Chapter 5, section 4: **Modeling with nonlinear deformer**s  
Friday, April 05, 2013  
Jellyfish Example

1. **Wave Deformer**
2. **Squash (and Stretch) Deformer**
3. **Twist Deformer**
4. **Jiggle Deformer** (to be continued on Monday)

(http://3dtutorials.michaelorourke.com/tutorials/Modeling/More/NonLinDefs13.pdf)

If asked for user id and password, it is  
User ID: mayatuts  
Password: morourke

Introduction to Deformers: 06:37

http://www.3dbuzz.com/training/view/mastering-maya-the-talented-ball/the-talented-ball/intro-to-deformers

http://youtu.be/FQYYd8qKIHW
Squash and Stretch – the Squash Deformer: 19:42

http://www.3dbuzz.com/training/view/mastering-maya-the-talented-ball/the-talented-ball/squash-and-stretch

http://youtu.be/uQrvJQqp3yw

Why does Zach encourage you to “please, please, please use your Range Slider” when doing this tutorial?

What is the most important attribute under the Squash Deformer squash1 inputs, according to Zach?

What happens to geometry that is above the high bound for the deformer?

What is meant by the deformer having an “area of effect”?

The Bend Deformer: 10:45Giving the bouncing ball a sense of forward motion.(Pushing off sensation, if you will).

http://www.3dbuzz.com/training/view/mastering-maya-the-talented-ball/the-talented-ball/bend-deformer

http://youtu.be/4BGhXmaQh8E

Why was the RotateY on the bend1handle changed to –90 instead of 90? Why did it have to be changed at all?

The Bend handle was selected, then the Sphere (the talented ball) was Shift–selected, and the p key was hit. Why was this necessary? What did this do? Why wasn’t it necessary for our jellyfish animation?

What does the animator flatten the tangent handles?

Why does the animator break the tangent handles?

Does the ball look more like it is jumping instead of bouncing after all of the above deformations have been applied and fine tuned?

What was the Middle Mouse Button used for when fine tuning the Bend Deformer?

http://www.3dbuzz.com/training/view/mastering-maya-the-talented-ball/the-talented-ball

You may need to review

Intro to Deformers
This video gives you an introduction to deformers, which will allow you to add custom animations to your objects.

Squash and Stretch
This video will introduce you to a pair of modifiers that will add a more dynamic animation to your main character.

Bend Deformer
This tutorial will show you how to add the Bend Deformer to your character after the main animation is already completed.

http://www.3dbuzz.com/training/view/mastering-maya-the-talented-ball/the-talented-ball

Intro to the Graph Editor
This video introduces you to the graph editor, allowing you to have more precise control over your animations.

Working with Animation Curves
This video covers the basics of working with Animation Curves allowing you to control your animations with more precision.

Refining Animation
This video shows you how to refine your animations allowing you to achieve wanted results.