

# MODUL PRATIKUM



## MATA KULIAH CREATIVE ANIMATION

### TOPIK

Perkenalan “Creative Animation”



**Penyusun:**

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## KATA PENGANTAR

Alhamdulillah, Puji syukur kami panjatkan pada Tuhan Yang Maha Esa bahwa kini telah tersusun Buku Panduan dan Modul Praktikum Mata Kuliah “Creative Animation” Universitas Esa Unggul.

Tujuan diterbitkannya modul praktikum ini adalah sebagai panduan dalam perkuliahan:

- 1) Pengaturan kegiatan praktikum bagi mahasiswa
- 2) Melaksanakan proses praktik dari bidang keilmuan dalam ilmu creative animation
- 3) Melaksanakan proses pembelajaran kasus, analisis praktis dan analisis profesional dalam praktik creative animation
- 4) Bagian dari proses belajar mengajar dan praktikum pada program pendidikan S1 Creative Animation

Harapan kami semoga modul praktikum ini dapat bermanfaat sesuai tujuan dan sasaran pendidikan.

Jakarta, 24 Maret 2018

Universitas Esa Unggul

**Nuryadi**



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## **Tujuan Intruksional**

- Memberikan Pengantar dan Perkenalan atas mata kuliah Creative Animation
- Mempersiapkan mahasiswa agar mampu mempromosikan diri dan mampu berkomunikasi dengan audiens.
- Pengenalan software Autodesk 3D Studio Max yang sebagai jembatan antara para desainer, engineer dan industry.

## **Sasaran Pembelajaran**

Sasaran pembelajaran praktikum manual mata kuliah Creative Animation ini adalah mahasiswa S1 Desain Komunikasi Visual semester 3 Fakultas Desain dan Industri Kreatif Universitas Esa Unggul.

## **Sumber Pembelajaran**

Sumber pembelajaran yang digunakan sebagai rujukan adalah:

- 3dsmax7 Fundamentals, NewRiders, TedBoardman
- 3d'sMax5Fundamentals, Techmedia, TedBoardman
- Inside3dsmax7, NewRiders, TedBoardman

## **Sumber Daya**

A. Sumber daya manusia:

- Dosen pemberi kuliah pengantar : 1 orang
- Asistensi dosen : orang

B. Sarana dan Prasarana

Ruang Lab Komputer Universitas Esa Unggul

## **Ruang Lingkup**

Ruang lingkup praktikum Creative Animation meliputi penjelasan tentang:

- Mendeskripsikan fungsi dan tujuan, pengembangan keterampilan & pengetahuan dalam 3D Modelling Animasi.
- Modelling dan creation of 3D Objects berbasis komputer dengan 3DS Max
- Mengaplikasikan teknik dasar 2D Splines, Shapes ke dalam 3D Object
- Mengaplikasikan teknik 2D Splines, Shapes & compound object
- Mengaplikasikan konsep 3D Modeling, Creating & Modifying Objects - Sesi 1
- Mengaplikasikan konsep 3D Modeling, Creating & Modifying Objects - Sesi 2
- Mengerti dasar-dasar Lighting & Camera Sesi 1

8. Mengerti dasar-dasar Lighting & Camera Sesi 2
9. Mengerti konsep membuat animasi dan motion dengan *Keyframe Animation*
10. Mengerti konsep dalam memberikan Texture with Max Sesi 1
11. Mengerti konsep Simulation & Effects

#### **Alat dan Kelengkapan**

1. Komputer, laptop, Wacom, Proyektor, Digital Pen, Mouse 3 Button.

#### **Pengendalian dan Pemantauan**

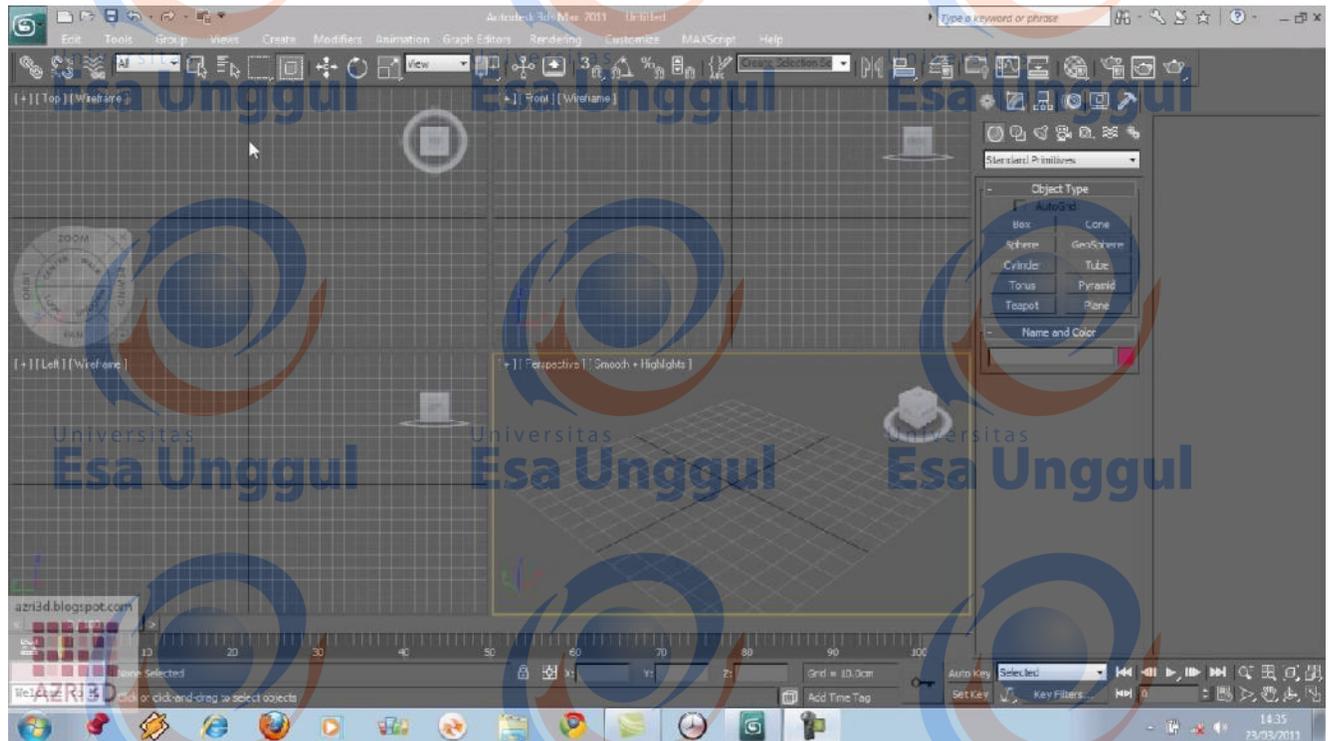
1. Absensi mahasiswa dan dosen yang telah ditanda tangani
2. Format asistensi tugas yang telah ditandatangani setiap adanya asistensi, diberi nama jelas dosen yang menilai serta peserta didik yang bersangkutan
3. Pedoman penilaian pencapaian kompetensi



