GMTCC Curriculum Map Power Sports Technology Instructor. Roscoe Allen

DATES	UNIT TITLE	TECHNICAL	ACADEMIC	21ST CENTURY SKILLS	MAJOR INSTRUCTIONAL ACTIVITY	ASSESSMENT
8/26 9/4	Introduction to power sports technology	.Service technician .Service writer . Parts specialist	. Filling out work orders . Building estimates for repair orders	.Communicating with customer base.	.Student introduction & a little about them selves .ice breaker activities .Discuss the history and evolution of the power sports industry & were it is going.	. Journals .Review/ Quiz . Essay
9/5 9/20	Chapter 2 Safety first	.Shop safety .Using proper safety equipment	. Vocabulary definition . Reading MSDS sheets .Write summary	. Job safety & how it effects them &the employer	.Discussions on shop safety . Understanding MSDS sheets .Understanding OSHA & your rights in the work place. .Safety videos	. Journal .Review/ Quiz . Tests [3]
9/20 10/4	Chapter 3 Tools/tool safety	.Hand tools .power tools .Specialty tools	.Vocabulary definitions . Tool measurements .S A E .METRIC	.Using proper tools in the work place	.Identify hand & power tools & proper way to use them. .Discussing safety on in proper use & using broken tools.	. Journal .Review/ Quiz . Test
10/7 10/22	Chapter 4 Measuring system/fasteners & thread repair	.SAE system .Metric system .Id fasteners .Repair fasteners	. Vocabulary definitions .Understanding SAE and metric system .Converting measurement	.Properly identifying the correct fasteners .Proper way to repair all threads & fasteners	. How to read the measuring system .Reading micrometers/veneer calipers .Repairing threads & fasteners internal and external.	. Journal . Review/Quiz .Test .Lab evaluations/ Student demo
10/22 11/5	Chapter 5 Basic engine operation	.Differences in 2 & 4 stroke engines .Engine configurations	. Vocabulary definitions . Reading & notes on class discussions . Practicing mathematic engine formulas	. Identifying critical engine components & there job in an engine	.How an internal combustion engine work .The four stages & how they work in sync with each other .Tech videos	.Journal .Review/Quiz .Test .Lab evaluation

GMTCC Curriculum Map Power Sports Technology Instructor. Roscoe Allen

11/6 11/19	Chapter 6 Internal combustion engines	.Engine operation and the physical laws .	.Measuring engine tolerances & comparing them to manufacture specs from service manual	.Disassemble, identify, clean - inspect & assemble	.Understanding scientific term of an internal combustion engine .Understanding the advantages & disadvantages of 2&4 stroke engines .How they differ physically	. Journal . Review/Quiz .Paper test .Lab Evaluation .Project
11/20 thgiving 12/9	Chapter 7 Lubrication and cooling systems	. The different types cooling systems . how to diagnose & repair them	. Understanding the chemical properties of cooling/antifreeze . Which ones are compatible? .	. Properly identify the parts of a cooling system . How they will diagnose and correctly repair system	. Identify all major parts .The importance of each and the function . why it is important to know how it all works together	. Journal . Review/Quiz . Paper test .Lab evaluation
12/10 Xmas 1/3	Chapter 8 Fuel systems	. How the fuel systems have advance with technology Understanding EFI systems	. Understanding the venturie theory. .How atmospheric / air density pressure play a part	. Tear down and examine different types of carburetor . diagnosing EFI systems	. How a carburetor operates and there basic functions . understanding EFI system and the components that make it work	. Journal . Review/ quiz .Paper test . Lab evaluation . diag demo
1/6 1/16 1/17	Introduction to basic welding Mid term	. Repairing some of today's basic metals . Assesses knowledge of S1	. Using the proper gasses an product to repair . Understanding the different metals being repaired ……	. . Hands on demo of six different type of welds ……	. Knowing how to use a welder and how to set it up and basic maintenance . Different techniques ……	. Journal .Explain the proper procedure & product used . Hands on demo 180 question Paper test…

