

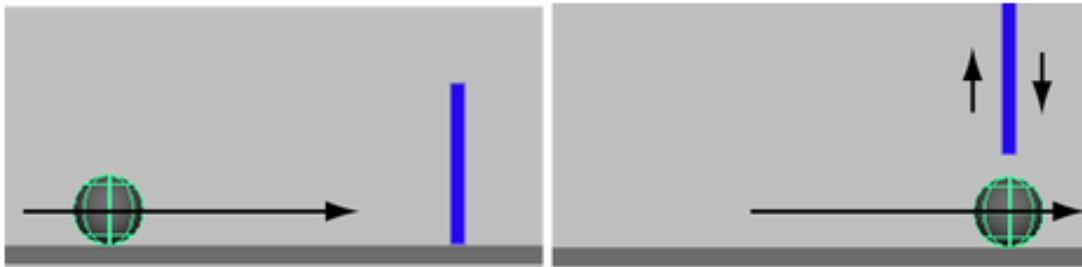
## Introduction

With keyframe animation, you key an attribute value to a time in the Time Slider. You repeat this process with different values at different times to animate the object.

When you must animate multiple objects or attributes that interrelate, setting keyframes can quickly become a complex task. *Set Driven Key* is a technique for driving one object's or attribute's animation from another attribute.

With *driven keys*, you relate an attribute value to the value of another attribute. You repeat this with different values to create a dependent link between a pair of attributes. A change in the *driver* attribute alters the value of the *driven* attribute. In this way the animation of the driven attribute doesn't need to be manually set; it occurs automatically once the relationship between attributes has been established. This makes setting up some types of animations much more efficient. For example, you can use driven keys to make a door open when a character walks in front of it.

In this lesson, you will learn how to use **Set Driven Key** in order to animate a door rising upwards when a ball approaches it.



In this lesson you learn how to:

- Link the object attribute behavior between two objects which will link the movement of one keyframed object to another with no keyframes assigned.
- Use the **Graph Editor** to adjust the animation for the driven object.

[http://download.autodesk.com/us/maya/maya2013\\_getting\\_started/index.html](http://download.autodesk.com/us/maya/maya2013_getting_started/index.html)

Or from within Autodesk Maya:

Help menu > Tutorials

Choose Getting Started With Maya 2013

Wednesday, October 03, 2012 we did all of Lesson 2: Set Driven Key from the Animation group of lessons. *Graph Editor, Spline Tangents, Breaking tangents, Assign Favorite Color, Checkerboard pattern, setting the Pivot Point and Timeline Keyframes were also covered/reviewed.*



The image shows the Autodesk Maya 2013 navigation menu. At the top left is the Autodesk Maya logo. To the right, the text "Autodesk® Maya® 2013" is displayed. Below this is a horizontal bar with four buttons: "Contents", "Index", "Search", and "Favorites". The "Contents" button is selected and highlighted. Below the buttons is a tree view of the tutorial content. The tree starts with a plus sign and a book icon for "NURBS Modeling", followed by another plus sign and book icon for "Subdivision Surfaces". Under "Subdivision Surfaces" is a minus sign and book icon for "Animation". Under "Animation" are two document icons: "Introduction" and "Preparing for the lessons". Below these is a plus sign and book icon for "Lesson 1: Keyframes and the Graph Editor". Under "Lesson 1" is a minus sign and book icon for "Lesson 2: Set Driven Key". Under "Lesson 2" are five document icons: "Introduction", "Lesson setup", "Using Set Driven Key to link attributes", "Viewing the results in the Graph Editor", and "Beyond the lesson". Below these is a plus sign and book icon for "Lesson 3: Path animation". Under "Lesson 3" is a minus sign and book icon for "Lesson 4: Inverse kinematics".