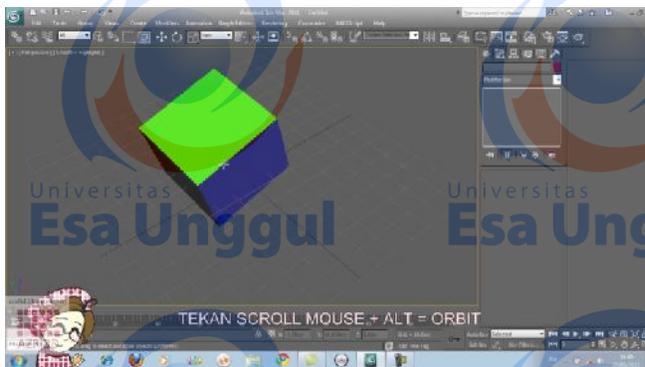
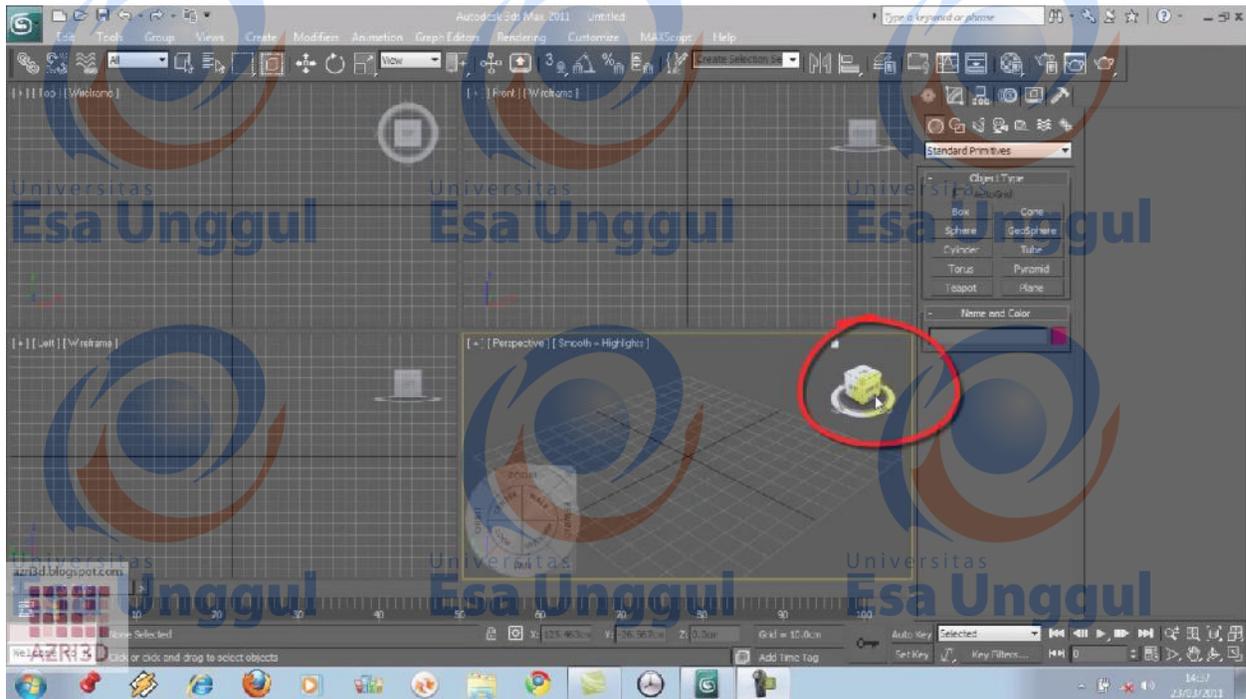
## Pelaksanaan

