

*.Dr. Amina Emam*

Computer graphic

**COURSE LECTURER :**

***DR. AMINA EMAM***

Assistant Lectures:

Eng. Hager

**3DS MAX**

**LECTURE (2-3)**

**TUTORIAL (3-5)**

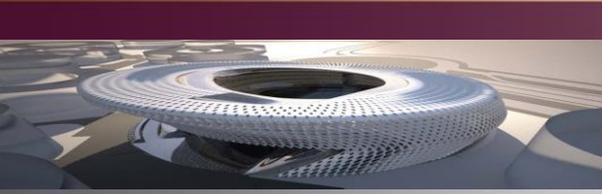
Week

26/3/2020



## التدريس : Teaching

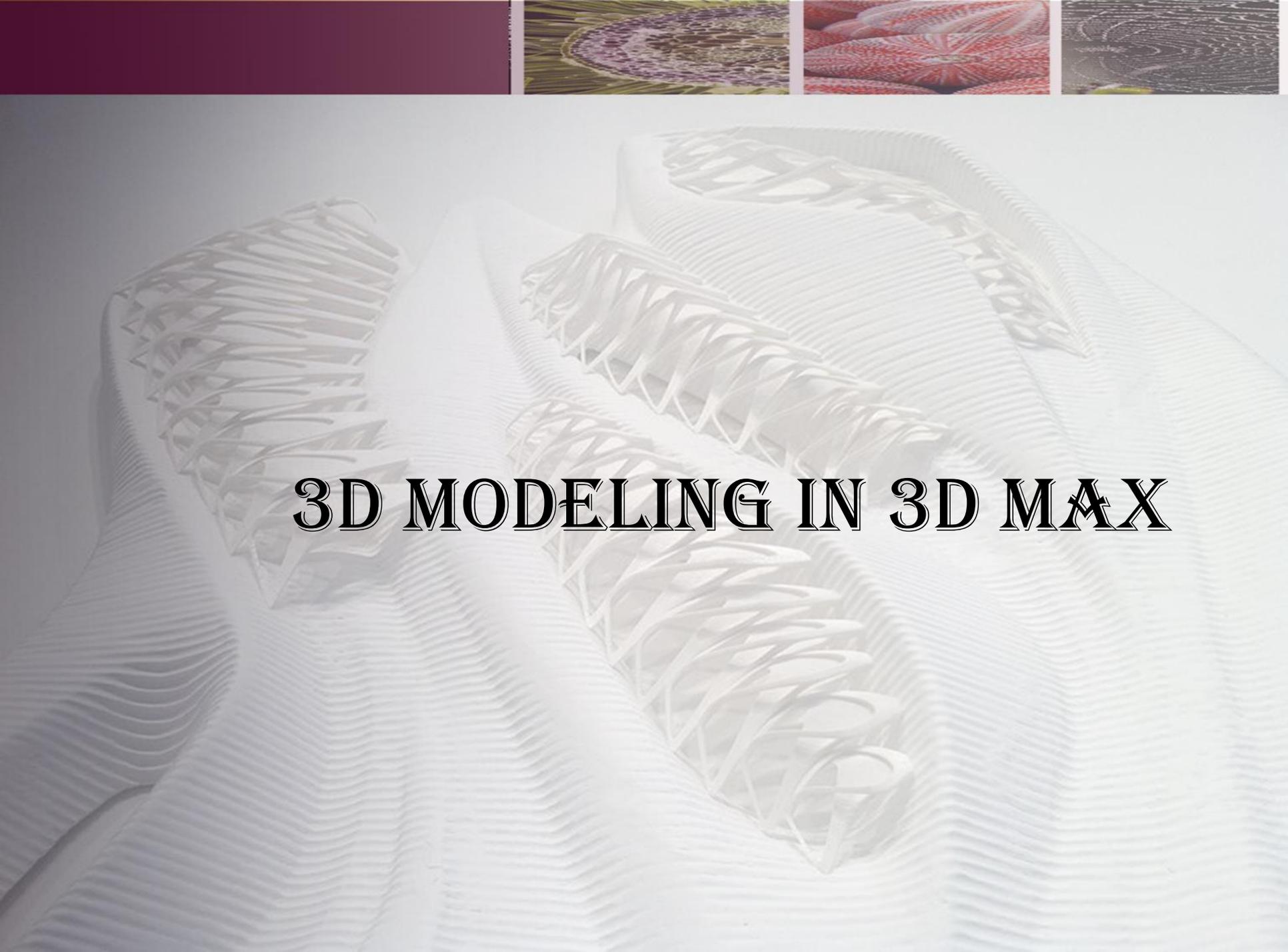
- يتم تدريس المنهج من خلال انماط التعليم التفاعلي التالي:-
- المحاضرات النظرية و المناقشة و المراجعة و طرح الأسئلة.
- الوسائل التعليمية الألكترونية المختلفة لعرض المعلومات (الداثا شو) و البروجكتور.



