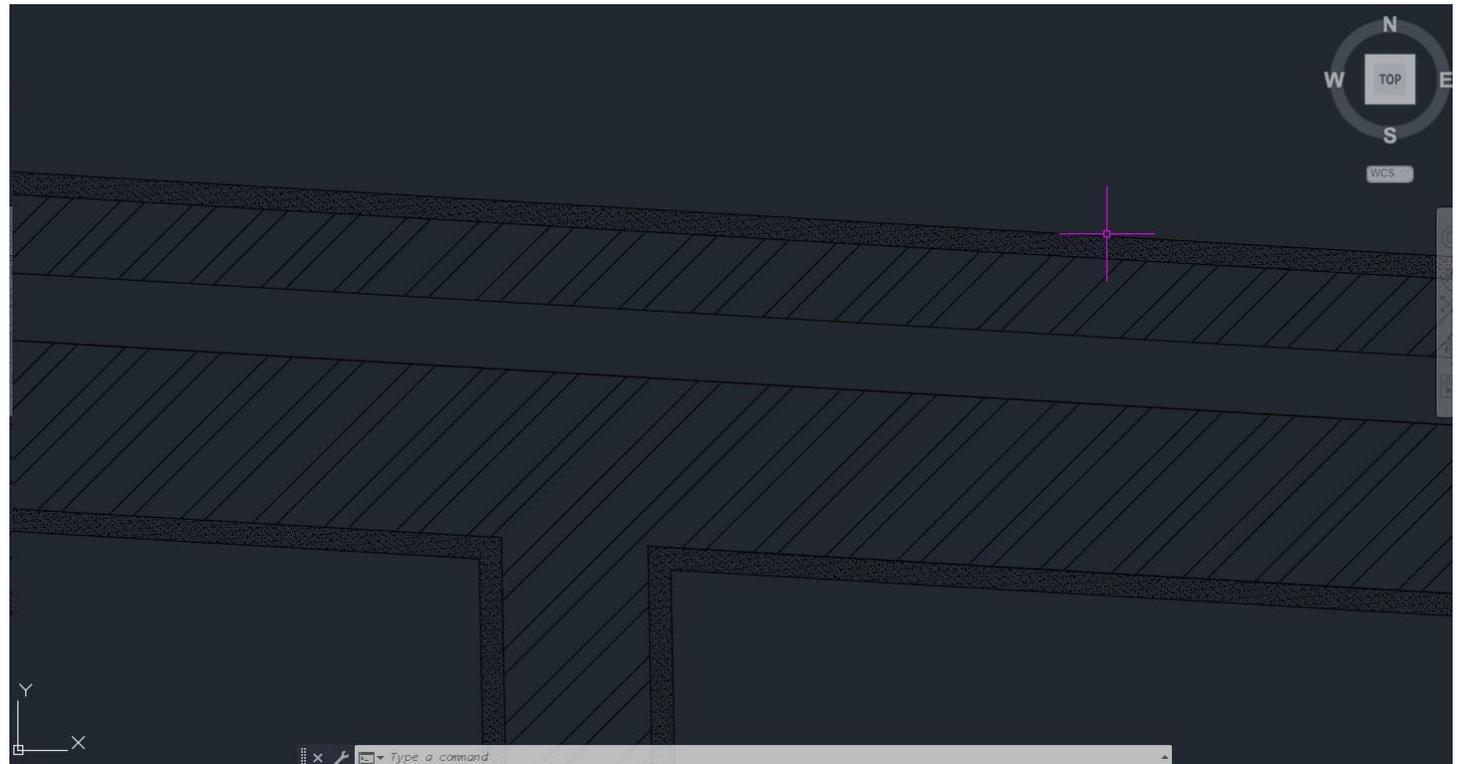
Semana 3

Detalhes;

HATCH

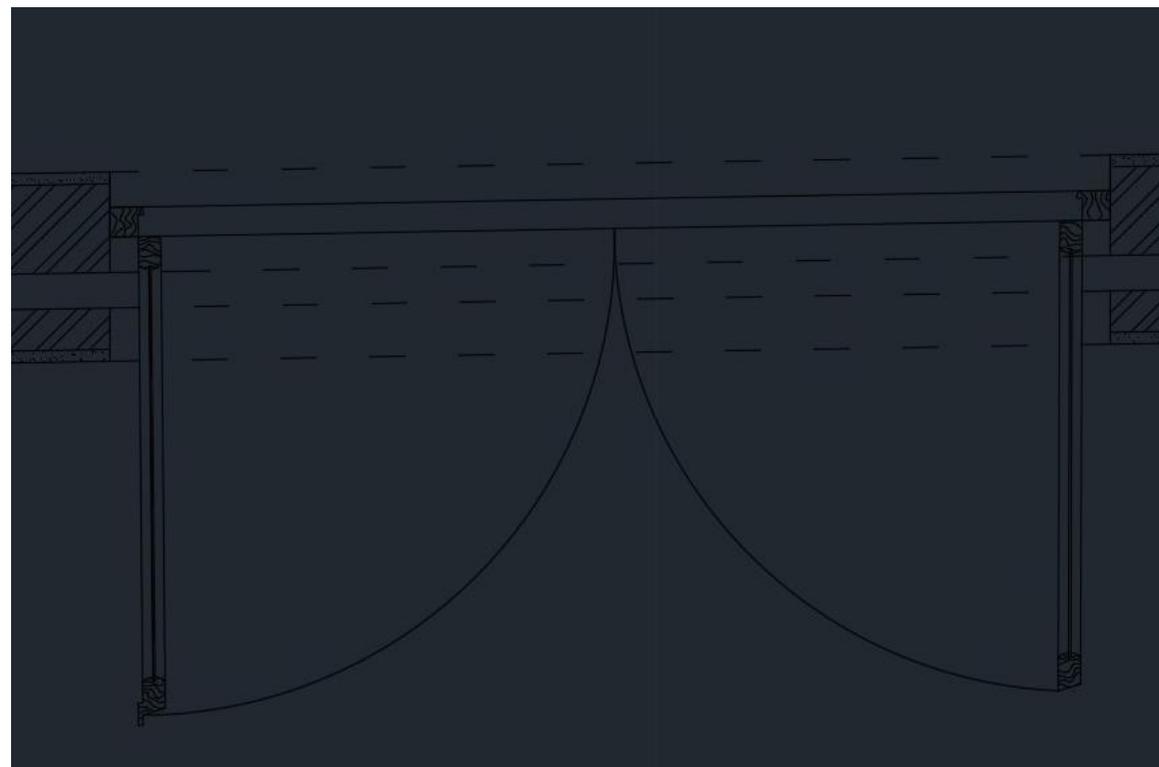
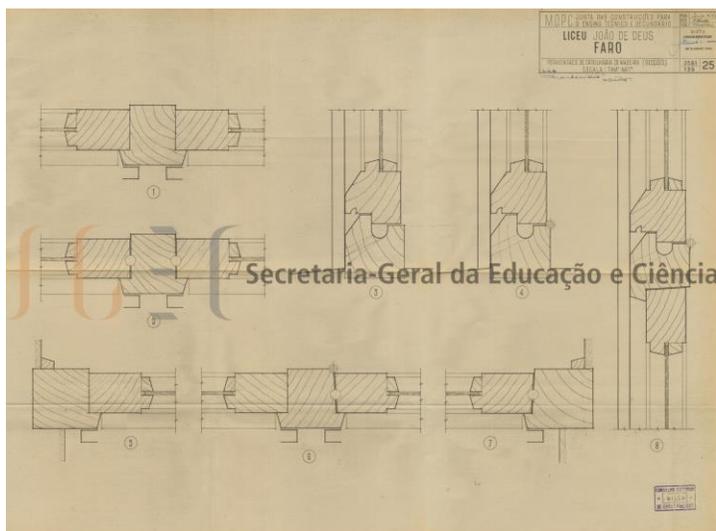
Para o reboco: AR – Sand