### PERTEMUAN KE-1: Pengenalan User Interface 3ds Max

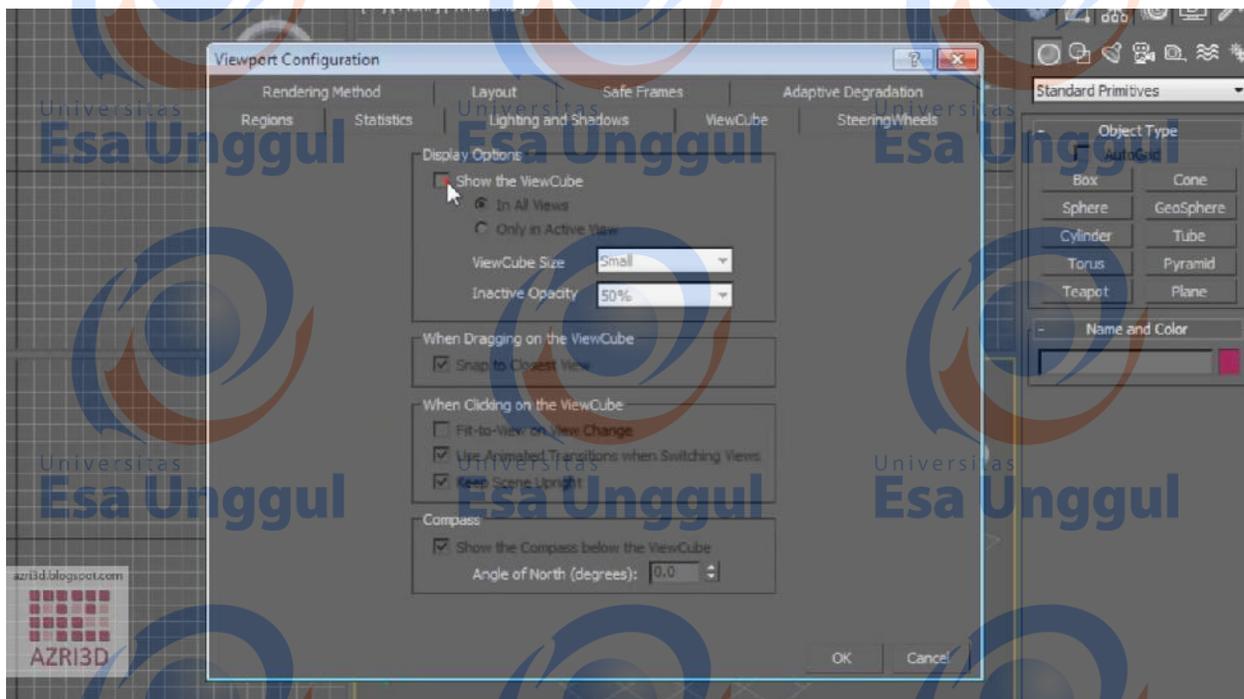
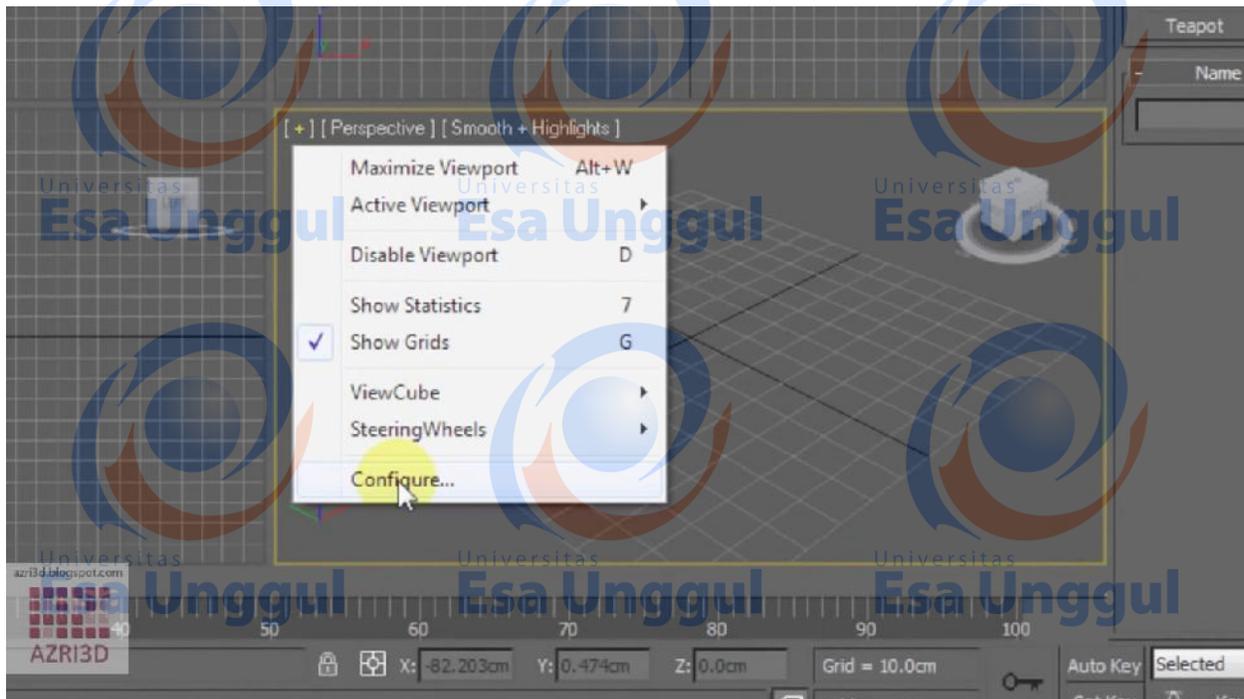
Pada pertemuan awal ini mahasiswa akan diperkenalkan User Interface 3DS Max agar dapat membuat modeling objek, mengatur pergerakan dan tampilan, mengetahui struktur objek, texturing objek mengaplikasikannya. User Interface berguna untuk mempermudah pengaplikasian software dalam menerapkan konsep 3D objek yang akan dibuat, dari objek yang sederhana sampai tingkat rumit. Berikut ini hal-hal dasar yang harus diketahui mahasiswa dalam mengenal Interface 3DS Max.



