SoCal ROC — Career Technical Education
Designing the Ultimate Cupcake

The skills learned in this tutorial will help you design your own Ultimate Cupcakeand you may win the $20 gift certificate!

Go on Google and type "Designer Cupcake". You'll see some amazing stuff. The best designed cupcake will win a $20 certificate. The winner will be voted by members of the class. Judging will be based on creativity, modeling, lighting, and compostion.
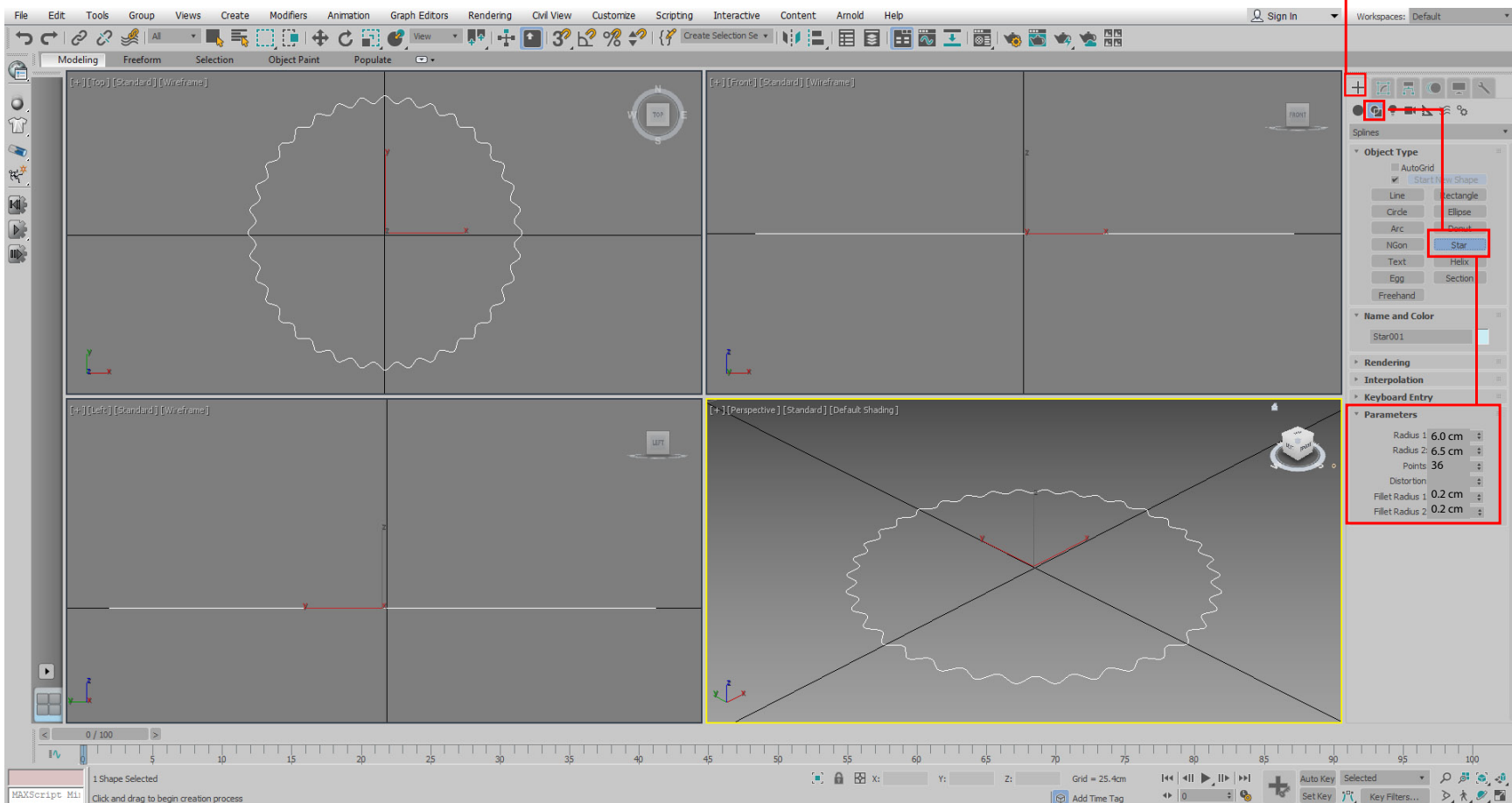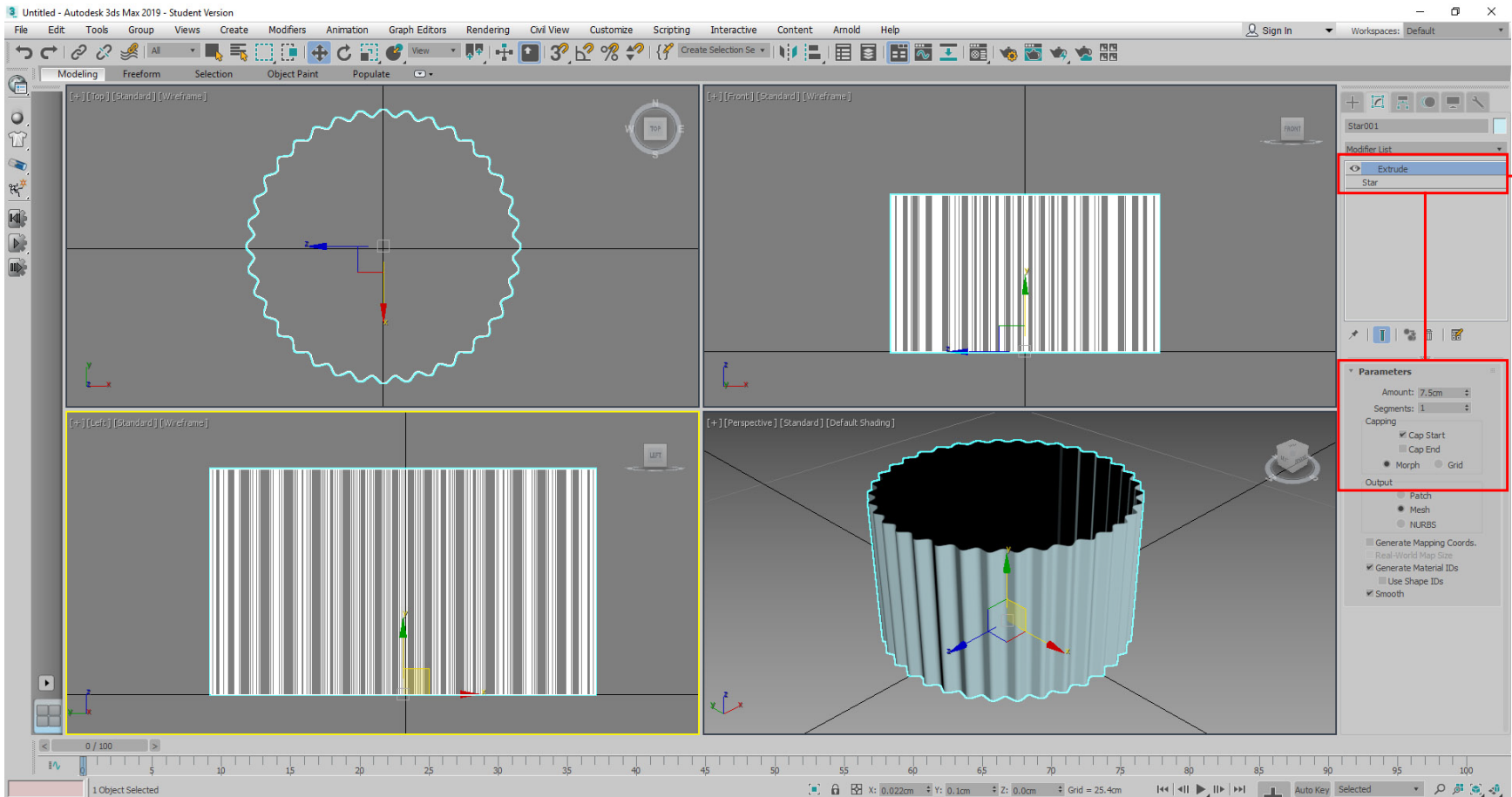
© Hello Sugar!

