



## PHAR 632

### Solid Dosage Forms

### “Powders, Granules & Granulation”

#### Objectives:

1. Understand the definitions, uses, characterization of different powders and granules.
2. Distinguish between different particle size determination methods.
3. Distinguish methods of particle size reduction: trituration (comminution) and levigation.
4. Distinguish methods of powders blending: spatulation, trituration, geometric dilution & tumbling.
5. Understand powder segregation and why does it happen? Distinguish eutectic, hygroscopic, deliquescent and efflorescent powders.
6. Understand method of effervescent granule preparation.
7. How are powders and granules prepared?
8. What is granulation and why is it an important in tablet manufacturing?

#### Reading Assignment:

The following pages are your reading from ***Ansel's Pharmaceutical Dosage Form and Drug Delivery*** for the next topic: **Powders and Granules. Chapter 6 and Chapter 8**

1. Read “**Powders**” Chapter 6, pages 214-217, pages 221-230. (Briefly look over Pharmacy Capsule 6.1 & 6.2)
2. Read “ **Granules**” Chapter 6, pages 231-235. (Briefly read Pharmacy Capsule 6.3).
3. Read “ **Compressed Tablet Manufacture**” *from chapter 8: Wet granulation, Dry Granulation & Direct Compression*” pages 276-282
4. The caption to Figure 6.2 is incorrect. What kind of blender is it?