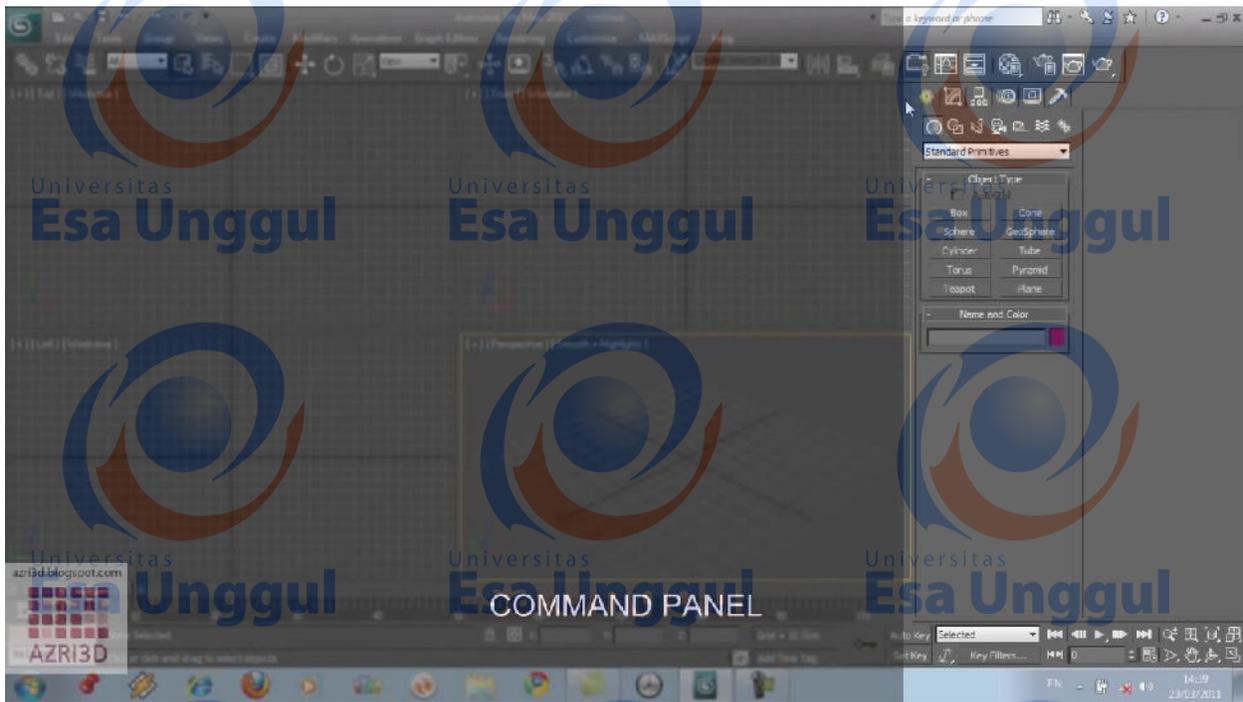
1. Viewport: untuk melihat tampilan secara Perspective, Front, Top, Left Side