Modeling with Splines

Splines are 2-dimensional shapes. They have no volume until you assign a process.

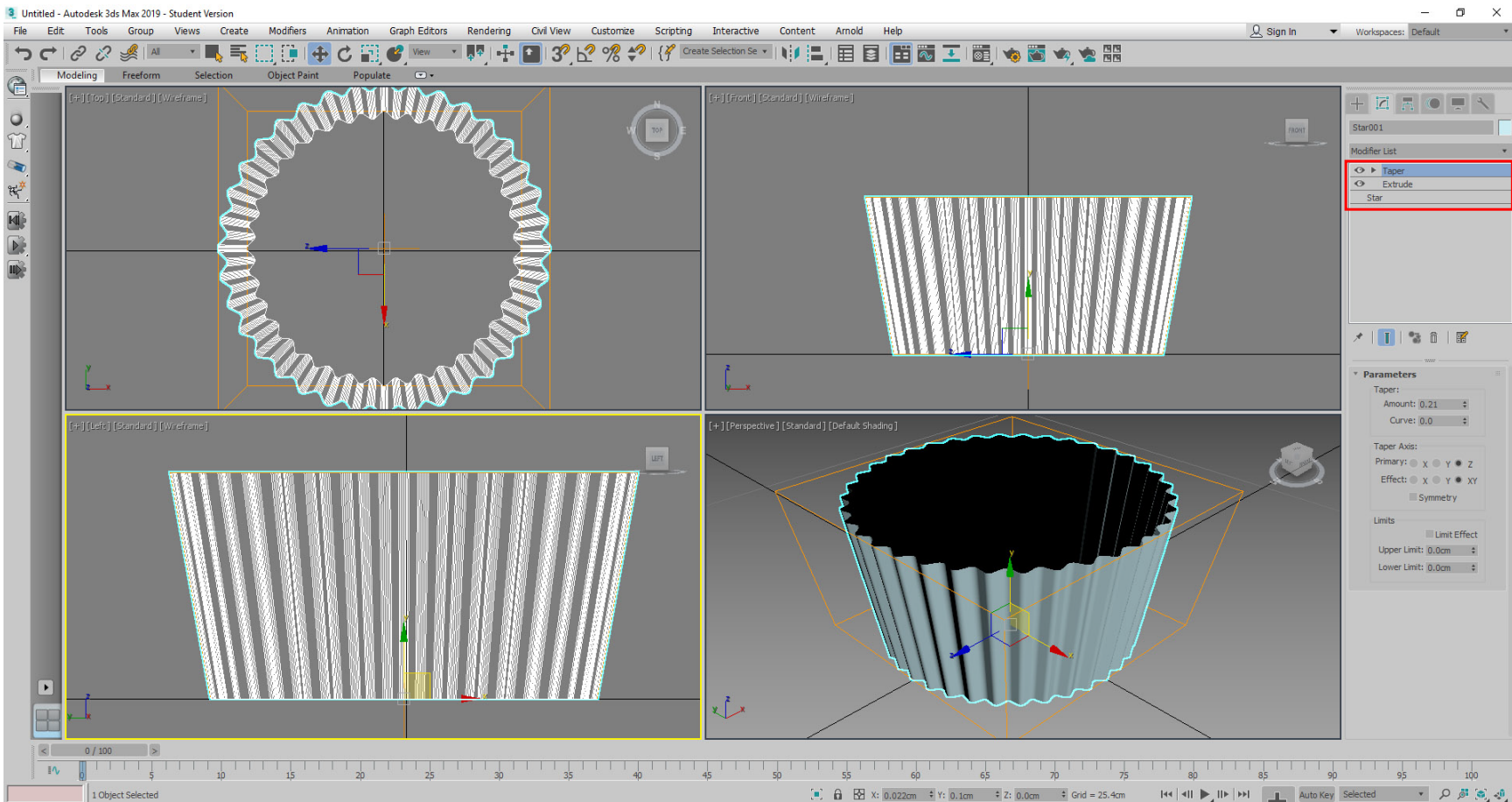3D Max has a dozen or so useful splines. We'll use the star and helix for starters.

