Curriculum Map
AUT 150-151
Maintenance and Light Repair Section A

School:	**Central ATC**	**Program:**	**Automotive Technology**
Teacher:	**William Bennett**	**School Year:**	**201__ -201___**
KCTCS Course Number:	**ADX 120-121**	**KY Tech Course Name**	**Maintenance and Light Repair Section A**
Length of Course:	**Year Long**	**Length of Period**	**50 Min** Period 1 and 2
High School Credit(s)	**1**		

Maintenance and Light Repair Section A:

Required Supplemental Tasks

Date Completed	Days	Task	Description	Common Core/Skills Standards
8-10-201_	1-4	1	Identify general shop safety rules and procedures.	Skills Standards: EB 001 EB 002 EB 003 EB 004 EB 005 EB 006 EB 007 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3
8-17-201_	5-8	2	Utilize safe procedures for handling of tools and equipment. PowerPoint from Text Vendor for this content	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 New Common Core Standards: RST 11-12 3

8-19-2014	9	3	Identify and use proper placement of floor jacks and jack stands.	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 New Common Core Standards: RST 11-12 3
8-19-2014	9	4	Identify and use proper procedures for safe lift operation. PowerPoint from Text Vendor for this content	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 New Common Core Standards: RST 11-12 3 New Generation Science Standards: HS-PS2-1
8-20-2014	10	5	Utilize proper ventilation procedures for working within the lab/shop area.	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 New Common Core Standards: RST 11-12 3

8-21-201	11	6	Identify marked safety areas.	Skills Standards: OC 018 OC 023 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3
8-26-201	11-12	7	Identify the location and the types of fire extinguishers and other fire safety equipment; demonstrate knowledge of the procedures for using fire extinguishers and other fire safety equipment. PowerPoint from Text Vendor for this content	Skills Standards: OC 018 OC 023 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3
8-27-201	13	8	Identify the location and use of eye wash stations.	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3

P-3d-d)	14	9	Identify the location of the posted evacuation routes.	Skills Standards: OC 018 OC 023 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3
	15-16	10	Comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities. Student assigned PowerPoint Assignment	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3
9-2-3v)	16	11	Identify and wear appropriate clothing for lab/shop activities.	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3
9-2-3v)	16	12	Secure hair and jewelry for lab/shop activities.	Skills Standards: OC 010 OC 011 Common Core Technical Standards: TD-HSE-1

				TD-HSE-2
9-4-201	17-18	13	Demonstrate awareness of the safety aspects of supplemental restraint systems (SRS), electronic brake control systems, and hybrid vehicle high voltage circuits.	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3 New Generation Science Standards: HS-PS3-5. HS-PS3-3.
9-4-201	17-18	14	Demonstrate awareness of the safety aspects of high voltage circuits (such as high intensity discharge (HID) lamps, ignition systems, injection systems, etc.). Student Assignment for internet research	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3
9-2-201	19	15	Locate and demonstrate knowledge of material safety data sheets (MSDS).	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3

9-9-20	20-21	16	Identify tools and their usage in automotive applications.	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3
9-10-20	22	17	Identify standard and metric designation.	Skills Standards: OB 002 OB 003 OB 004 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3 N-Q.1 A-CED-4

9-16-2011	23-27	18	Demonstrate safe handling and use of appropriate tools.	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3
9-22-2011	28-31	19	Demonstrate proper cleaning, storage, and maintenance of tools and equipment.	Skills Standards: OC 010 OC 011 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3
9-25-2011	32-33	20	Demonstrate proper use of precision measuring tools (i.e. micrometer, dial-indicator, dial-caliper).	Skills Standards: OB 002 OB 003 OB 004 Common Core Technical Standards: TD-HSE-1 TD-HSE-2 New Common Core Standards: RST 11-12 3 N-Q.1

9-29-2011	34-35	21	Identify information needed and the service requested on a repair order. Student complete a spreadsheet	Skills Standards: OD 001 OD 002 OD 003 OD 004 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2
9-30-2011	35	22	Identify purpose and demonstrate proper use of fender covers, mats.	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-OPS.3 New Common Core Standards: RST 11-12 3
10-1-2011	36	23	Demonstrate use of the three C's (concern, cause, and correction).	Skills Standards: OD 001 OD 002 OD 003 OD 004 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2