GMTCC Curriculum Map Power Sports Technology Instructor. Roscoe Allen

1/21 2/5	Chapter 9 Transmission, clutches and drives	. different types of clutches, transmissions & drive systems	.Understanding gear and drive ratio and how they work together .performing mathematic formulas for them	. Tear down , inspection and repair of varicose systems	. Identify the different type of transmissions and how to ID them . doing math formulas for the different drive ratio : . Primary , transmission Final and over all	. Journal . Review/quiz . Paper test .Lab evaluation/ Student demo
2/6 2/20	Chapter 10 2 stroke top end inspection	. Identify the components of the top end and how to repair them	. Measuring tolerances . Comparing to spec manuals	.Inspecting each component for wear or damage	. Proper way to disassemble a top end .How to diagnose the problem .correct repair procedure	. Journal . Review/Quiz . Paper test .lab evaluation . student demo
3/5 3/19	Chapter 11 2 stroke bottom end inspection	. To identify the moving components and their purpose	. measuring crank run out . spec on bearing tolerances	. disassemble bottom end clean and inspect .Reassemble	. The basics of the lower end .What makes them differ from 4 strokes . How there different	. Journal . Review/quiz . Paper test . Lab evaluation
3/20 4/2	Chapter 12 4 stroke top end inspection	. To identify the more complex top end and how it works	.Figuring out cam duration . compression ratios . Cylinder volumes	. Tear down ID parts their function and what causes their failure	.The different parts of the top . The job of each and why it is important to check condition an spec on them during repair	. Journal . Review/quiz . Paper test . Lab evaluation .indentifying parts
4/3 4/22	Chapter 13 4 stroke bottom end inspection	. How 4 stoke bottom ends differ from 2 stroke	. As like to 2 stroke you will as well measure crank and bearing tolerances to factory specs	.Disassembly of lower end for cleaning and inspection & diagnosis . Reassemble	. Identify how 4 stroke cranks differ for 2 strokes. . Proper engine case separation . counter balancers and their purpose	. Journal . Review/quiz .Paper test . lab evaluation .identifying parts

GMTCC Curriculum Map Power Sports Technology Instructor. Roscoe Allen

4/23 5/6	Chapter 14 Electrical fundamentals	. How it is generated on you in today's industry . Battery Fundamentals	.Study of magnetism . The understanding of flow of electricity thru current, resistance and load	. Hands on diagnostics using a variety of DVOM meters & specs	. How electric is produced .The components that make up simple circuit .Understanding OHM'S law and how it work .What makes up a battery	. Journal . Review/ quiz . Paper test . lab evaluations .building building charts on electrical theory
5/7 5/19	Chapter 15 Electrical charging systems	.What is a charging and its primary job	. Learning to read DVOM meter and comparing them to spec manuals	. To perform proper tests and procedures to repair a charging system	.Identify the major components that create a simple charging system. .How to test component to pinpoint charging problem	. Journal .Review/quiz .Paper test . lab evaluation .Class room demo on diagnosing stators/regulators
5/20 6/3	Chapter 16 Electrical ignition system	.Understanding Ignition system of the past to future technology	.Reading tech manuals for specs .Following flow charts	. Show how to break down the system in to simple circuits to find diagnostic problem.	. discuss the ignition system of the past and how they have changed with technology .The complex systems of today .How to fix today's fuel injection efficiently	. Journal . review/quiz . Paper test . Lab evaluations .Demo on ignition system trouble shooting.
6/4 6/6	Shop close down and clean	Restock and inventory for next year	.....	.taken ownership the shop for the year.	.....	.....
6/9	Final exam	.....	.....	.....	.....	.....
6/11	Graduation ceremony	.....	.....	.....	.....	.....

GMTCC Curriculum Map Power Sports Technology Instructor. Roscoe Allen