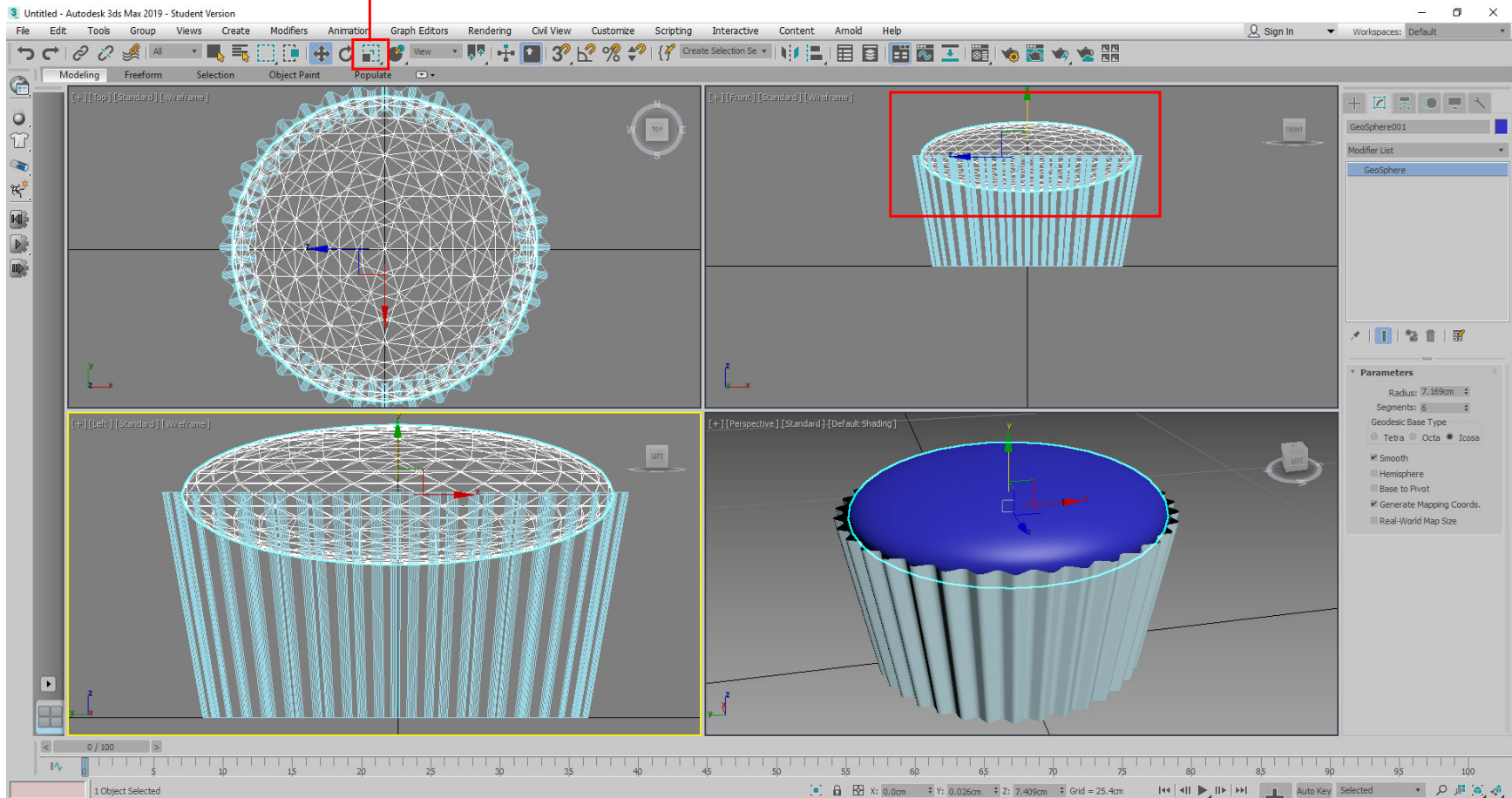1. Start by creating a star spline with the indicated parameters