Para o tijolo: ANSU32



Semana 4

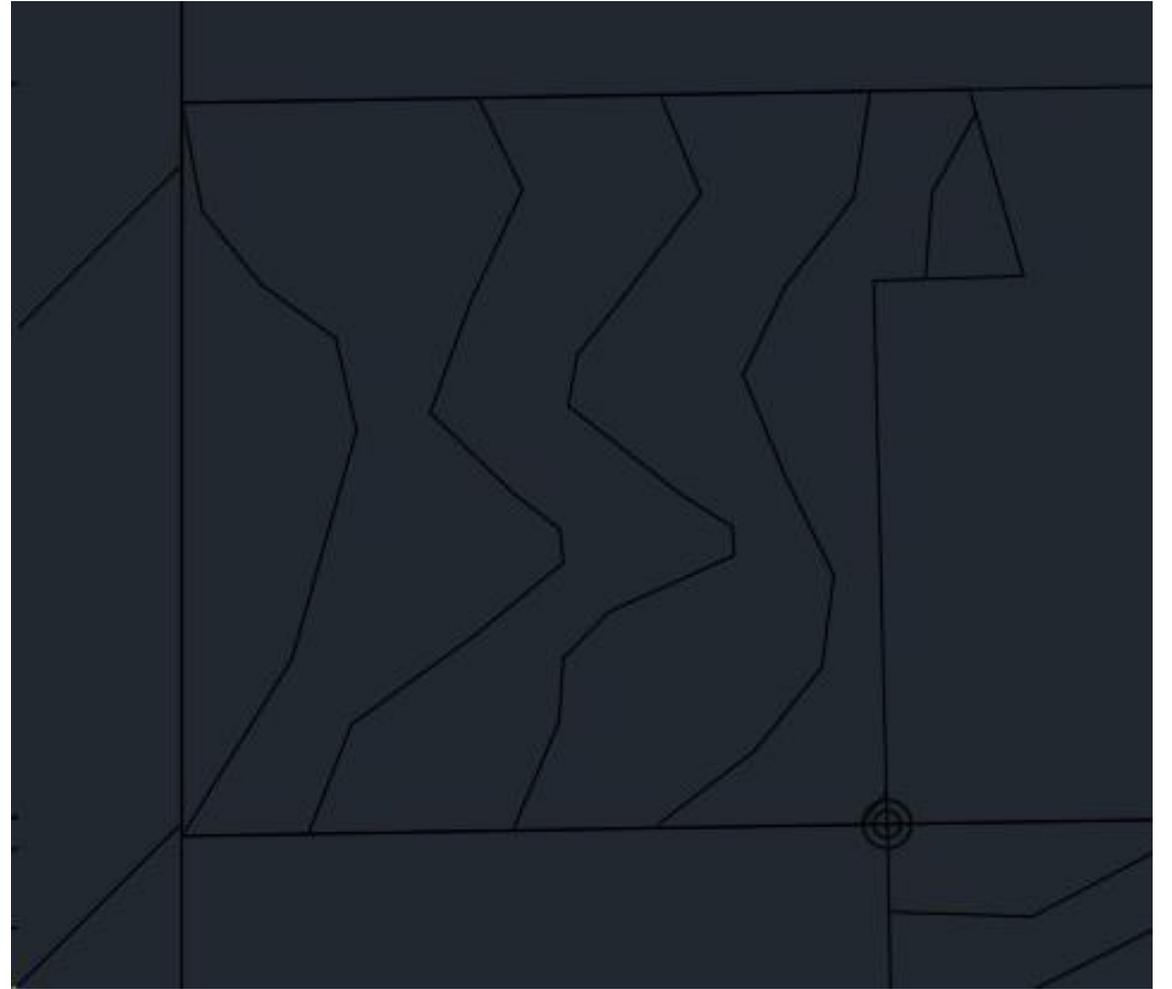
Representação dos caixilhos;



Semana 5

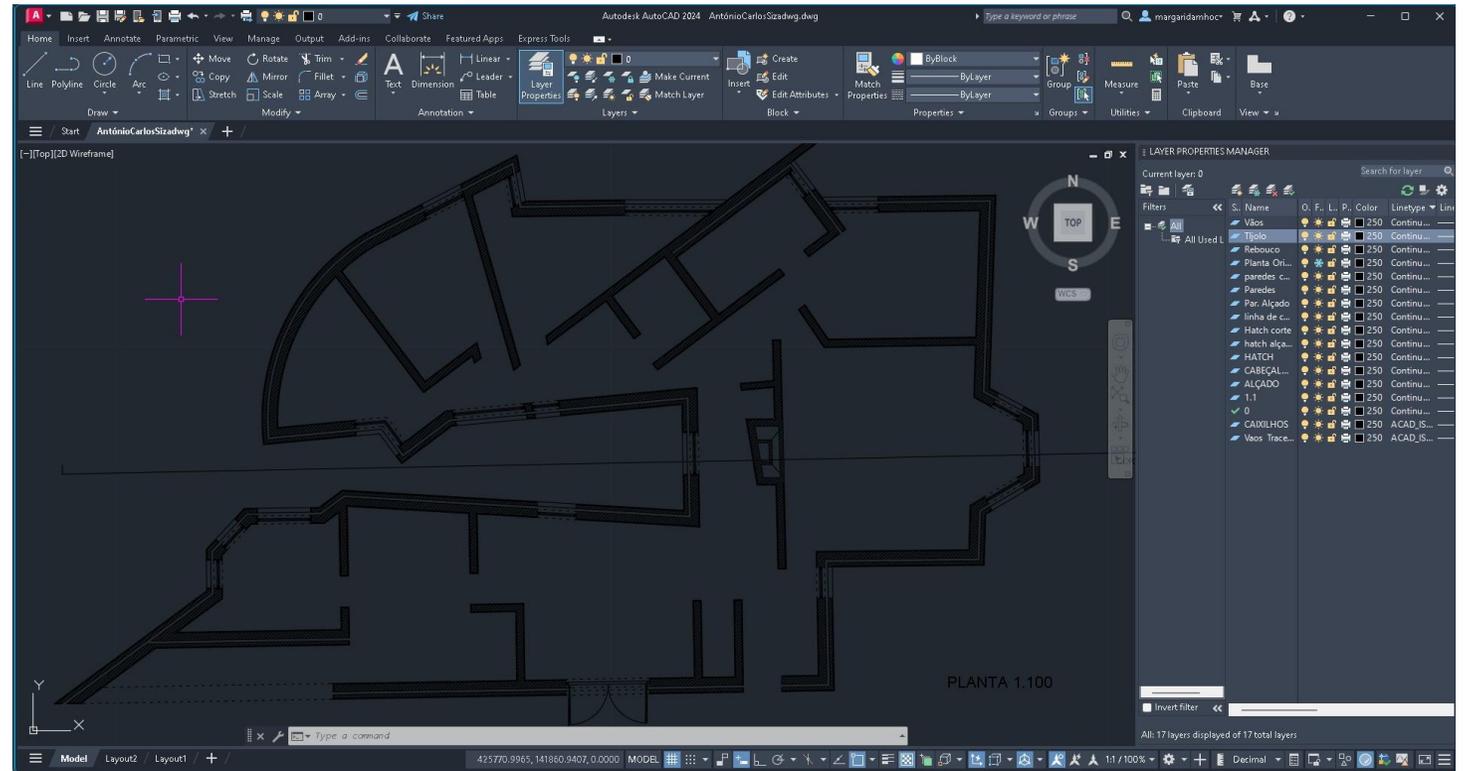
Pormenor dos caixilhos de madeira;

SPL (spline) – linhas curvas;



Semana 5

Decalque da casa Carlos
António Siza do Siza Vieira –
completo;