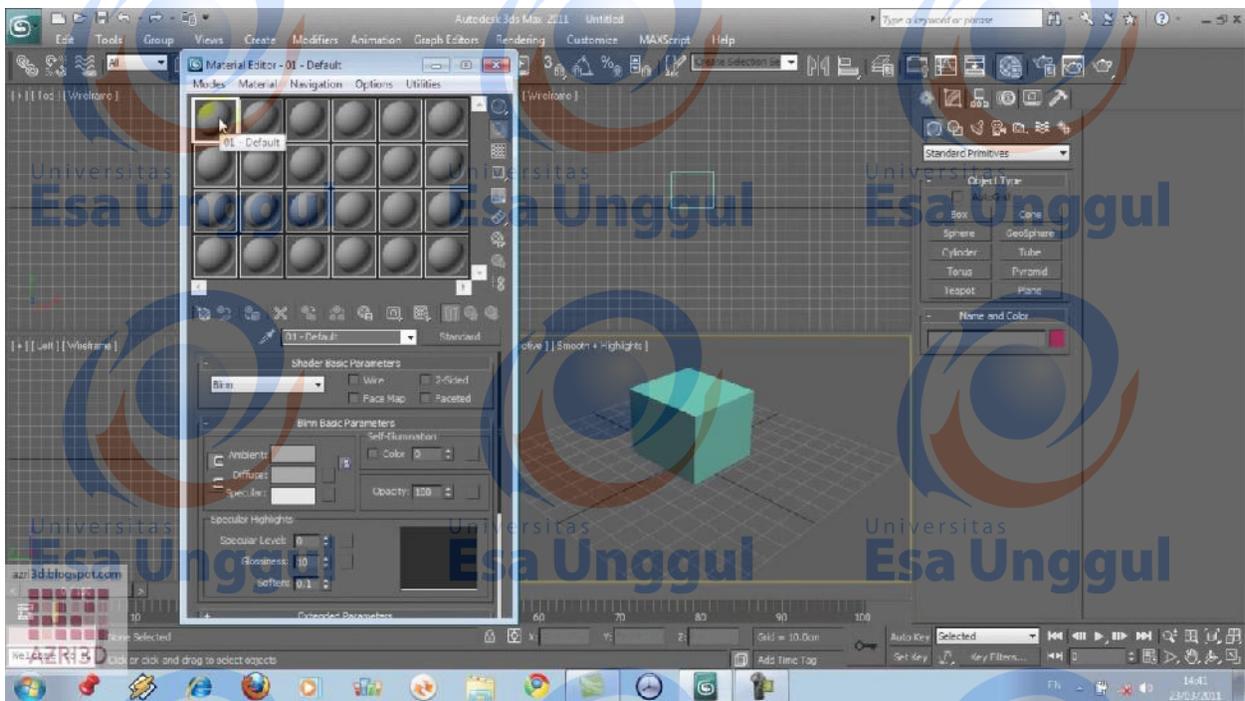
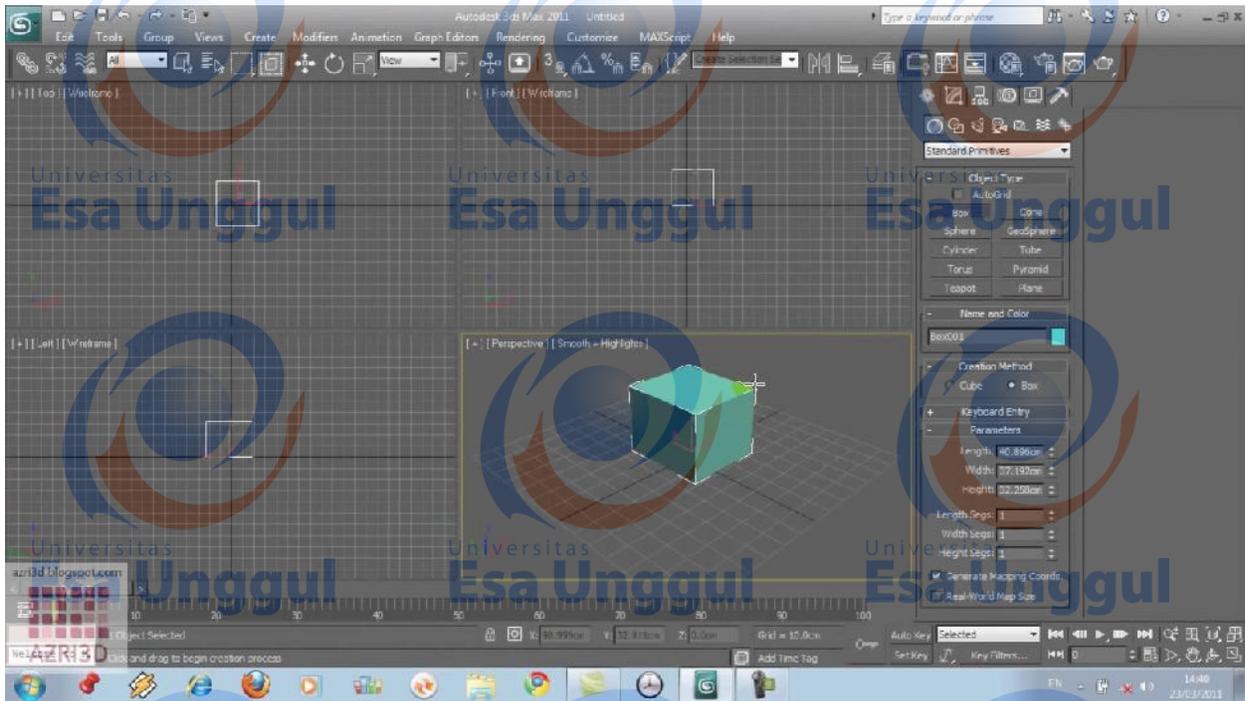
## 2. Pengaturan Tampilan melalui konfigurasi (*Viewport Configuration*)