2. Add the "Extrude" modifier (find it on the Modifier list)   atop the star shape.

3. Place a "Taper Modifier" atop the cup and set the parameter for flaring the cup.
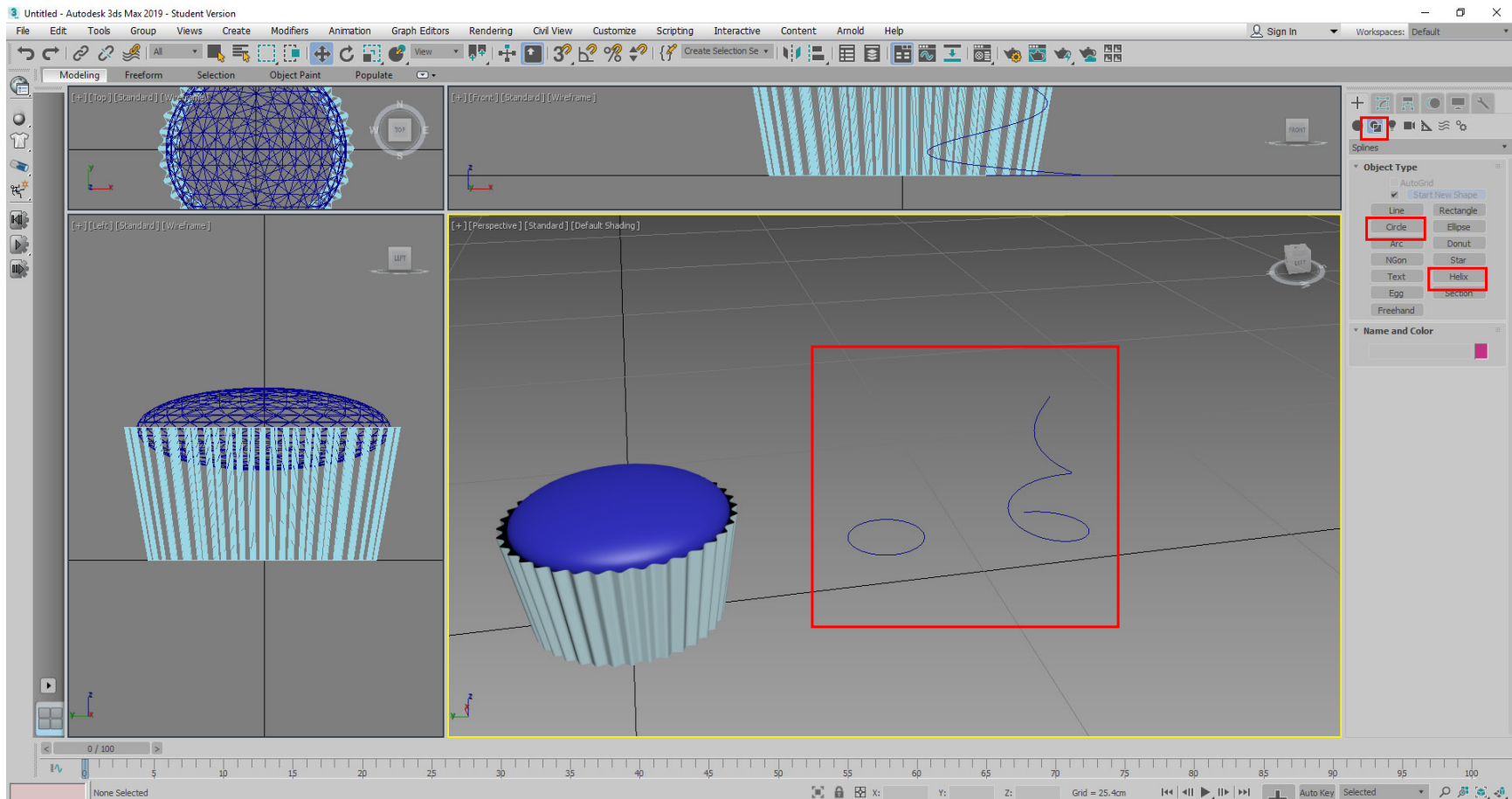
4. Create sphere and flatten it down using the "Scale Tool" and place into the cup.
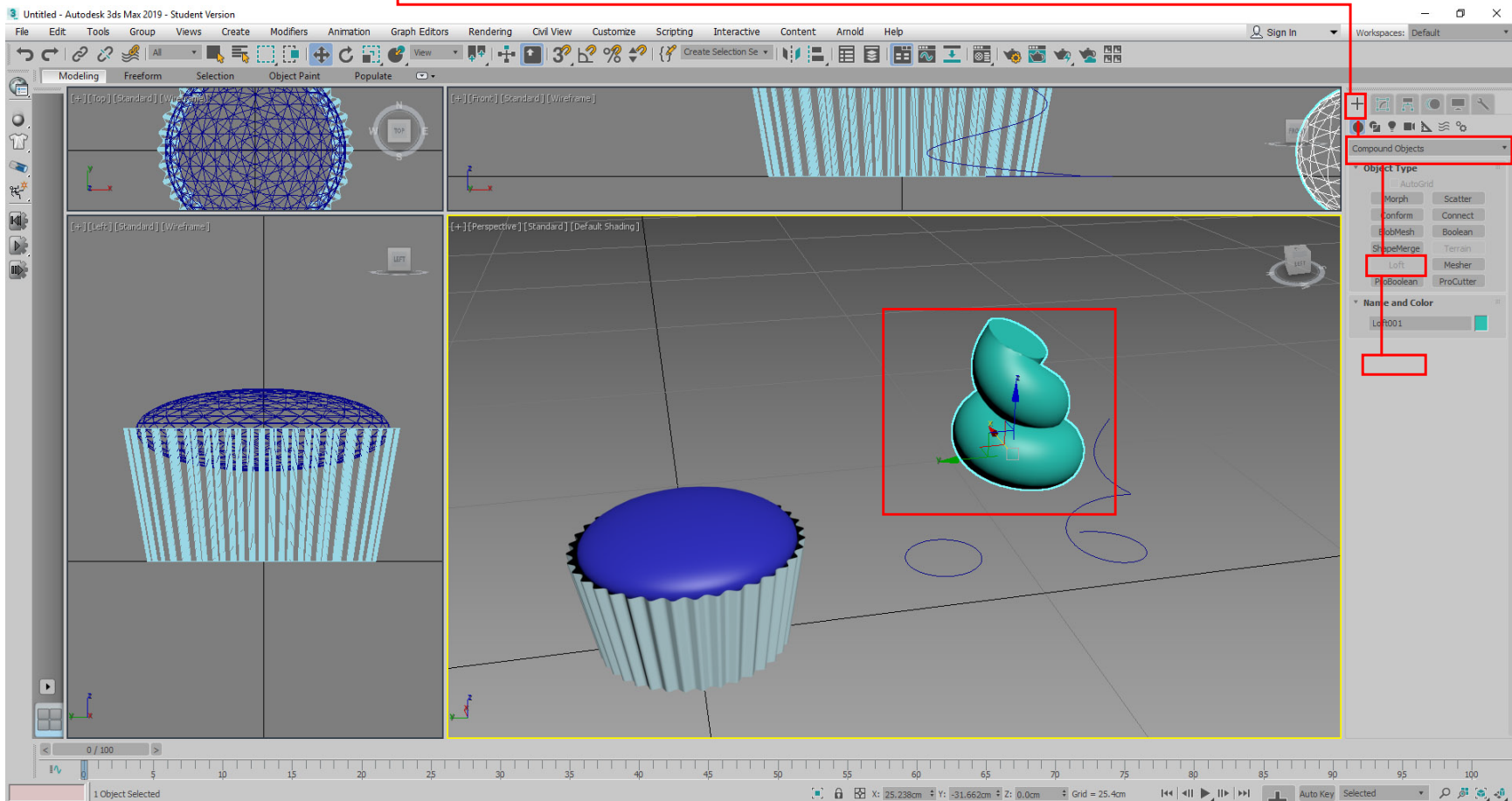
Now we'll make some swirling frosting.

