

Week/Date		Lectures/ Labs**	
<div>TEAM PROJECT</div> <div>Individual PROJECT</div>	Week 1 8/22 – 8/26	Lectures – Course Overview; Design Process, Ideation Methods. Lab 1 – Lab Orientation; Creative design and sketch	↑ Ideation & Sketching ↓
	Week 2 8/29 – 9/2	Lectures –Conceptual Sketching Lab 2 –Thumbnail and Conceptual Sketching	
	Week 3 9/5 – 9/9	Monday no class: , Lectures – Perspective Sketching Lab 3 – Perspective Views and design variation	↑ Virtual Design, Assembly and 3D Printing ↓
	Week 4 9/12 – 9/16	Lectures - Engineering Lettering; Shapes and Forms Lab 4 – Engineering Lettering; sketching simple and complex forms	
	Week 5 9/19 – 9/23	Lectures–Multiviews; Dimensioning Lab 5 – Adding details, Multiviews and dimensioning	
	Week 6 9/26 – 9/30	Lectures – Intro to 3D Solid Modeling: 2D sketching; Constraints; Extrusions; Holes; Edge Treatments, Revolved, Swept and Lofted features; Shell(Thin wall); Work features Lab 6 - Part Modeling	
	Week 7 10/3 – 10/7	Lectures – Editing Features; Intersects; Copy; Mirror; Coils; Ribs; Threads; Split/Combine/Derived parts; Patterns; Text Lab 7 – Part Modeling	
	Week 8 10/10 – 10/14	M and T no class: Lectures –Mass Properties; Variables/Formulas; Advanced geometric constraints Lab 8 – Part Modeling	
	Week 9 10/17 – 10/21	Lectures – 3D Printing; Mfg processes; Design for Mfg Lab 9 – 3D Printing, Rapid Prototyping; Invention Studio Tour	
	Week 10 10/24 – 10/28	Lectures –Assembly Modeling; Interference checking, Contact Sets, Lab 10 – Assembly Modeling	
	Week 11 10/31 – 11/4	Lectures – Creating section, detail, broken, auxiliary and standard multiviews; Lab 11 – Drawing Views & Dimensioning; Tolerances; GD&T	
	Week 12 11/7 – 11/11	Lectures –Exploded Views, Balloons and Part's List; Cutaway Views Lab 12 –Exploded; Parts List; Cutaway Views; Instructions Manual	
	Week 13 11/14 – 11/18	Lectures - Renderings; Animations Lab 13 - Rendering; Animations	
	Week 14 11/21 – 11/25	Lectures - Renderings; Animations Lab 14 - Thanksgiving break – no lab	
	Week 15 11/28 – 12/2	Lectures - Renderings; Animations Lab 15 - Work on project final reports	
	Week 16 12/5 – 12/9	Lectures – Project Review; Guidelines for Oral Presentations 3D Team Project report due- Tuesday, Dec. 6 @ 3 PM to Instructor's office (GTMI 451)	
	12/12 – 12/16	Final Exam Week Team Project Presentations – functional animations due to t-square	

**All dates, topics and deadlines may subject to change by your instructor.