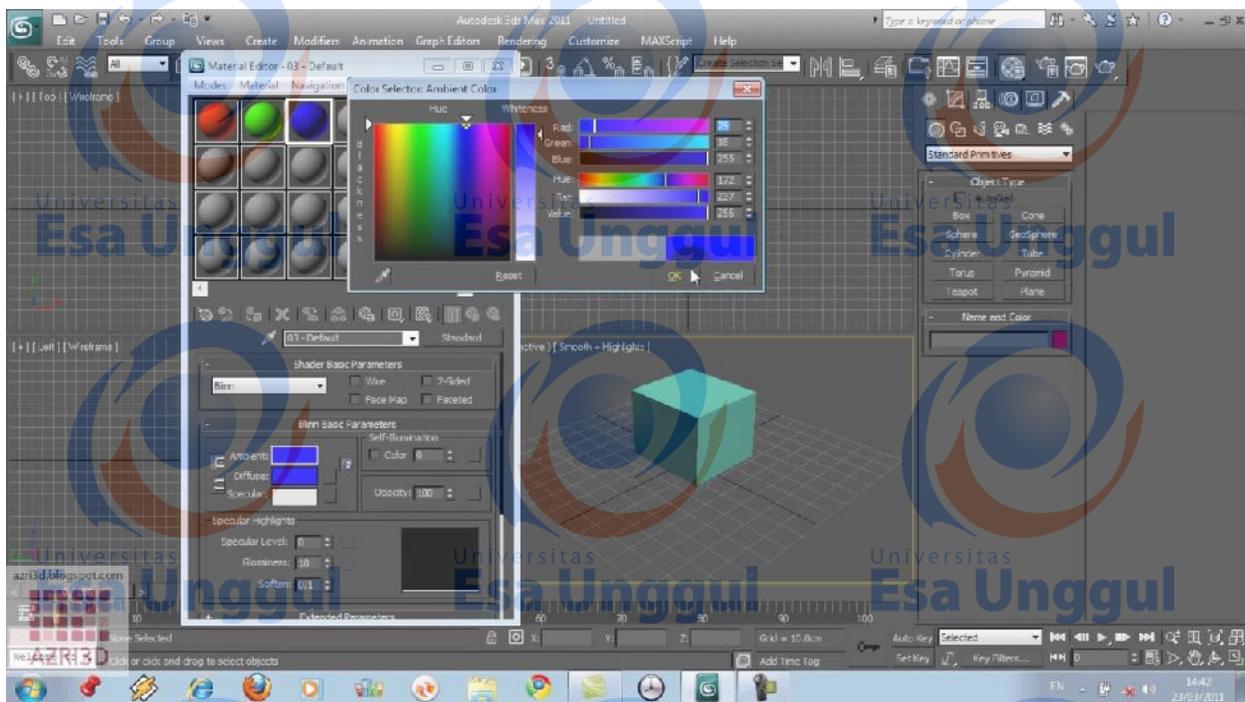
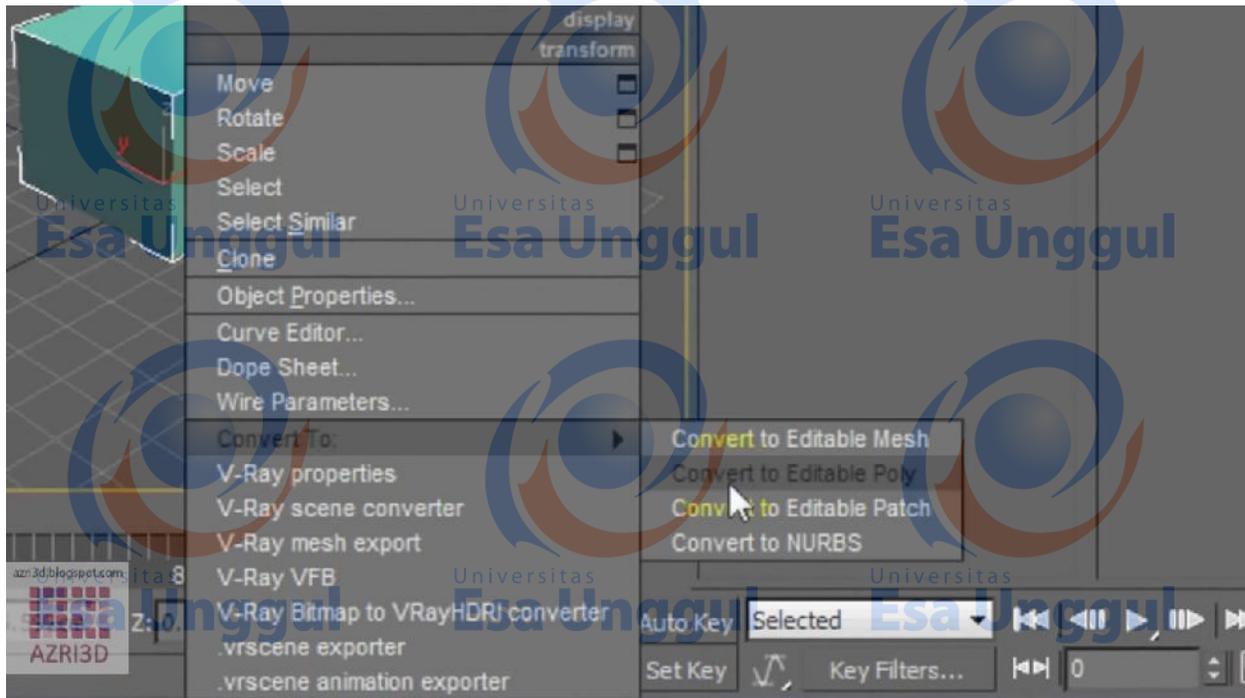
### 3. Pengenalan Command Panel & Toolbar