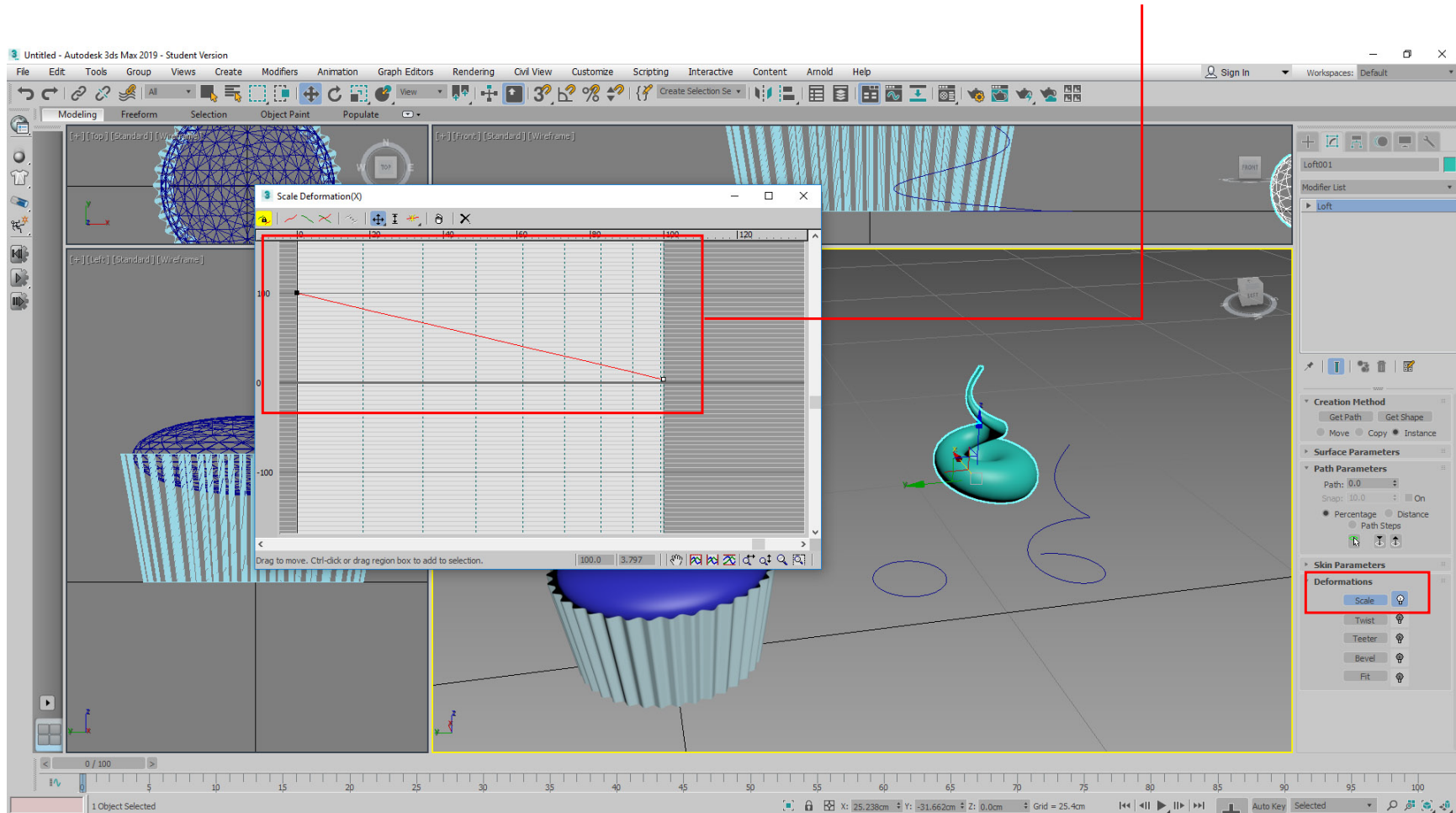**6.** Open the "Shapes (spline) panel and create a circle and helix.

Now, using a process called "Lofting" we'll extrude the circle along the helix.

7. Select the helix. Open <u>Compound Objects</u> and select "Loft". Select the "Get Shape" button and click on the circle.

8. Select the the new Loft. In the modify panel, open "Deformations" and "Scale". Adjust the graph as shown.

This gives you starting point for decorating the cake

Try cloning a "Copy" of the Loft and then changig the parameters.
Try lofting other shapes along a helix.
Try excercising your imagination....