Semana 5

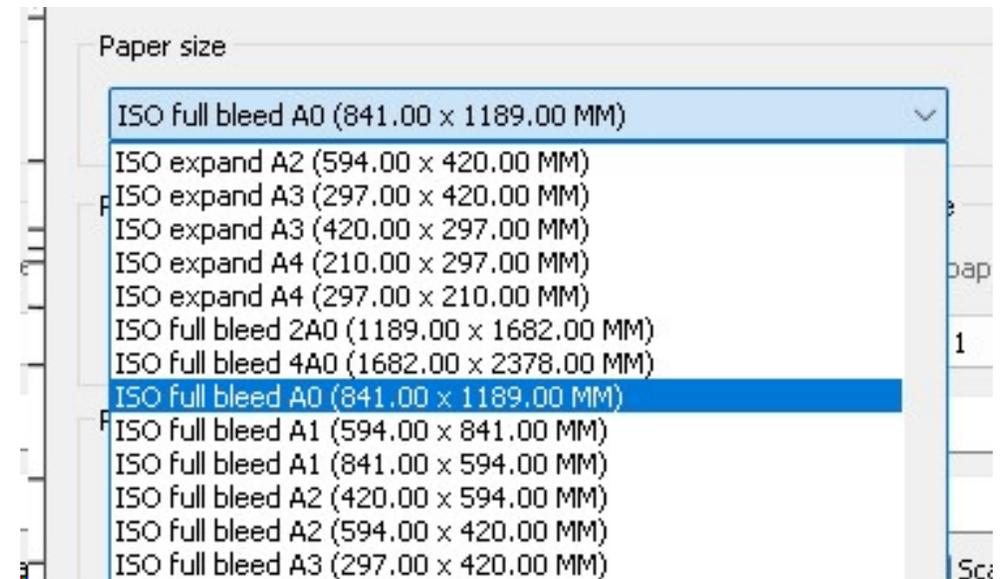
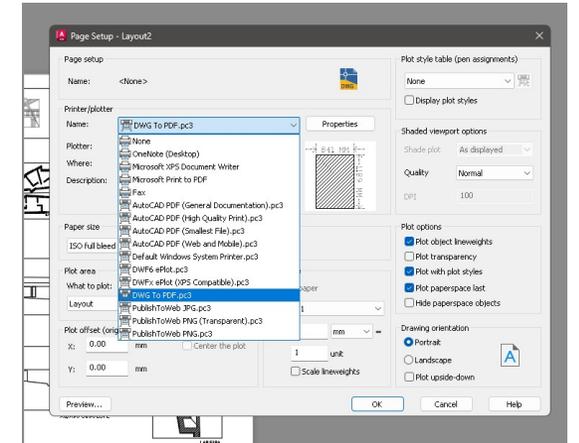
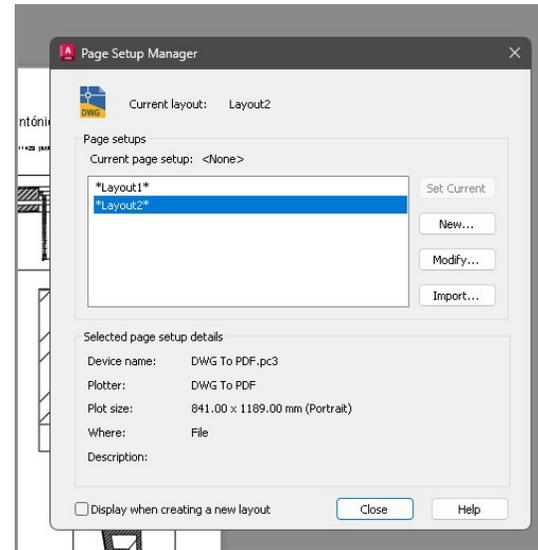
Layout de impressão;

Layout – right click – Page Setup Manager;

Selecionar o layout – modify;

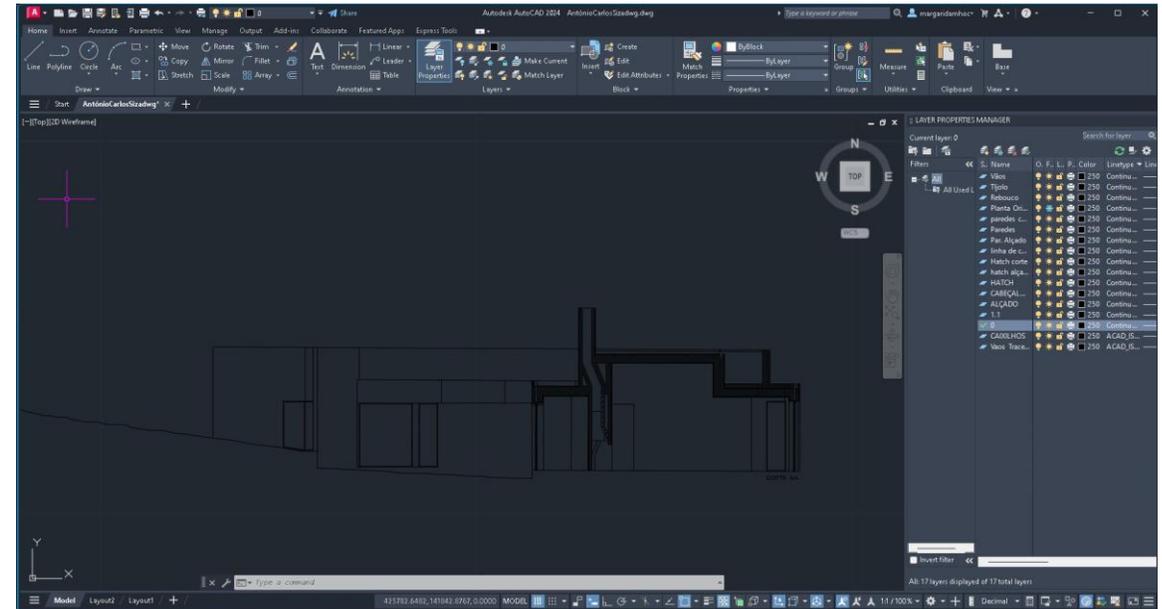
Ficheiro DWG para PDF.pc3;

Tamanho ISO full bleed A0



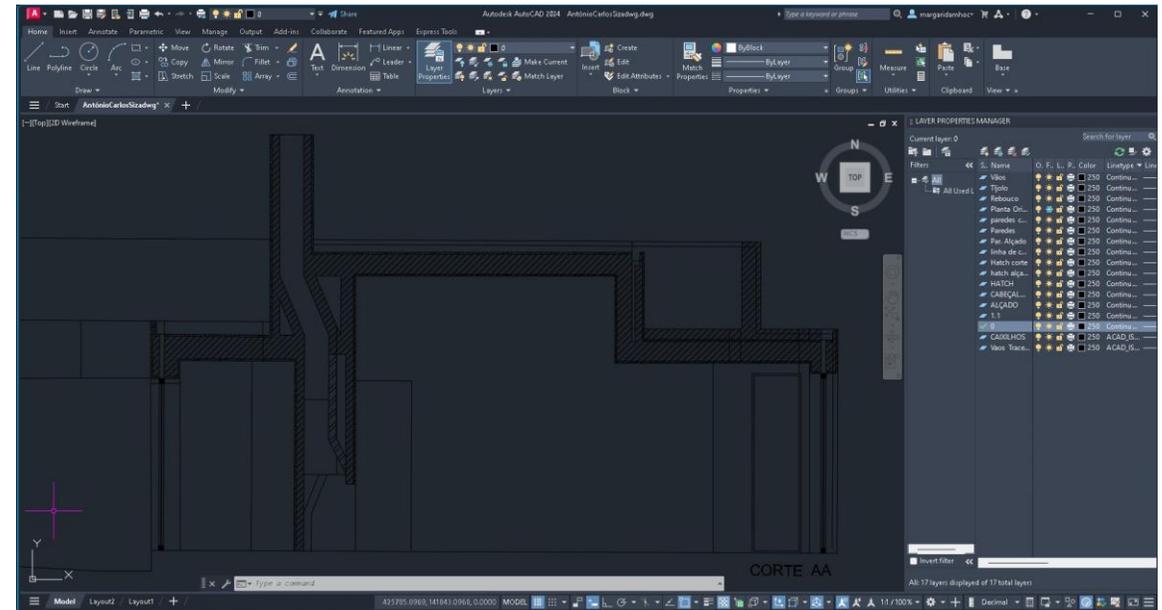
Semana 6

Cortes e Alçados;



