

# Syllabus Multiphase Flows MIE 1222

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**Text: Drops, Sprays and Aerosols, by N. Ashgriz**

<b>week</b>	<b>Topic</b>	<b>Assignments</b>
<b>1</b>	Chap. 1: Introduction Chap 2: Fluid Equations 2.1 – 2.2	
<b>2</b>	Chap 2: Fluid Equations 2.3 – 2.4	
<b>3</b>	Chap 3: Fluid Interface Instabilities	Homework 1
<b>4</b>	Chap 4: Instability of a Liquid Sheet	
<b>5</b>	Chap 5: Instability of a Liquid Jet	Homework 2
<b>6</b>	Chap 6: Droplet Dynamics	
<b>7</b>	Chap 7: Droplet Deformation and Breakup	Homework 3
<b>8</b>	Reading week	
<b>9</b>	Chap 8: Droplet Collision and Impact	
<b>10</b>	Chap 9: Droplet Impact	Homework 4
<b>11</b>	Chap 10: Atomization Models	
	Chap 10: Atomization Models	Homework 5
<b>10</b>	Review	
<b>11</b>	Due date of the final project	Final Project

**Final grade will be based on:**

**Homework: 70%**

**Final Project: 30%**

**Office Hour by appointment.**