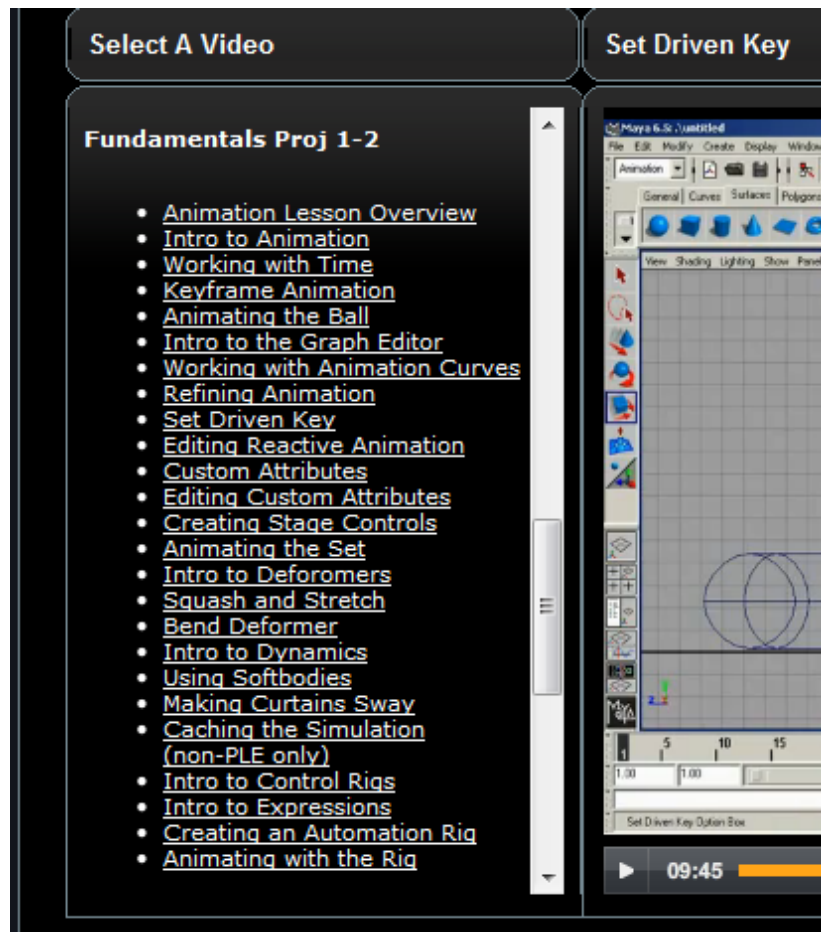
- +  NURBS Modeling
- +  Subdivision Surfaces
  -  Animation
    -  Introduction
    -  Preparing for the lessons
  - +  Lesson 1: Keyframes and the Graph Editor
    -  Lesson 2: Set Driven Key
      -  **Introduction**
      -  Lesson setup
      -  Using Set Driven Key to link attributes
      -  Viewing the results in the Graph Editor
      -  Beyond the lesson
  - +  Lesson 3: Path animation
    -  Lesson 4: Inverse kinematics

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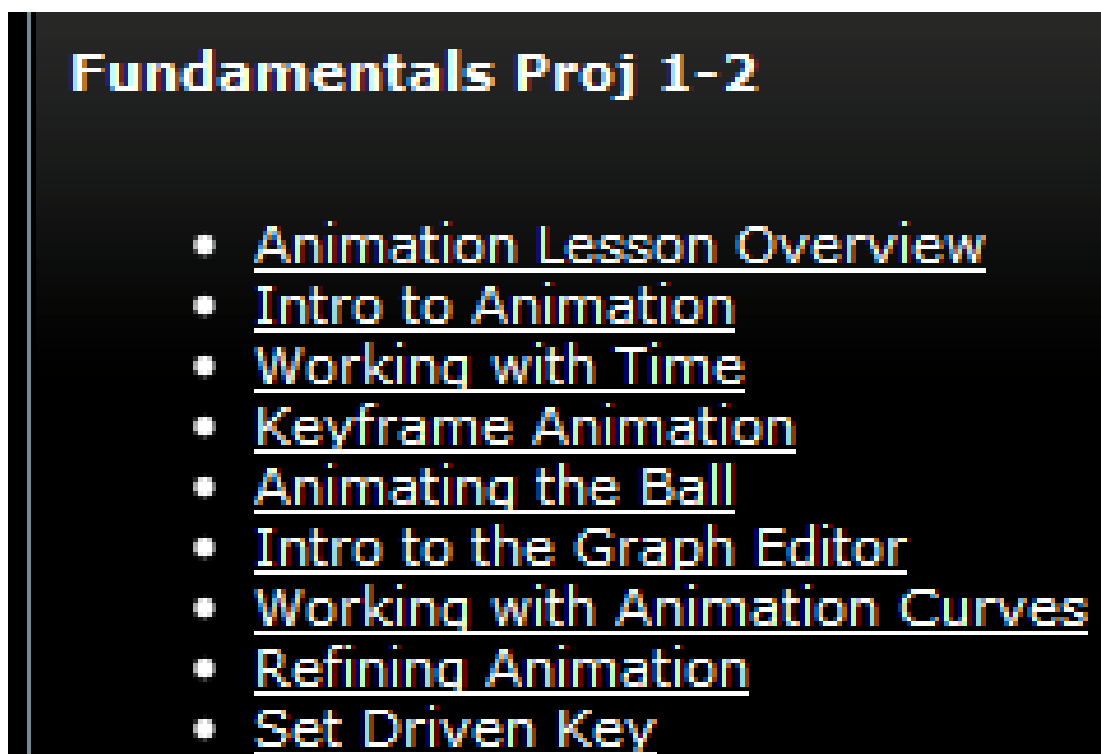
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**Set Driven Key** is the 9<sup>th</sup> video in Fundamentals Proj 1-2 of the 3DBuzz Maya tutorials. 29 minutes, 13 seconds.

See <http://www.3dbuzz.com/xcart/product.php?productid=32#samples>



# Maya 2011 Essential Training with George Maestri

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In *Maya 2011 Essential Training*, George Maestri demonstrates the tools and feature set in Maya, as well as the skills necessary to model, texture, animate, and render projects with this deep and robust piece of 3D animation software from Autodesk. This course takes an in-depth tour of Maya's interface, including navigating and manipulating objects in 3D and customizing the workspace. The course also covers object creation and modeling basics, shading and texturing, surface mapping techniques, character rigging, and lastly, rendering and final output. Exercise files accompany the course.