Semana 6

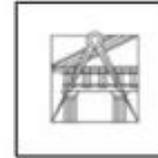
Detalhe do corte;



Semana 6

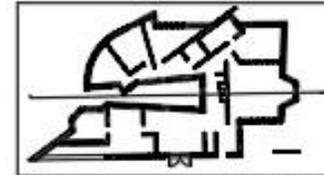
Viewpoints e layout final;

Mview – Criar viewpoints;

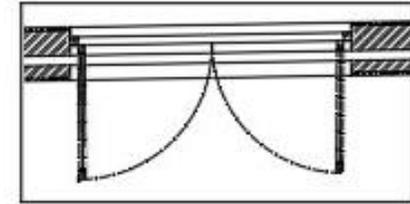


Casa Carlos António Siza - Álvaro Siza Vieira

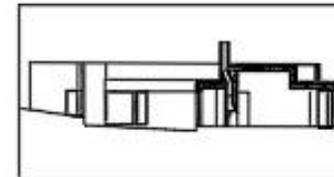
F. A. L. (2020-2024) (FD)
MARGARIDA CABRAL (2021-142) (MARR02)



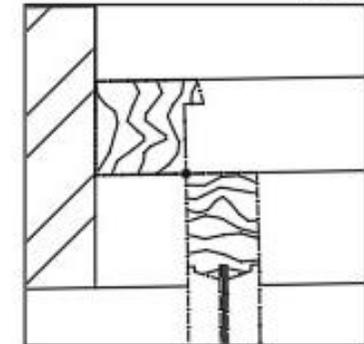
PLANTA 1.000



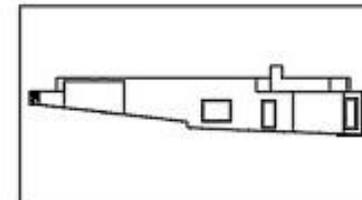
JANELA 1.10



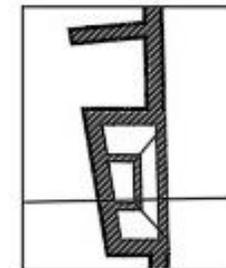
CORTEAA



DETALHE
JANELA 1.1



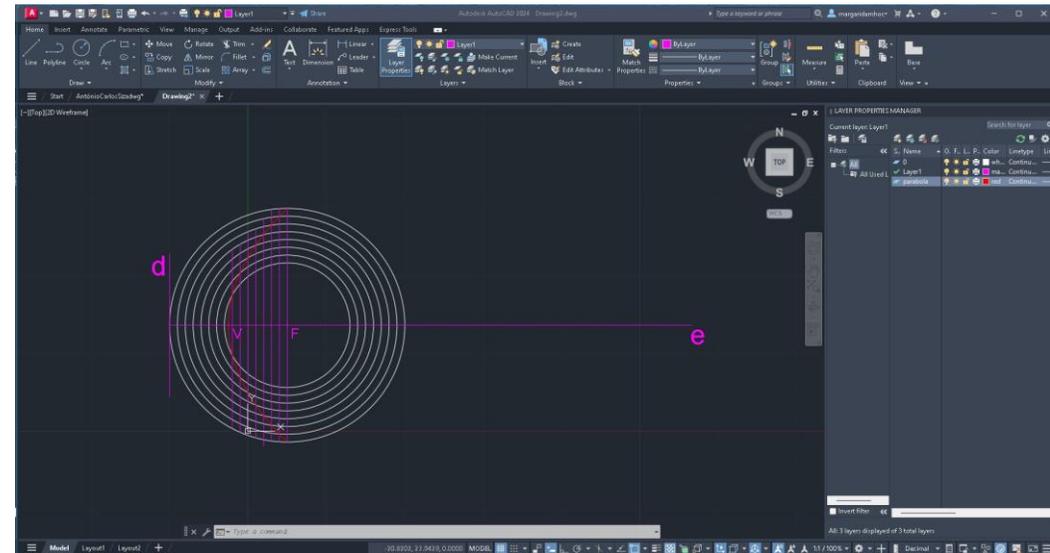
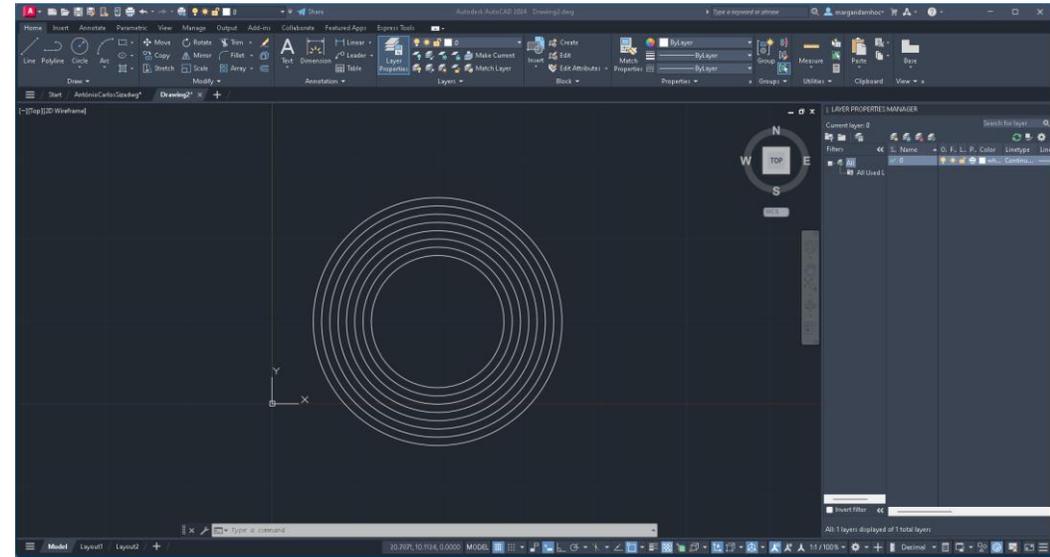
ALÇADO SUDOESTE



LAREIRA

Semana 7

Parábola;