## تقييم المنهج : Assessment

يتم قياس و تقييم مستوي الطالب في تحصيل المادة و ادائه من خلال الحضور و المشاركة الفصلية بالإضافة الي الأبحاث المقدمة و جودة و تفرد اداء الطالب سواء الفردية او الجماعية. و يتم احتسابها كالتالي:-

10%	المتابعه والتقييم
20%	الأمتحان الفصلي
10%	المشروع النهائي
40%	مجموع اعمال السنة
60%	الأمتحان النهائي
100%	المجموع الكلي للمادة



# 3D MODELING IN 3D MAX



# 3D MODELING

**STANDARD  
PRIMITIVES  
IN 3DS  
MAX**

Extended  
primitives in  
3ds max

How to  
create doors  
& windows in  
3ds max

AEC  
Extended in  
3ds max  
(walls  
& gates  
& trees)

How to  
create stairs  
in 3ds max

# Extended primitives



Autodesk 3ds Max 2014 x64 Untitled

Workspace: Default

1 Object Selected

Click and drag to begin creation process

Grid = 10.0

07:33 PM 3/19/14

Activate Windows  
Go to PC settings to activate Windows

Extended Primitives

Object Type

- AutoGrid
- Hedra**
- Torus Knot
- ChamferBox
- ChamferCyl
- OilTank
- Capsule
- Spindle
- L-Ext
- Gengon
- C-Ext
- RingWave
- Prism
- Hose

Name and Color

Hedra002

Parameters

Family:

- Tetra
- Cube/Octa
- Dodec/Icos
- Star1
- Star2

Family Parameters:

P: 0.0

Q: 0.0

Axis Scaling:

P: 100.0

Q: 100.0

R: 100.0

Reset

Vertices:

- Basic
- Center
- Center & Sides

Radius: 15.107

Generate Mapping Coords.



Autodesk 3ds Max 2014 x64 Untitled

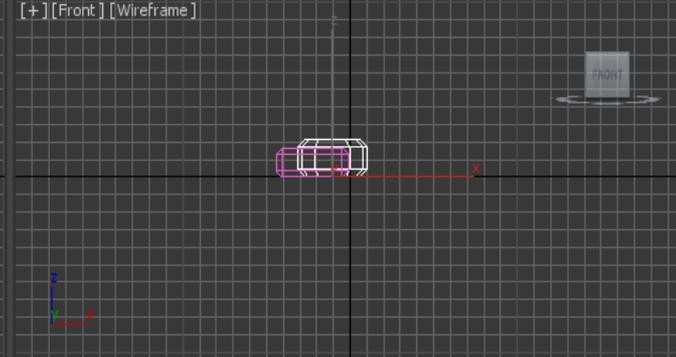
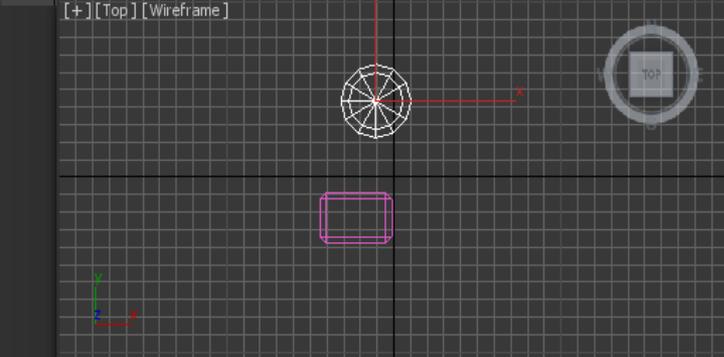
Workspace: Default