Topics include:

- Getting familiar with the Maya interface
- Organizing scenes
- Creating hierarchies
- NURBs modeling for solid objects
- Adding color to models
- Applying bitmap textures
- Working with mental ray materials
- Polygonal modeling for characters and organic objects
- Deforming with the Skin tool
- Setting up lights and cameras
- Creating realistic effects such as depth of field
- Working with the Timeline
- Creating animation cycles
- Batch rendering
- Rendering with the mental ray engine

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author [George Maestri](#)  
 subject [3D + Animation](#)  
 software [Maya 2011](#)  
 level [Beginner](#)

duration 9h 8m

**table of contents**

exercise files

transcript

author

preferences

FAQs

[+](#) expand all | [-](#) collapse all

viewed duration

<a href="#">▶</a> Introduction	3m 50s
<a href="#">▶</a> 1. Getting Started in Maya 2011	1h 0m
<a href="#">▶</a> 2. Polygonal Modeling Techniques	59m 25s
<a href="#">▶</a> 3. Refining Polygonal Models	36m 6s
<a href="#">▶</a> 4. NURBS Modeling Techniques	1h 18m
<a href="#">▶</a> 5. Refining NURBS Models	35m 53s
<a href="#">▶</a> 6. Organizing Maya Scenes	33m 22s
<a href="#">▶</a> 7. Creating Materials	40m 18s
<a href="#">▶</a> 8. Applying Textures	30m 14s
<a href="#">▶</a> 9. Basic Deformations and Rigging	41m 16s
<a href="#">▼</a> 10. Animating in Maya	1h 5m
<a href="#">Working with the Timeline</a>	4m 16s
<a href="#">Creating and adjusting keys (keyframes)</a>	5m 4s
<a href="#">Editing keys</a>	3m 13s
<a href="#">Modifying keys in the Graph Editor</a>	5m 47s
<a href="#">Modifying keys in the Dope Sheet</a>	2m 51s
<a href="#">Creating breakdown keys</a>	2m 28s
<a href="#">Animating objects along paths</a>	5m 54s
<a href="#">Animation playback using Playblast</a>	3m 10s
<a href="#">Animating with constraints</a>	6m 16s
<a href="#">Creating animation cycles</a>	8m 25s
<a href="#">Using set-driven keys</a>	6m 13s
<a href="#">Adding sound to animations</a>	2m 24s
<a href="#">Finishing the animation</a>	9m 45s

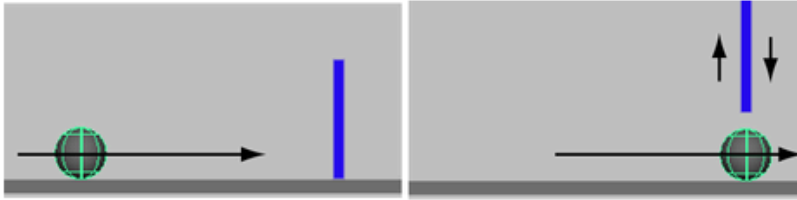
[site feedback](#)

<http://lynda.uni.edu> and then find the MAYA 2011 video tutorials. Choose **Maya 2011 Essential Training**. As you can see above, **Using set-driven keys** is 6m 13s and is in **Chapter 10: Animating in Maya**.

## 2011

<a href="#">+</a>	<a href="#">Creating Particle and Fire Effects with Maya</a>	Intermediate	03h 46m	07/2011	
<a href="#">+</a>	<a href="#">Character Animation Fundamentals with Maya</a>	Intermediate	06h 06m	05/2011	
<a href="#">+</a>	<a href="#">Maya 2011: Creating Natural Environments</a>	Intermediate	04h 18m	02/2011	
<a href="#">+</a>	<a href="#">Maya 2011: Modeling a Character</a>	Intermediate	03h 03m	10/2010	
<a href="#">+</a>	<a href="#">Maya 2011: Creating Textures and Shaders</a>	Intermediate	03h 30m	09/2010	
<a href="#">+</a>	<a href="#">Maya 2011 Lighting and Rendering in mental ray</a>	Intermediate	04h 56m	07/2010	
<a href="#">+</a>	<a href="#">Maya 2011 Essential Training</a>	Beginner	09h 08m	06/2010	
<a href="#">+</a>	<a href="#">Maya 2011 New Features</a>	Intermediate	01h 22m	05/2010	

In this lesson, you will learn how to use **Set Driven Key** in order to animate a door rising upwards when a ball approaches it.



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Here's a Playblast animation of the two Set Driven Key setups we did in class:

**Window menu > Playblast**

Quicktime movie: [Ball with door that lifts up and ball with door that swings open.](#)

Five objects (1 NURBS plane floor, 2 different polygonal spheres for the balls, and 2 polygonal cubes for the doors).

Notice how the two different ball and door pairs behave differently. This is because of using the Graph Editor to adjust the different keyframes (Change a keyframe to Spline Tangents, Break the Tangents apart, getting rid of Easing (Ease in and Ease out, also know as Slow In and Slow Out)).



Maya 2011 Essential Training

Beginner

09h 08m

06/2010

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