10-2-2011	37	24	Review vehicle service history.	Skills Standards: OD 001 OD 002 OD 003 OD 004 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2
10-6-2011	38-39	25	Complete work order to include customer information, vehicle identifying information, customer concern, related service history, cause, and correction.	Skills Standards: OD 001 OD 002 OD 003 OD 004 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2
10-9-2011	40-41	26	Ensure vehicle is prepared to return to customer per school/company policy (floor mats, steering wheel cover, etc.).	Skills Standards: OC 002 OC 003 OC 010 OC 011 Common Core Technical Standards: TD-OPS.3 New Common Core Standards: RST 11-12 3

			ENGINE REPAIR	
			General	
10-13-01	42-43	27	Research applicable vehicle and service information, vehicle service history, service precautions, and technical service bulletins.	Skills Standards: AB 1 AB 2 AB 3 AB 4 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2
	44	28	Verify operation of the instrument panel engine warning indicators.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3
	45	29	Inspect engine assembly for fuel, oil, coolant, and other leaks; determine necessary action.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards:

				RST 11-12.2 RST 11-12 3
	46	30	Install engine covers using gaskets, seals, and sealers as required. Students us Identifx	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3
	47-48	31	Remove and replace timing belt; verify correct camshaft timing.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3

				G-MG-1
	49-50	31	Perform common fastener and thread repair, to include: remove broken bolt, restore internal and external threads, and repair internal threads with thread insert.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3
	51	33	Identify hybrid vehicle internal combustion engine service precautions. Students use Today's Classroom.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 A-CED-4 New Generation Science Standards: HS-PS2-5.

			Cylinder Head and Valve Train	
	52-54	34	Adjust valves (mechanical or hydraulic lifters).	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q-3 New Generation Science Standards: HS-PS2-1. HS-PS3-3.

			Lubrication and Cooling Systems	
	55-57	35	Perform cooling system pressure and dye tests to identify leaks; check coolant condition and level; inspect and test radiator, pressure cap, coolant recovery tank, and heater core; determine necessary action.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q-3
	57-61	36	Inspect, replace, and adjust drive belts, tensioners, and pulleys; check pulley and belt alignment. Student use Identifix	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q-3

	62-63	37	Remove, inspect, and replace thermostat and gasket/seal.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q-3
	64	38	Inspect and test coolant; drain and recover coolant; flush and refill cooling system with recommended coolant; bleed air as required.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3

	65	39	Perform engine oil and filter change.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q-3
			AUTOMATIC TRANSMISSION AND TRANSAXLE	
			General	
	66-67	40	Research applicable vehicle and service information, fluid type, vehicle service history, service precautions, and technical service bulletins. Students use Today's Classroom	Skills Standards: AB 1 AB 2 AB 3 AB 4 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2

	68-69	41	Check fluid level in a transmission or a transaxle equipped with a dip-stick.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 New Generation Science Standards: HS-PS2-1. HS-PS3-3.
	70	42	Check fluid level in a transmission or a transaxle not equipped with a dip-stick.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 New Generation Science Standards: HS-PS2-1. HS-PS3-3.

	70-71	43	Check transmission fluid condition; check for leaks.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 New Generation Science Standards: HS-PS2-1. HS-PS3-3.
			In-Vehicle Transmission/Transaxle	
	73-77	44	Inspect, adjust, and replace external manual valve shift linkage, transmission range sensor/switch, and park/neutral position switch. PowerPoint from Text Vendor for this content	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q-3

	78-79	45	Inspect for leakage at external seals, gaskets, and bushings. Student use Identifix	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3
	80-82	46	Inspect, replace and align power train mounts.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3

	83-85	47	Drain and replace fluid and filter(s).	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q-3
			Off-Vehicle Transmission and Transaxle	
	86-87	48	Describe the operational characteristics of a continuously variable transmission (CVT). Student use Today's Classroom	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 New Generation Science Standards:

				HS-PS2-1. HS-PS3-3.
	88-92	49	Describe the operational characteristics of a hybrid vehicle drive train. Student assigned an internet project.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 New Generation Science Standards: HS-PS2-5. HS-PS3-3.