Edit Tools Group Views Create Modifiers Animation Graph Editors Rendering Customize MAXScript Help

View 3 Create Selection Set

Modeling Freeform Selection Object Paint Populate

Polygon Modeling



Parameters

Radius: 20.959  
Height: 21.685  
Fillet: 4.75

Height Segs: 1  
Fillet Segs: 1  
Sides: 12  
Cap Segs: 1

Smooth  
 Slice On

Slice From: 0.0  
Slice To: 0.0

Generate Mapping Coords.  
 Real-World Map Size

Extended Primitives

Object Type

AutoGrid

Hedra Torus Knot  
ChamferBox **ChamferCyl**  
OilTank Capsule  
Spindle L-Ext  
Gengon C-Ext  
RingWave Prism  
Hose

Name and Color

ChamferCyl001

Creation Method

Edge  Center

Keyboard Entry

0 / 100

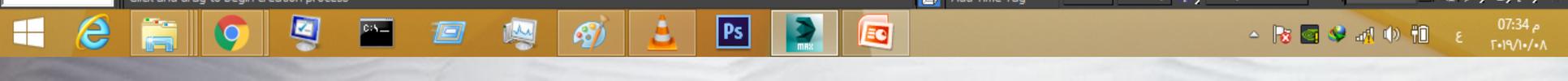
1 Object Selected

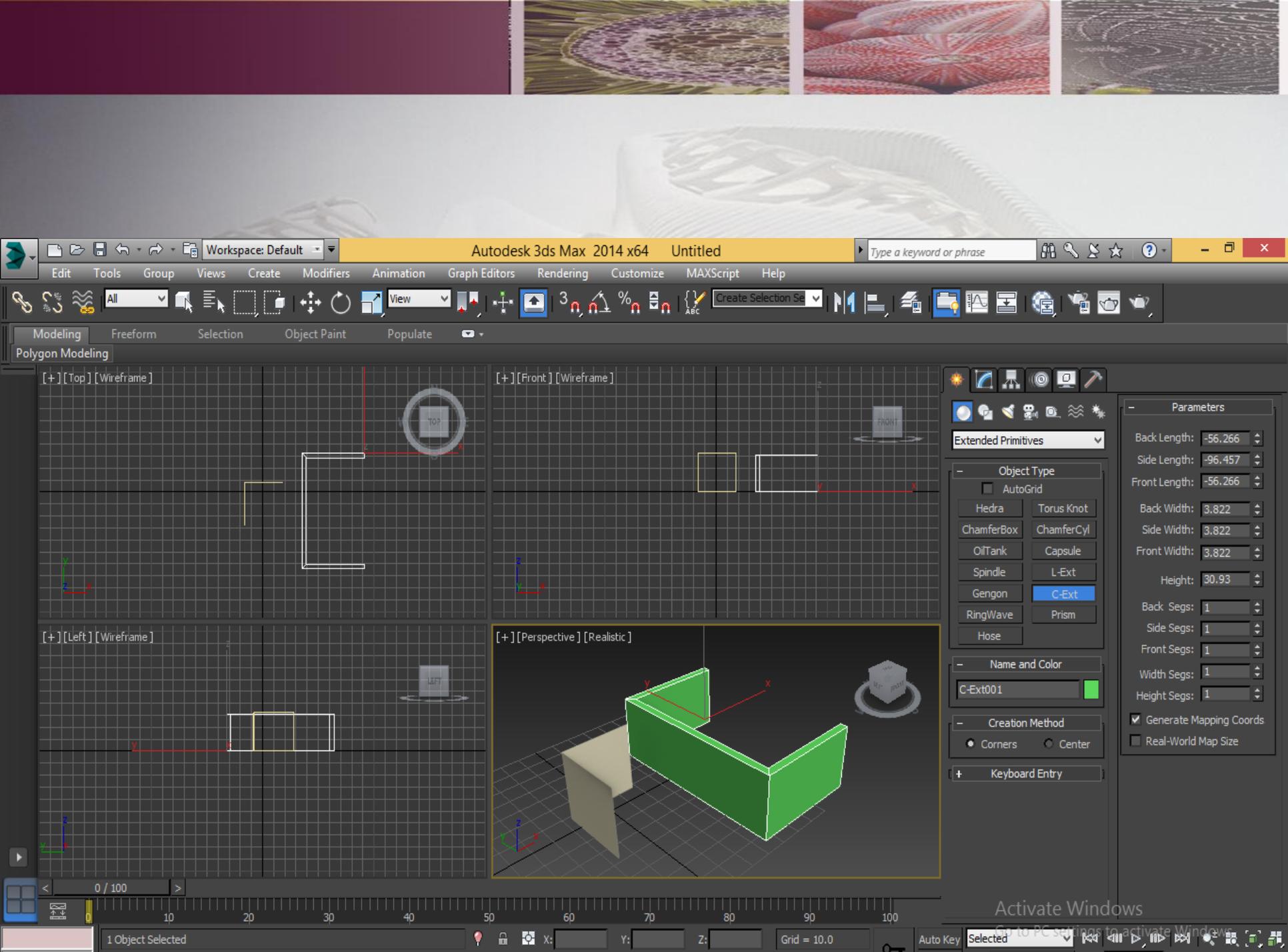
Grid = 10.0

Add Time Tag

Auto Key Selected

Set Key Key Filters...





Workspace: Default

Autodesk 3ds Max 2014 x64 Untitled

Type a keyword or phrase

Edit Tools Group Views Create Modifiers Animation Graph Editors Rendering Customize MAXScript Help

All View Create Selection Set

Modeling Freeform Selection Object Paint Populate

Polygon Modeling

[+][Top][Wireframe]

[+][Front][Wireframe]

[+][Left][Wireframe]

[+][Perspective][Realistic]

Extended Primitives

Object Type  
AutoGrid  
Hedra Torus Knot  
ChamferBox ChamferCyl  
OilTank Capsule  
Spindle L-Ext  
Gengon C-Ext  
RingWave Prism  
Hose

Name and Color  
C-Ext001

Creation Method  
Corners Center

Keyboard Entry

Parameters

Back Length: -56.266  
Side Length: -96.457  
Front Length: -56.266  
Back Width: 3.822  
Side Width: 3.822  
Front Width: 3.822  
Height: 30.93  
Back Segs: 1  
Side Segs: 1  
Front Segs: 1  
Width Segs: 1  
Height Segs: 1