Semana 7

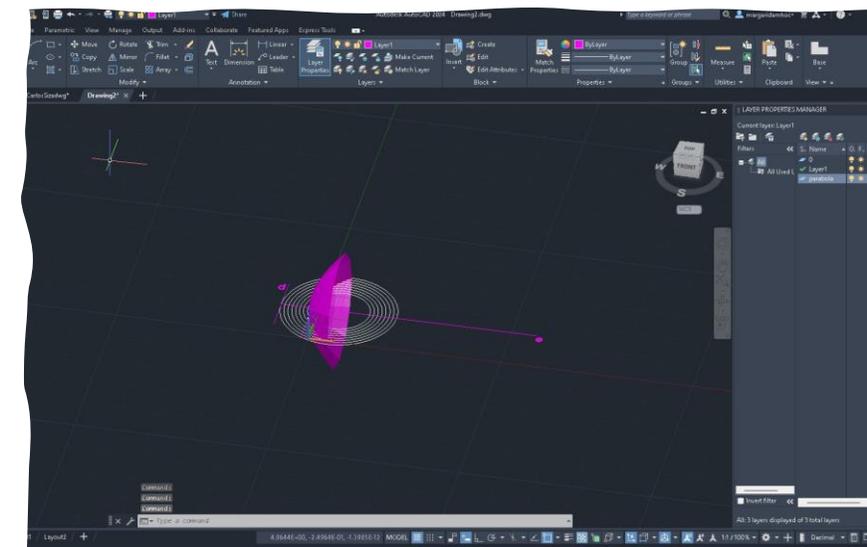
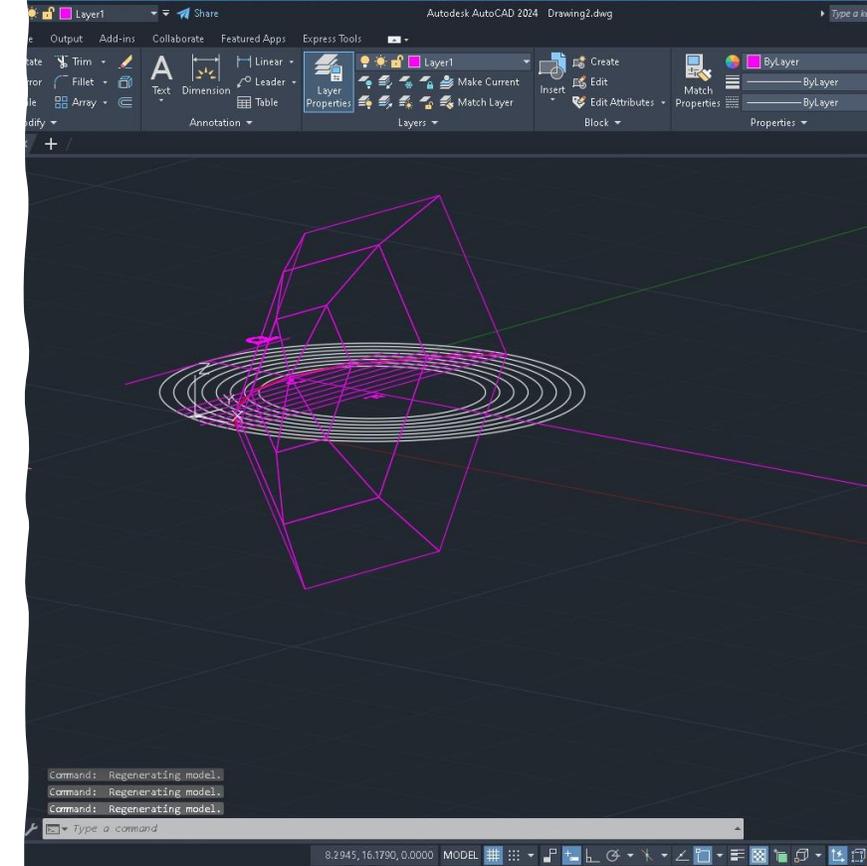
Parábola;

Revsurf – V – ângulos 0 e 360;

Surftab1 – elementos – 30;

Surftab2 – elementos – 30;

Shade;



Semana 7

Representar sólidos;

Pentágono – EXT – 10;

Comandos introduzidos:

EXT (extrude) – criar estruturas a partir de formas;

3DROTATE – Rodar em 3D;

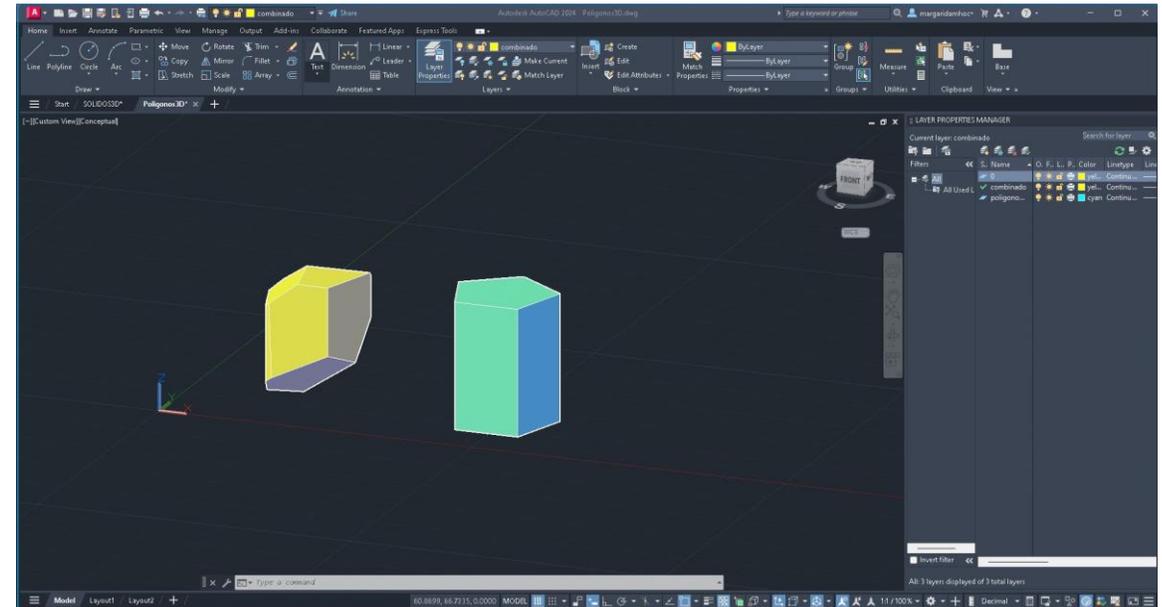
ROTATE3D – definir o eixo e o ângulo de rotação;

VISUALSTYLES – diferentes estilos de visualização de sólidos;

UNI (union) – unir sólidos;

SUBTRACT – subtrair sólidos;

INTERSECT – Intersectar sólidos;



Semana 8

Representar polígonos;

Tetraedro – 4 bases;

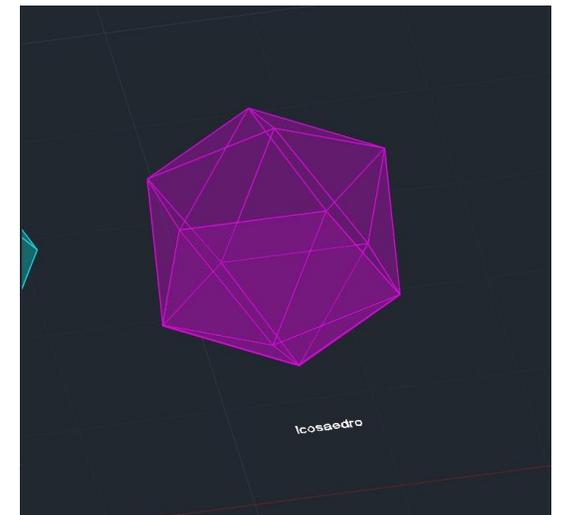
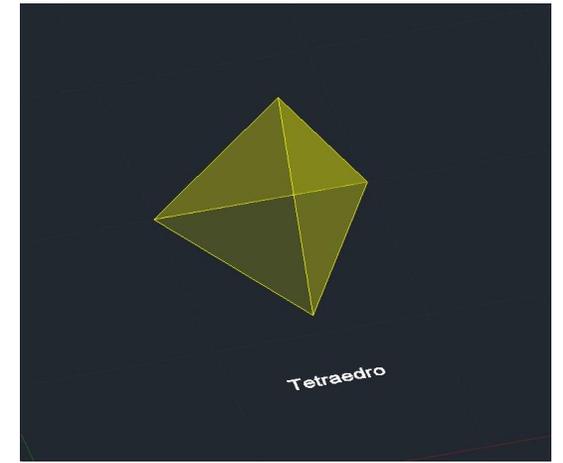
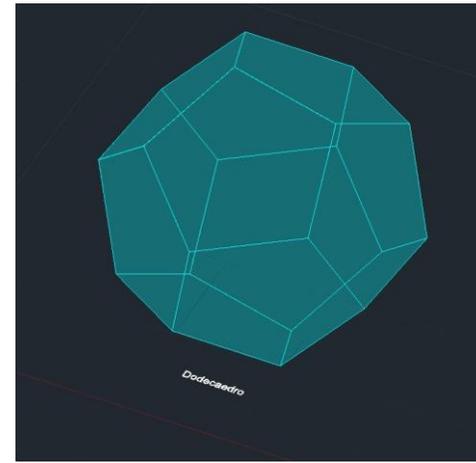
Octaedro – 8 bases;

Dodecaedro – 12 bases;

Icosaedro – 20 bases;

