Small Power and Equipment- 3rd Trimester

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Spring 2013

Date	Learning Targets: I can	Activities	Assessment
2/25	1. Describe class expectations for behavior and work ethic2. Understand class activities and competencies to be gained3. Identify opportunities to get involved in FFA	 Icebreaker Overview of the Syllabus and Competencies (post it notes and then posters over units) Class Materials needed Classroom Expectations 	Return syllabus agreement and Explore Bowhunting Agreement by Friday 8/17
2/26	 Create a classroom notebook Develop a SAE Project and keep records 	Develop a table of contents for notebookSAE Calendar Pages	• Notebook Checks four times per semester
2/27	Unit 1: Beginnings and Safety 1. Trace the developments of small engines throughout history	- Small Engine Timeline	- Exit Slip
2/28	1. Identify common injuries occurred from the operation of small engines	- Video and PPT	- brainteaser
3/1	1. Describe and practice general shop safety procedures	Fire triangle testShop Tour and Clean Up	- Notebook notes checked

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3/4	Examine a MSDS sheet for potential workplace hazards	MSDS- Paint Thinner	Safety Pop Quiz
		http://www.youtube.com/watch?v=pxLzIj68s5E	
	Describe the dangers associated with moving		
	machinery, parts, and blades	http://www.youtube.com/watch?v=KmgIqVwytwA&feature=related	
3/5	Review for the Safety Exam	Review Guide	RTK Quiz
3/6	Review for the Safety Exam	Review Game	
3/7	Complete the Safety Exam		Exam
3/8	Unit 2: Engine Operations Differentiate between internal and external engines	PPT and Parts Lab	
	Identify the parts of the small engine	Engine Parts Lab	

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3/11	No School - PD		
3/12	Complete the Safety Exam	Exam	Exam
3/13	Differentiate between internal and external engines	PPT and Parts Lab	Quiz
	Identify the parts of the small engine		
3/14	Describe the four strokes of an internal combustion engine	Crankcase Lab	Lab sheet
3/15	Describe the differences between 4- stroke and 2-stroke engines	Graphic Organizer	Quiz

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3/18	Utilize energy conversion principles to better understand the work output of a small engine	Energy Conversions (Pressue, Work)	Equation Worksheet
3/19	Utilize energy conversion principles to better understand the work output of a small engine	Energy Conversions (Horsepower, Torque)	Equation Worksheet
3/20	Calculate piston displacement	Review Lab for Conversions and Calculations	Identification quiz
3/21	Calculate Piston Displacement	Piston Displacement Lab	Energy Conversions Quiz
3/22	Calculate piston displacement	Piston Displacement PPT Worksheet	Identification quiz

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3/25	Calculate Piston Displacement	Worksheet	Quiz
3/26	Create a small business model for a small engine operation	Business Plan	Project Grade
3/27	Create a small business model for a small engine operation	Business Plan	Project Grade
3/28	Create a small business model for a small engine operation	Business Plan	Project Grade
3/29	Create a small business model for a small engine operation	Business Plan	Project Grade

Spring Break April 1st- 5th

Date	Learning Targets: I can	Activities	Assessment
4/8	Review Energy Conversion Principles	Calculating RPM of Small Engine	Lab
4/9	Calculate horsepower	Horsepower Lab	Lab
4/10	Identify tools commonly used in small engine repair	Tools ID	ID
4/11	Complete the Engine Operations Study Guide	Study Guide	Study Guide
4/12	Complete the Engine Operations Exam	Exam	Exam

Date	Learning Targets: I can	Activities	Assessment
4/15	Unit 3: 5 Systems		
	Describe how a magneto generates an electrical current and set the air gap	PPT and Lab	Lab Grade
4/16	Draw and label a small engine ignition system	Video and Notes	Drawing of System
4/16	List and explain the principles of operation pertaining to small engine	Torque Spark Plug	Quiz
	carburetors	Carburetion Notes	
4/18	Describe the various types of carburetors	Carburetion Notes	Ignition System Quiz
4/19	Describe how governors work on the small engine	Types of Governors	Lab

Date	Learning Targets: I can	Activities	Assessment
4/22	Review for the carburetion and ignition exam	Study Guide	Exam
4/23	Describe how the governor protects the engine from wear and tear	Notes	Quiz
4/24	Review for the Unit Exam	Review Game	Participation
4/25	Complete the 5 Systems Exam	Exam	Exam
4/26	Unit 4: Engine Tear Down and Assembly	Engine Labs	Project Grade
	Tear down the engine and reassemble it to run properly		