Generate Mapping Coords  
Real-World Map Size

Activate Windows

Go to PC settings to activate Windows

1 Object Selected

X: Y: Z: Grid = 10.0

Auto Key Selected



# 3D MODELING

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create stairs  
in 3ds max

# CREATE DOORS

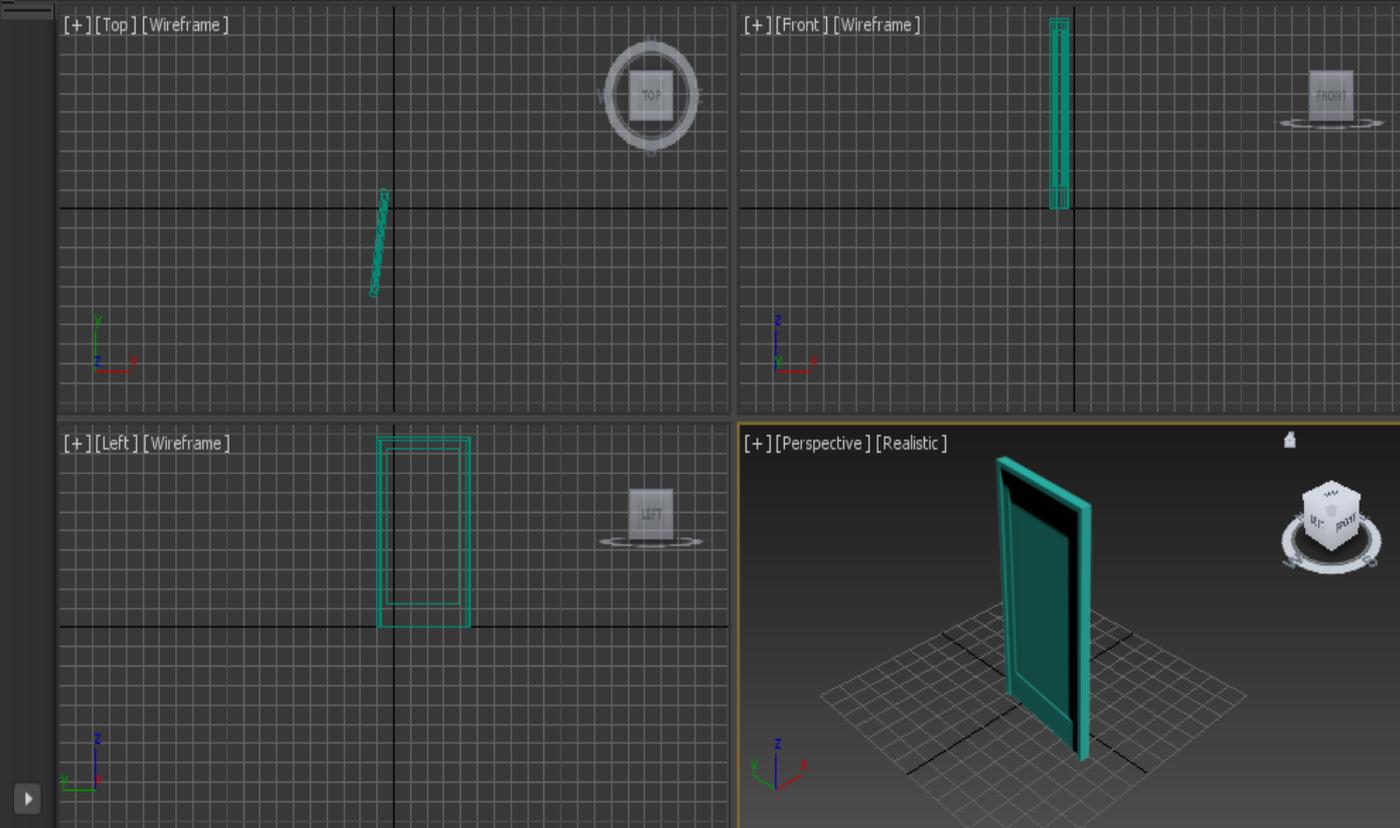
Autodesk 3ds Max 2014 x64 Untitled

Workspace: Default

Edit Tools Group Views Create Modifiers Animation Graph Editors Rendering Customize MAXScript Help

Modeling Freeform Selection Object Paint Populate

Polygon Modeling



Parameters

Doors

Object Type

- AutoGrid
- Pivot
- Sliding
- BiFold

Name and Color

Creation Method

- Width/Depth/Height
- Width/Height/Depth
- Allow Non-vertical Jams

Height: 0.0

Width: 0.0

Depth: 0.0

Open: 0.0 deg.

Frame:

- Create Frame
- Width: 2.0
- Depth: 1.0
- Door Offset: 0.0
- Generate Mapping Coords
- Real-World Map Size

Leaf Parameters

Thickness: 2.0

Stiles/Top Rail: 4.0

Bottom Rail: 12.0

# Panels Horiz: 1

# Panels Vert: 1

Muntin: 2.0

Panels:

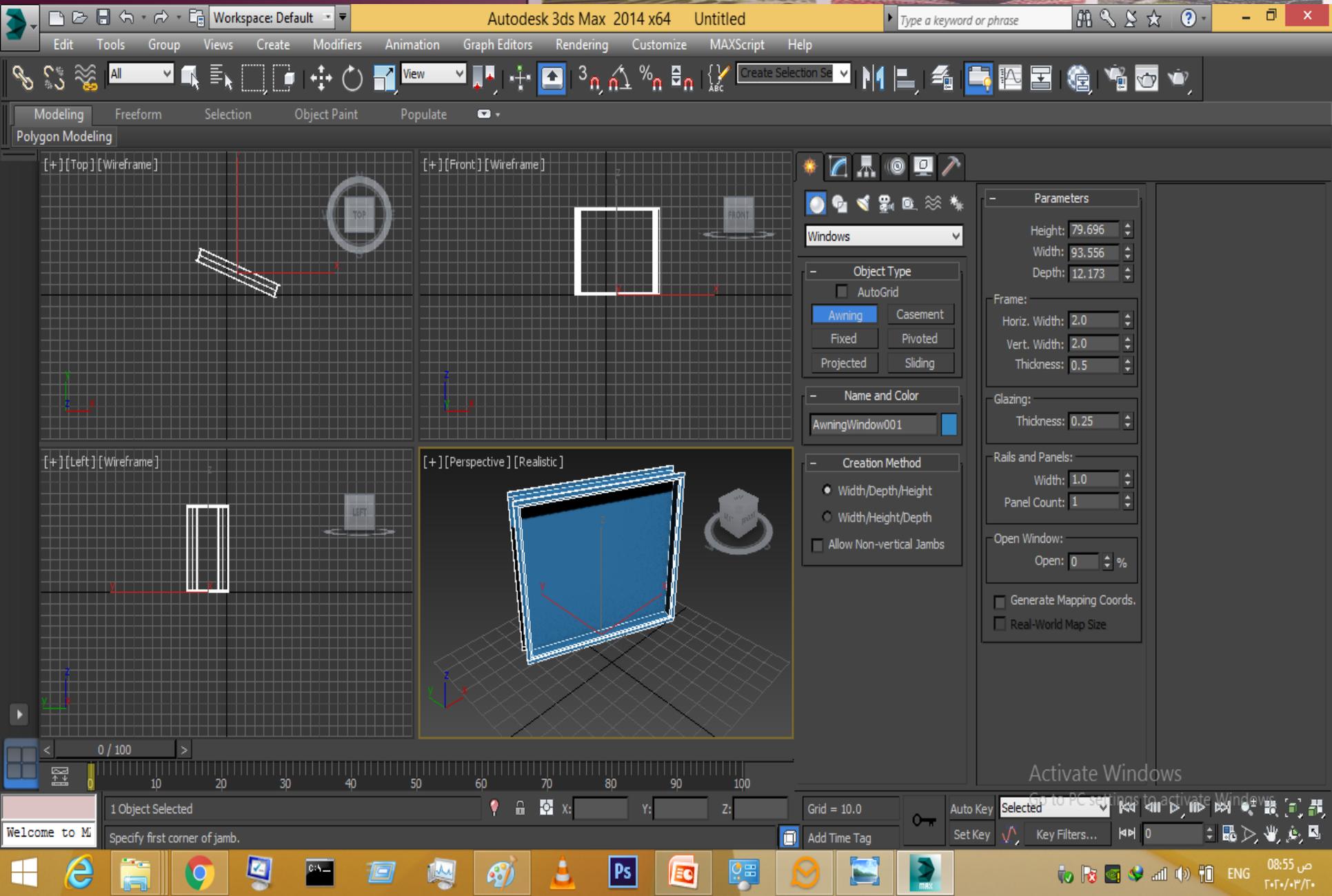
0 / 100

10 20 30 40 50 60 70 80 90 100

Welcome to M... None Selected Specify hinge point of single door. Grid = 10.0 Add Time Tag

Windows Taskbar with icons for Internet Explorer, File Explorer, Chrome, Outlook, Task Manager, Command Prompt, Photoshop, 3ds Max, and PowerPoint. System tray shows date 07:43 PM and 11/19/2014.