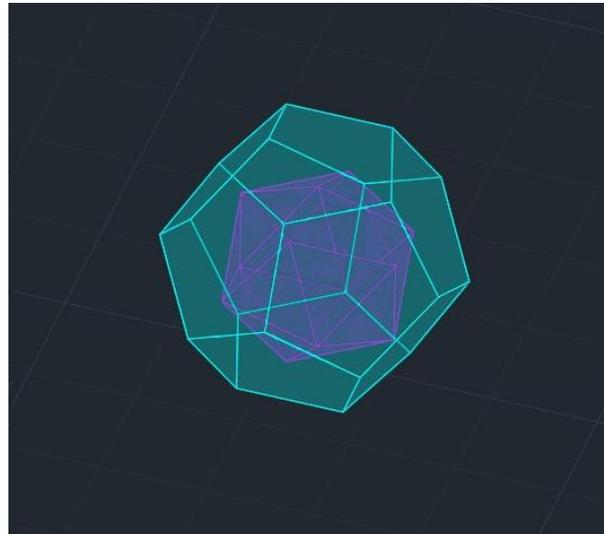
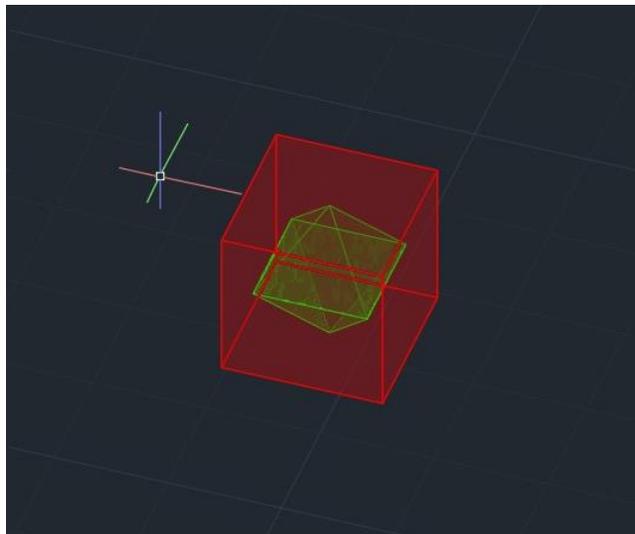
Comandos introduzidos:

3DMIRROR – Espelhar em 3D;



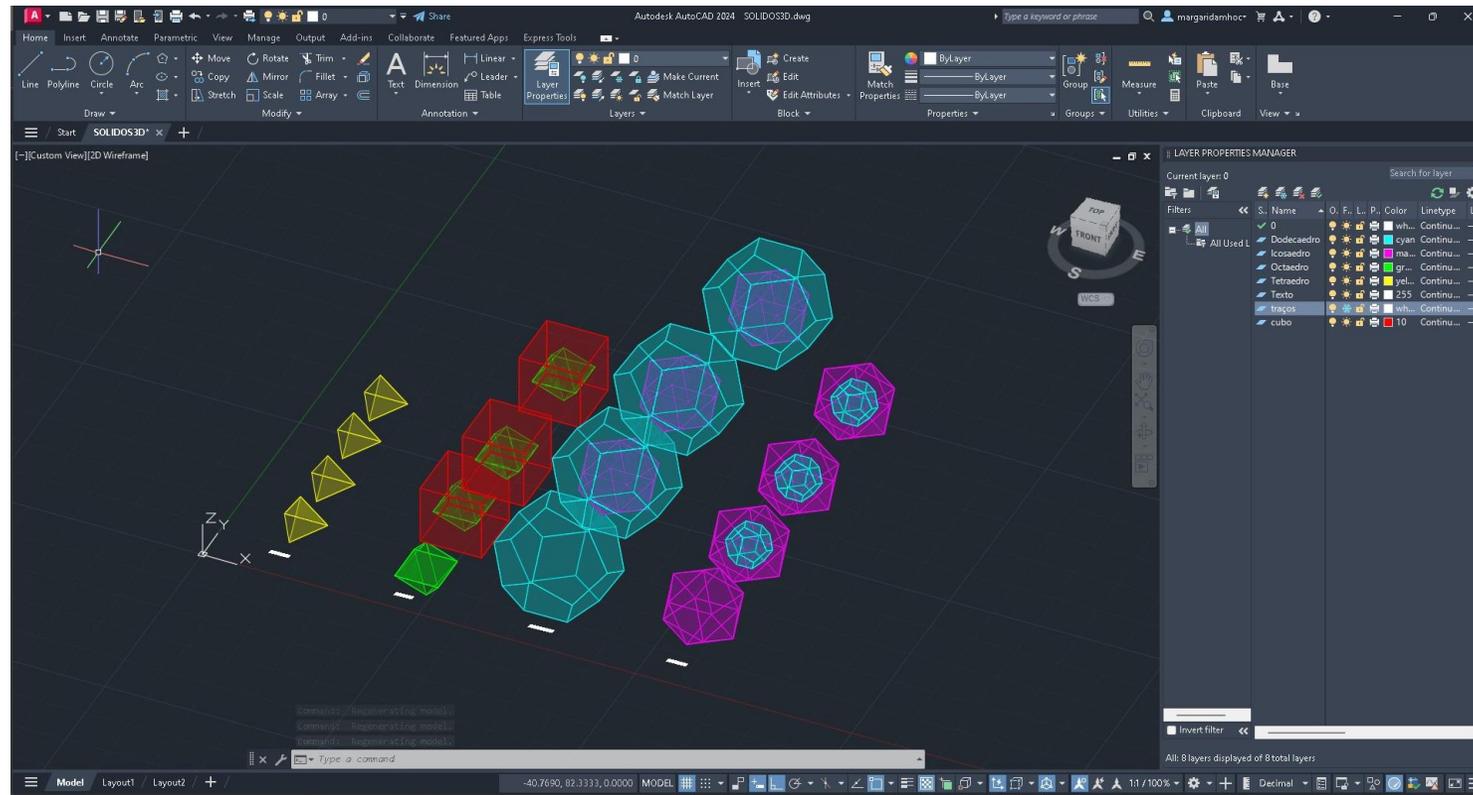
Semana 8

Interseção de polígonos;



Semana 8

Interseção de polígonos - FINAL



Semana 9

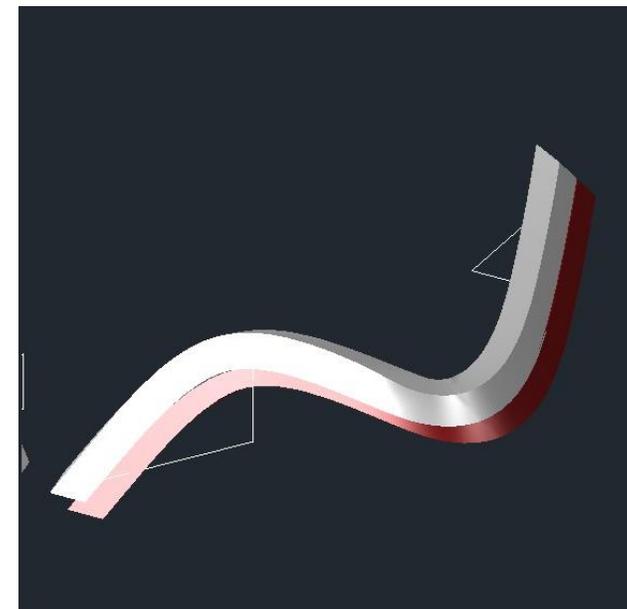
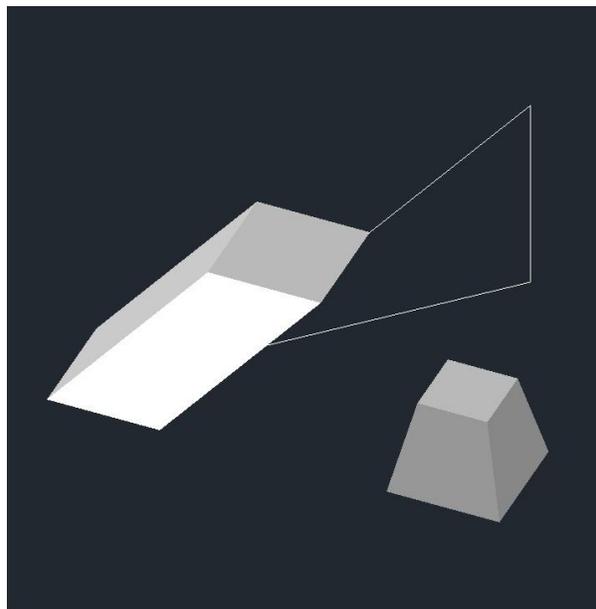
Mais usos com o comando extrude;