			MANUAL DRIVE TRAIN AND AXLES	
			General	
	93-97	50	Research applicable vehicle and service information, fluid type, vehicle service history, service precautions, and technical service bulletins. Use Identifix	Skills Standards: AB 1 AB 2 AB 3 AB 4 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2
	99-101	51	Drain and refill manual transmission/transaxle and final drive unit.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3
	102-106	52	Check fluid condition; check for leaks.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2

				New Common Core Standards: RST 11-12.2 RST 11-12 3
			Clutch	
	106-110	53	Check and adjust clutch master cylinder fluid level.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q.3 New Generation Science Standards: HS-PS2-1. HS-PS3-3.
	111-113	54	Check for system leaks.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3

			Transmission/Transaxle	
	114-117	55	Describe the operational characteristics of an electronically-controlled manual transmission/transaxle. Students use Today's Classroom	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 New Generation Science Standards: HS-PS2-1. HS-PS3-3.
			Drive Shaft, Half Shafts, Universal and Constant-Velocity (CV) Joints	
	118-122	56	Inspect, remove, and replace front wheel drive (FWD) bearings, hubs, and seals.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2

				RST 11-12 3 N-Q.3
	123-127	57	Inspect, service, and replace shafts, yokes, boots, and universal/CV joints. Students use Identifix.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q.3
			Differential Case Assembly	
	127-131	58	Clean and inspect differential housing; check for leaks; inspect housing vent.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3

	132- 134	59	Check and adjust differential housing fluid level.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3
	134	60	Drain and refill differential housing.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q.3

			Drive Axles	
	135-137	61	Inspect and replace drive axle wheel studs.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 N-Q.3
			Four-wheel Drive/All-wheel Drive	
	138-141	62	Inspect front-wheel bearings and locking hubs.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2

				RST 11-12 3
	142-144	63	Check for leaks at drive assembly seals; check vents; check lube level.	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3
			SUSPENSION AND STEERING SYSTEMS	
			General	
	145-148	64	Research applicable vehicle and service information, vehicle service history, service precautions, and technical service bulletins.	Skills Standards: AB 1 AB 2 AB 3 AB 4 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2

	150-152	65	Disable and enable supplemental restraint system (SRS). PowerPoint from Text Vendor for this content	Skills Standards: OH 001 OH 002 OH 003 OD 002 OD 003 OD 005 Common Core Technical Standards: TD-SYS-2 New Common Core Standards: RST 11-12.2 RST 11-12 3 New Generation Science Standards: HS-PS3-5. HS-PS3-3.
			EMPLOYABILITY SKILLS	
			Reports to work daily on time; able to take directions and motivated to accomplish the task at hand. Students given PowerPoint assignment	Skill Standards: EF 001 EF 005 EF 010
			Dresses appropriately and uses language and manners suitable for the workplace.	Skills Standards: EF 003 EF 004
			Maintains appropriate personal hygiene	Skills Standards: EF 003 EF 004

			Meets and maintains employment eligibility criteria, such as drug/alcohol-free status, clean driving record, etc.	Skills Standards: EE 003 EB 003 EF 019
			Demonstrates honesty, integrity and reliability	Skills Standards: ED 001 ED 004 EF 001
			Complies with workplace policies/laws	Skill Standards: EF 010 EB 001 EF 018
			Contributes to the success of the team, assists others and requests help when needed.	Skills Standards: EA 005 EA 011 EC 002
			Works well with all customers and coworkers.	Skills Standards: EE 001 EF 019 EF 016
			Negotiates solutions to interpersonal and workplace conflicts.	Skills Standards: EC 001 EC 002 EC 003 EA 013
			Contributes ideas and initiative	Skills Standards: EC 002 EC 003

			Follows directions	Skills Standards: EF 010 EF 012 EF 013
			Communicates (written and verbal) effectively with customers and coworkers.	Skills Standards: EA 008 EA 006 EA 013 EA 007
			Reads and interprets workplace documents; writes clearly and concisely.	Skills Standards: EA 003 EA 001 EA 006
			Analyzes and resolves problems that arise in completing assigned tasks.	Skills Standards: EC 001 EC 002 EC 003
			Organizes and implements a productive plan of work.	Skills Standards: ED 001 ED 002 OD 003 OD 004 OD 005
			Uses scientific, technical, engineering and mathematics principles and reasoning to accomplish assigned tasks	Skills Standards: OB 001 OB 002 OB 003 OB 004
			Identifies and address the needs of all customers, providing helpful, courteous and knowledgeable service and advice as needed.	Skills Standards: ED 001 ED 002

				ED 003 ED 005 ED 006