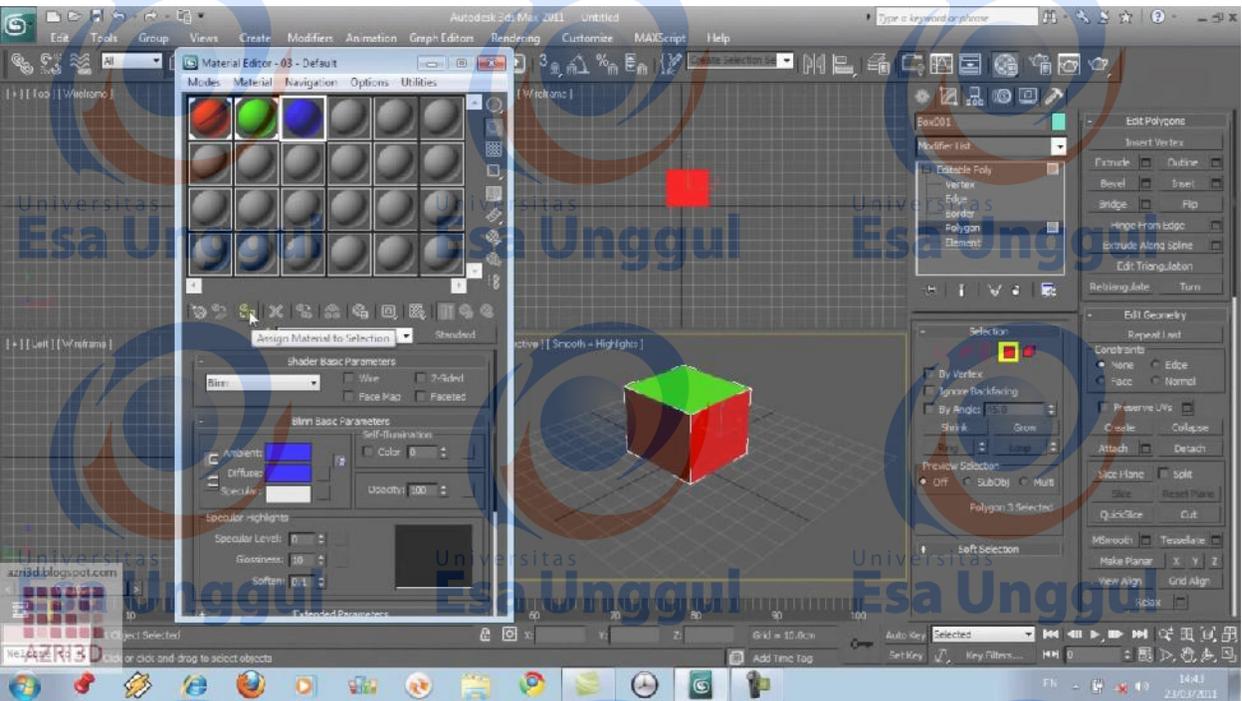
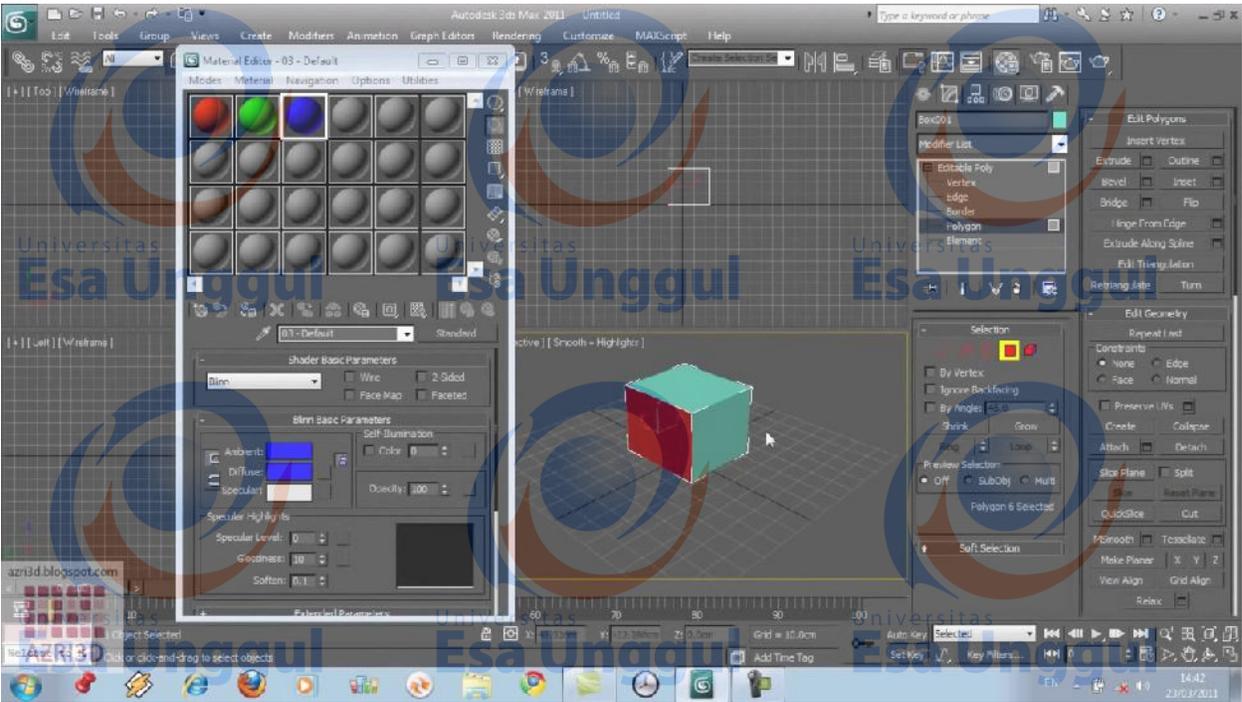


#### 4. Pengenalan Material Object



## 5. Pengenalan Editable Poly terhadap Penerapan Material Object





## Navigating a Scene

In this lesson, you'll open a partially-completed scene of a battlefield and learn how to adjust the view and navigate the viewports.

Navigating the scene:



1 On the Quick Access toolbar, click the Open File button.

2 From the `\scenes\startup` folder, highlight `battlefield_start.max`, then click Open.



Perspective viewport

The Perspective viewport should be active, indicated by a yellow border. If no border is visible, click anywhere within the viewport to activate it.