Comandos introduzidos:

Direction – determina a direção do extrude;

Path – faz um extrude a seguir o caminho dado;

Taper angle – faz um extrude afunilado;

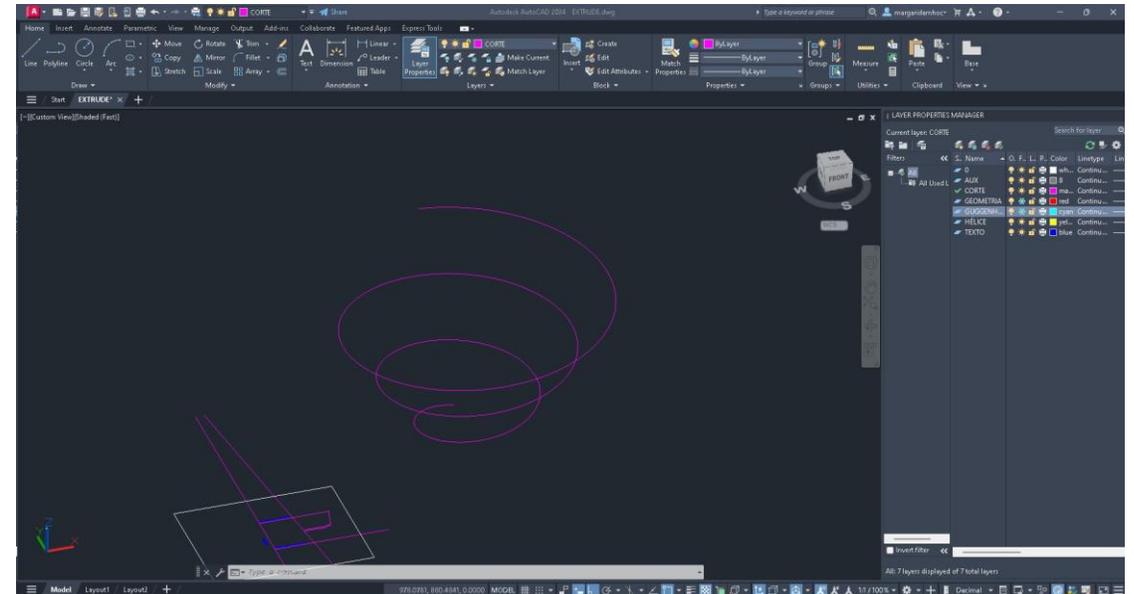
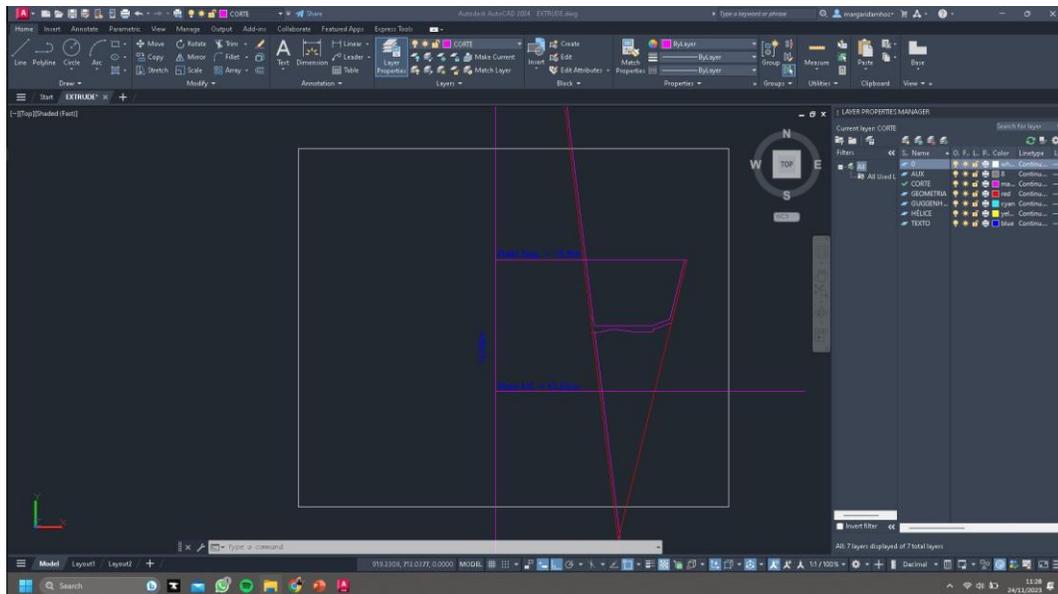


Semana 9

Rampa do Guggenheim;

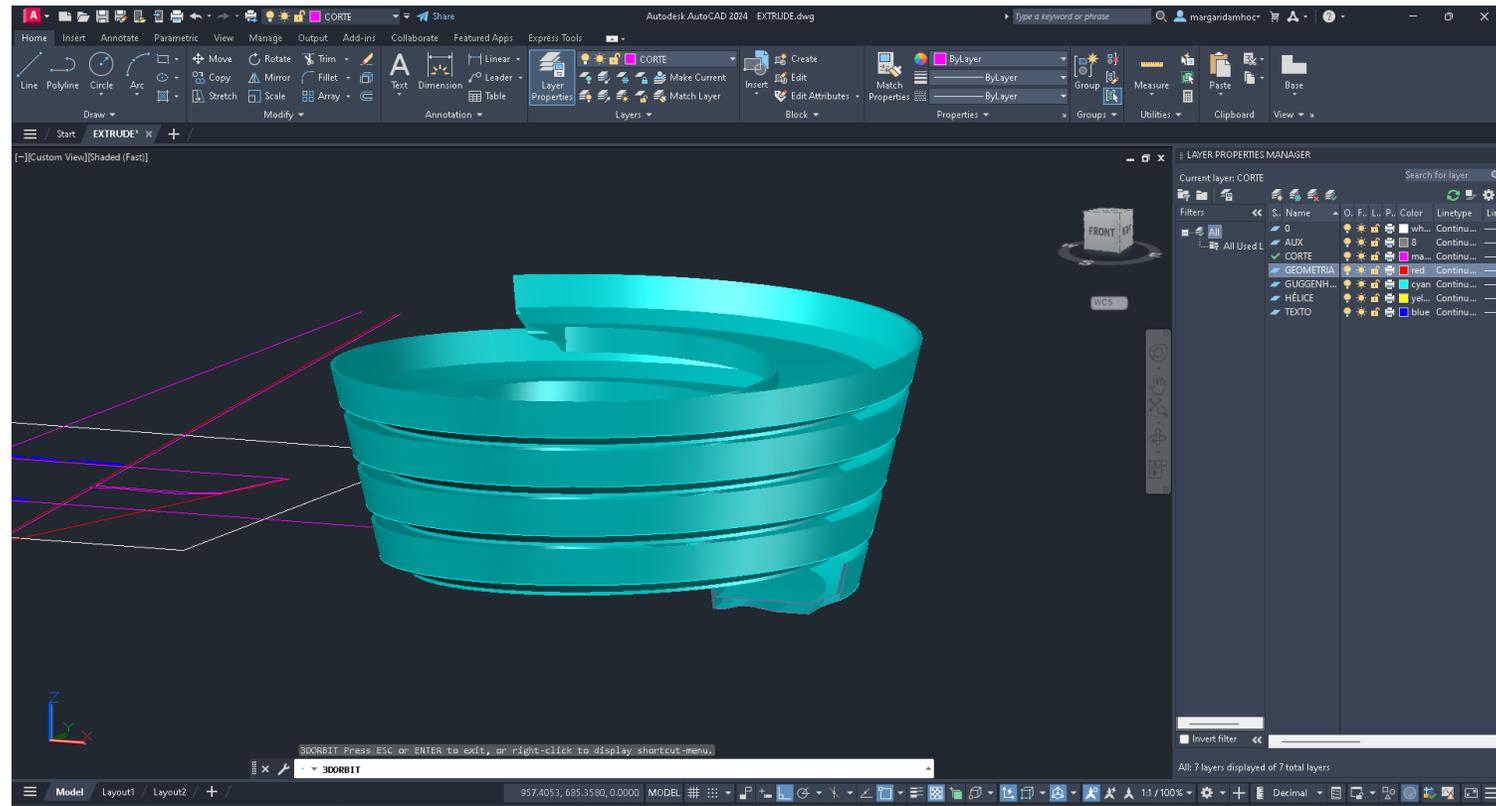
Decalcar o corte;