# windows in 3ds max



# walls

The screenshot displays the Autodesk 3ds Max 2014 x64 interface. The top menu bar includes options like Edit, Tools, Group, Views, Create, Modifiers, Animation, Graph Editors, Rendering, Customize, MAXScript, and Help. The main workspace is divided into four viewports: Top, Front, Left, and Perspective. The Top viewport shows a wireframe of a wall with a circular selection tool. The Front viewport shows a wireframe of a wall. The Left viewport shows a wireframe of a wall. The Perspective viewport shows a 3D view of a green wall. The right-hand side of the interface features a Command Panel with the 'Wall' object type selected. The 'Parameters' section shows 'Width: 5.0' and 'Height: 96.0'. The 'Justification' section has 'Center' selected. The 'Generate Mapping Coords.' checkbox is checked. The bottom status bar shows '1 Object Selected' and 'Grid = 10.0'. The Windows taskbar at the bottom includes icons for Internet Explorer, File Explorer, Chrome, Photoshop, and 3ds Max.

Autodesk 3ds Max 2014 x64 Untitled

Workspace: Default

View

Modeling Freeform Selection Object Paint Populate

Polygon Modeling

[+][Top][Wireframe]

[+][Front][Wireframe]

[+][Left][Wireframe]

[+][Perspective][Realistic]

AEC Extended

Object Type

AutoGrid

Foliage Railing

Wall

Name and Color

Wall001

Keyboard Entry

Parameters

Width: 5.0

Height: 96.0

Justification

Left

Center

Right

Generate Mapping Coords.

Real-World Map Size

0 / 100

10 20 30 40 50 60 70 80 90 100

Grid = 10.0

Auto Key Selected

Set Key Key Filters...