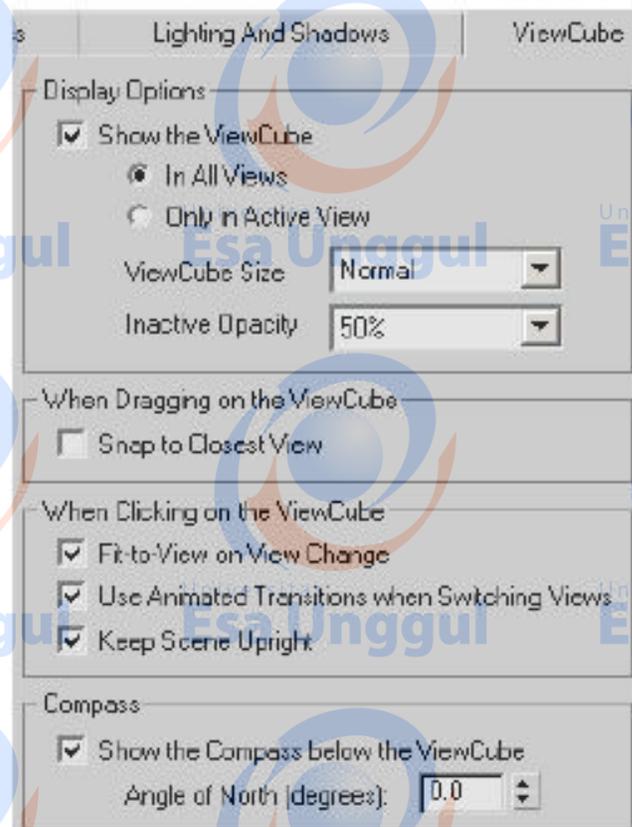
3 Depending on how your system is currently being used, you may have up to two navigation tools displayed in the viewport. The ViewCube™

displays in the top right corner and the SteeringWheels™ 3D navigation controls display in the lower left.

- 4 You will first take a look at the ViewCube. If the SteeringWheels is visible, hide it by clicking the X at the top right of the corner of the wheel.

**NOTE** If this is the first time you are using SteeringWheels, you will need to click on its icon to activate it.

- 5 In the Views menu > Viewport Configuration > ViewCube panel > Display Options group, turn on Show The ViewCube if it is not already on.



- 6 In the When Clicking On The ViewCube group, make sure Fit-To-View On View Change and Keep Scene Upright are on, and click OK.

- 7 In the Perspective viewport, right-click the ViewCube and choose Set Current View As Home.



- 8 Click the Left face of the ViewCube to view the scene from the left. As you can see, the ViewCube lets you view the scene from alternative viewpoints with a simple click of a mouse.

Notice how the viewport zooms in to a default scene magnification as it switches to the left perspective. The change in zoom factor is not something we want in this tutorial however, so you'll change it.

- 9 Right-click the ViewCube and choose Configure from the menu. The ViewCube tab is automatically selected.

- 10 In the When Clicking On The ViewCube group, turn off Fit-To-View On View Change and click OK.

It is important to keep this setting off if you want to maintain the same zoom factor when switching between viewpoints.

- 11 In the Perspective viewport, click the Home icon to the upper left of the ViewCube.



The Perspective viewport returns to its initial viewpoint.

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**NOTE** You can reset the Home viewpoint to the current view at any time by right-clicking the ViewCube and choosing Set Current View As Home.

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- 12 Click the Zoom button in the viewport navigation controls at the lower-right corner of the 3ds Max interface.

To show that this control is now active, the button appears pressed in, with a yellow background.

- 13 With the mouse, drag downward in the Perspective viewport. Your view zooms out so you can see the scene from a distance.

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**NOTE** You can also zoom in or out by rotating the mouse wheel forward or backward.

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- 14 In the viewport navigation controls click Orbit, which is below and to the right of the Zoom button. The button highlights when active.

A yellow navigation circle appears in the viewport.

- 15 Position the cursor *inside* the yellow circle. Press and hold the left mouse button and move the mouse. This action is called dragging.

The point of view orbits around the scene.

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**TIP** Avoid dragging outside the yellow navigation circle, unless you want to roll the entire viewport.

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- 16 Use a combination of the Orbit and mouse wheel to zoom in on the windmill.



17 Orbit your view by dragging to the left or right until you can see the cannon in the opposite direction.

18 Right-click the viewport to exit Orbit mode.

19  Click Pan in the viewport navigation controls and move the mouse in the viewport.

The viewport view now follows the movement of your mouse.

**NOTE** You can also start a pan operation by holding down the mouse button or wheel as you pan.



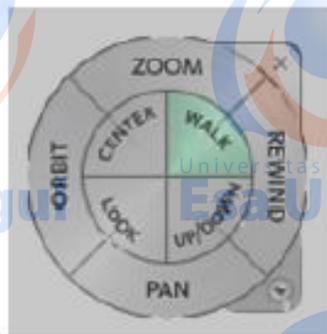
- 20 Return the viewport to its original orientation by clicking the Home icon.
- 21 Press Shift+W to display the SteeringWheels controls, if they are not already visible.

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**NOTE** In this instruction, "Shift+W" is outlined with a rectangle to indicate that you must press this key combination on the computer keyboard. We use this style consistently in the help and tutorials for both single keypresses and key combinations, so that it's always clear when an instruction involves using the physical keyboard as opposed to using the mouse with the software interface on the screen.

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The SteeringWheels controls offer an alternative way to navigate a scene.



- 22 Click and drag each of the Zoom, Pan and Orbit controls in turn, and experiment with how they can be used to navigate the scene.
- 23 When you're done, click the Rewind button and drag to the left.
- 24 The Rewind tool passes over a strip of thumbnails, each of which represents a previously selected navigation point. Release the mouse on any thumbnail. The viewport rewinds to that point.





25

Experiment with the Center, Walk, Look and Up/Down controls in the center of the SteerWheels icon. When you are done, click the arrow in the bottom right of the wheel and choose Go Home. This repositions the viewport view to the Home viewpoint.

26 Click the small "X" in the top right of the wheel to hide the SteeringWheels widget.

**TIP** Press Shift + W to redisplay the SteeringWheels controls.

Next, you'll create a camera and a Camera viewport. The Camera viewport is similar to the Perspective viewport but with different functionality. It can be animated, and effects added.