Helix – cria uma hélix;



Semana 9

Rampa do Guggenheim;



Semana 10

Cone:

Raio – 5mm

Altura – 5mm

Espessura – 1.5mm

Comando Mirror no vértice para obter outro cone igual;

Desenhar planos secantes pela figura, criando triângulos e hipérbolas;

Comando Intersect entre a figura e os planos;

Semana 11 - 3D MAX

Lamparina

Cilindro:

Raio - 75mm

Altura – 80mm

8 segmentos;

Torus no cilindro:

1º raio – 75mm

2º raio – 2mm

Compound objects - boolean –
fazer subtract do torus

Modifier list – taper

Adicionar dois cilindros para o
botão;

Chama

Cilindro

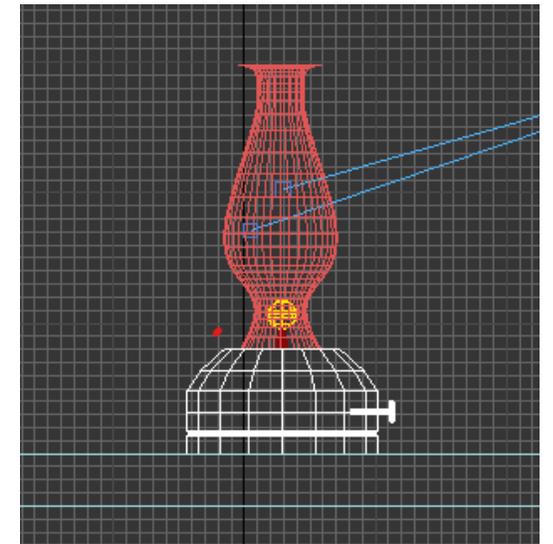
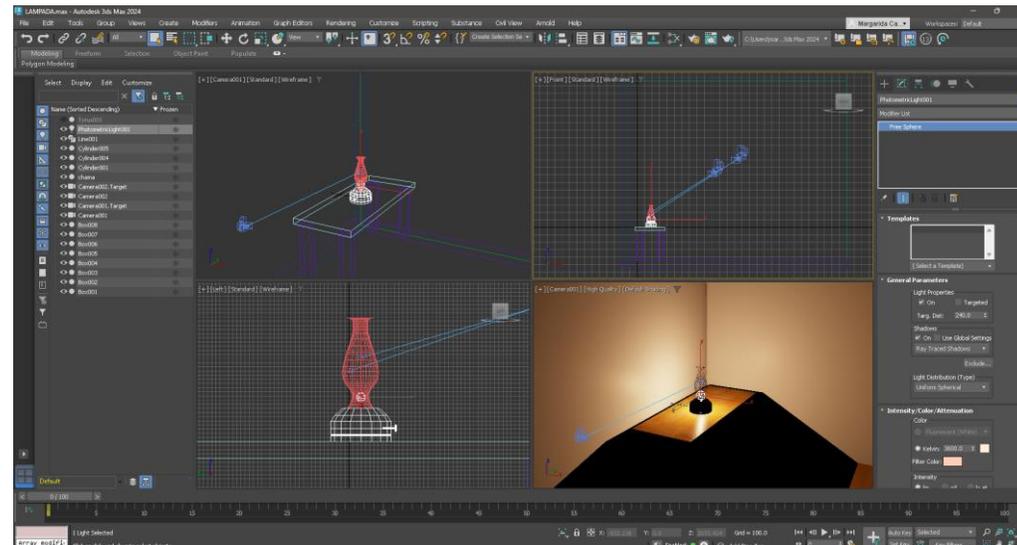
Modifier list – Stretch até
se parecer a uma chama

Campânula

Criar linhas e arredondá-las em Modifier list –
Selection – Vertex até se parecerem com a forma
desejada;

Modelar a forma com Bezier ou Smooth;

Para obter o objeto ir a Modifier List – Lathe;



Semana 11

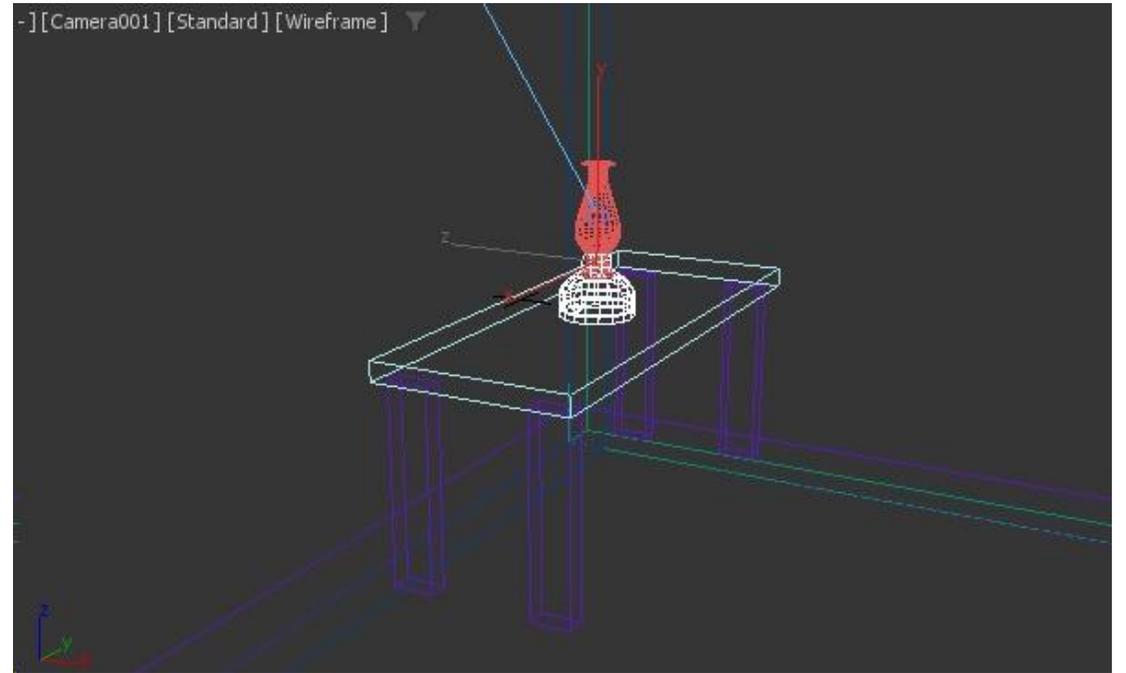
Mesa

Criar box 400x1000x-40 (tampo);
Criar box 40x80x-800 (pernas x4);
Alinhar;

Chão e Paredes

Criar box 2000x3000x-100 (chão);
Criar box 2000x100x2500 e 3000x100x2500 (paredes);

Escolher os materiais em Material Editor e arrastar para o objeto;



Semana 11

Light e Render

Adicionar no lugar da chama - Photometric light - Target light;

Shape/ Area Shadows – Emit light from – Point;

Adicionar cameras e posiciona-las de modo a obter uma boa vista;

Renderizar;