0

Activate Windows

Go to PC settings to activate Windows

Welcome to M

Click and drag to begin creation process

Add Time Tag

08:58 ص ٢٠٢٠/٠٣/٢٠

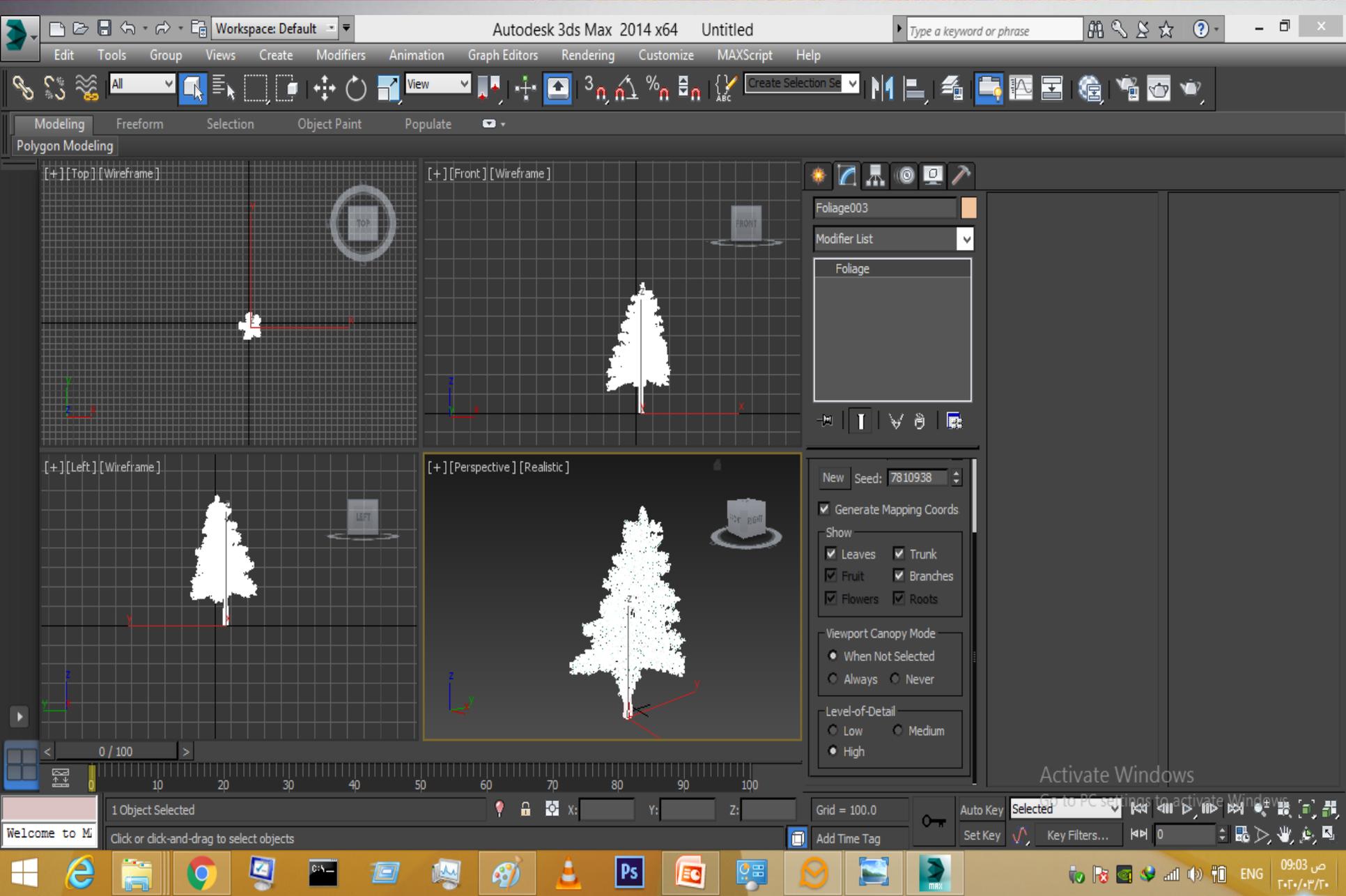
# Railing

The image shows the Autodesk 3ds Max 2014 x64 interface. The main viewport displays a railing object in wireframe and perspective views. The Railing Properties panel is open, showing the following settings:

- Railing:**
  - Pick Railing Path: AEC Extended
  - Segments: 1
  - Respect Corners:
  - Length: 145.482
- Top Rail:**
  - Profile: Square
  - Depth: 4.0
  - Width: 3.0
  - Height: 99.517
- Lower Rail(s):**
  - Profile: Square
  - Depth: 2.0
  - Width: 1.0
  - Generate Mapping Coords.:
  - Real-World Map Size:
- Posts:**
  - Profile: Square
  - Depth: 2.0
  - Width: 2.0
  - Extension: 0.0
- Fencing:**
  - Type: Solid Fill
  - Profile: Square
  - Depth: 1.0
  - Width: 1.0
  - Extension: 0.0
  - Bottom Offset: 0.0
  - Thickness: 0.31
  - Top Offset: 0.165
  - Bottom Offset: 0.0
  - Left Offset: 0.0
  - Right Offset: 0.0

The interface also shows the standard 3ds Max toolbars, the Command Panel, and the Command Line. The status bar at the bottom indicates "1 Object Selected" and "Grid = 10.0".

# trees



# create stairs

Autodesk 3ds Max 2014 x64 Untitled

Workspace: Default

Stairs

Object Type: AutoGrid, Straight Stair, L-Type Stair, U-Type Stair, **Spiral Stair**

Name and Color: SpiralStair001

Parameters:

- Type: Open, Closed, Box
- Generate Geometry:  Stringers,  Carriage,  Center Pole
- Handrail:  Inside,  Outside
- Rail Path:  Inside,  Outside
- Layout:  CCW,  CW
- Radius: 173.823
- Revs: 0,75
- Width: 173.823
- Rise: Overall: 466.574, Riser Ht: 38.881, Riser Ct: 12
- Steps: Thickness: 2.0, Depth: 34.13

1 Object Selected

Specify center point of stair.

Grid = 100.0

Auto Key Selected

Set Key Toggle Auto Key Mode

09:05 ص ٢٠٢٠/٠٣/٢٠

# المطلوب

- رسم نماذج مختلفه من المجسمات التي تم شرحها