

Overview of SLO Process Work for the Division

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
Dept - (BHES) Automotive Technology	AUTO 50A	Student will be able to answer correctly, selected questions on the final exam concerning engine theory, lubrication, and basic electrical fundamentals.				
		Student will be able to answer correctly, selected questions on the final exam concerning engine theory, lubrication, and basic electrical fundamentals.				
	AUTO 50B	Student will be able to answer correctly, selected questions on the final exam concerning engine service, cooling system maintenance and battery testing.				
		Student will be able to answer correctly, selected questions on the final exam concerning engine service, cooling system maintenance and battery testing.				
	AUTO 51A	Student will be able to answer correctly, selected questions on the final exam concerning drive line theory, clutch and transmission service and diagnosis.				
		Student will be able to answer correctly, selected questions on the final exam concerning drive line theory, clutch and transmission service and diagnosis.				
	AUTO 51B	Student will be able to answer correctly, selected questions on the final exam concerning tire service including balancing, disc and drum brake service, and front and rear suspension service.				

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		Student will be able to answer correctly, selected questions on the final exam concerning tire service including balancing, disc and drum brake service, and front and rear suspension service.				
	AUTO 53A	Demonstrate the ability to diagram and construct compound mechanical and pneumatic machines, calculating the mechanical advantage for the individual components as well as the complete system.				
		Demonstrate the ability to diagram and construct compound mechanical and pneumatic machines, calculating the mechanical advantage for the individual components as well as the complete system.				
	AUTO 53B	Demonstrate the ability to diagram and construct simple electromechanical circuits, calculating and measuring voltage, amperage, and resistance using Ohm's Law and a digital multimeter.				
		Demonstrate the ability to diagram and construct simple electromechanical circuits, calculating and measuring voltage, amperage, and resistance using Ohm's Law and a digital multimeter.				
		Develop a testing sequence to diagnose open , shorted, and grounded electromechanical circuits.				
		Develop a testing sequence to diagnose open , shorted, and grounded electromechanical				

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		circuits.				
	AUTO 57A	After studying the various parts of the automotive industry and learning job interview skills, the student will participate in an 'in-class' job interview.				
		After studying the various parts of the automotive industry and learning job interview skills, the student will participate in an 'in-class' job interview.				
	AUTO 60	Demonstrate the ability to diagram and construct simple electrical circuits, calculating and measuring voltage, amperage, and resistance using Ohm's Law and a digital multimeter.				
		Demonstrate the ability to diagram and construct simple electrical circuits, calculating and measuring voltage, amperage, and resistance using Ohm's Law and a digital multimeter.				
		Develop a testing sequence to diagnose inoperative charging, cranking, and battery circuits.				
		Develop a testing sequence to diagnose inoperative charging, cranking, and battery circuits.				
	AUTO 60A	Student will diagnose an electrical feedback circuit problem in a lighting circuit using a logical diagnostic process. Student will interpret a customer based symptom that does not reveal the causal system in order to apply a logical diagnostic process for this type of problem.				
		Student will diagnose an				

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		<p>electrical feedback circuit problem in a lighting circuit using a logical diagnostic process. Student will interpret a customer based symptom that does not reveal the causal system in order to apply a logical diagnostic process for this type of problem.</p>				
		<p>Student will diagnose an open circuit problem in which all or part of the circuit is inoperative. Student will interpret the work order description, apply basic circuit theory concepts using logical circuit tracing techniques and accurate prediction of voltage drops. Student will correctly navigate supporting documents prescribe a recommended repair.</p>				
		<p>Student will diagnose an open circuit problem in which all or part of the circuit is inoperative. Student will interpret the work order description, apply basic circuit theory concepts using logical circuit tracing techniques and accurate prediction of voltage drops. Student will correctly navigate supporting documents prescribe a recommended repair.</p>				
	<p>AUTO 60B</p>	<p>Student will identify and appraise the operation of engine control systems where computer management is prevalent. Student will apply basic electrical fundamentals for the purpose of diagnostic troubleshooting. Student will interpret and analyze digital computer input and output</p>				

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	AUTO 60B	<p>signals. Student will select the appropriate diagnostic test equipment based on system symptom and design. Student will integrate the results of diagnostic tests and measurements.</p>				
		<p>Student will identify and appraise the operation of engine control systems where computer management is prevalent. Student will apply basic electrical fundamentals for the purpose of diagnostic troubleshooting. Student will interpret and analyze digital computer input and output signals. Student will select the appropriate diagnostic test equipment based on system symptom and design. Student will integrate the results of diagnostic tests and measurements.</p>				
	AUTO 60C	<p>Student will identify major ignition and fuel system components. Student will assess the function of an ignition system as associated with a drive symptom. Student will analyze a fuel delivery system based on diagnostic test results. Student will distinguish the cause of a drivability symptom based on the interpretation of diagnostic results. Student will differentiate the consequence of a failed emission device or system. Student will conclude a repair using the appropriate protocol.</p>				
		<p>Student will identify major ignition and fuel system components. Student will</p>				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		<p>assess the function of an ignition system as associated with a drive symptom. Student will analyze a fuel delivery system based on diagnostic test results. Student will distinguish the cause of a drivability symptom based on the interpretation of diagnostic results. Student will differentiate the consequence of a failed emission device or system. Student will conclude a repair using the appropriate protocol.</p>				
<p>AUTO 60D</p>		<p>Student will identify the purpose of an automotive ignition system. Student will demonstrate the correct application and usage of ignition system diagnostic equipment. Student will predict the results of an inappropriately adjusted ignition system. Student will categorize the results of ignition system diagnostics. Student will formulate a diagnosis based on interpretation of provided data values. Student will prioritize required repairs based on effectiveness.</p>				
		<p>Student will identify the purpose of an automotive ignition system. Student will demonstrate the correct application and usage of ignition system diagnostic equipment. Student will predict the results of an inappropriately adjusted ignition system. Student will categorize the results of ignition system diagnostics.</p>				

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		Student will formulate a diagnosis based on interpretation of provided data values. Student will prioritize required repairs based on effectiveness.				
	AUTO 60E	Student will describe the principles of electronic fuel injection. Student will explain common designs of fuel injection systems. Student will distinguish specific fuel injection diagnostic equipment. Student will analyze a fuel injection system based on diagnostic test data. Student will solve a drivability scenario as related to a fuel injection system failure. Student will determine the applicable service procedure based on a given circumstance.				
		Student will describe the principles of electronic fuel injection. Student will explain common designs of fuel injection systems. Student will distinguish specific fuel injection diagnostic equipment. Student will analyze a fuel injection system based on diagnostic test data. Student will solve a drivability scenario as related to a fuel injection system failure. Student will determine the applicable service procedure based on a given circumstance.				
	AUTO 60F	Student will identify basic internal combustion principles for the gasoline engine. Student will diagnose a no-start condition in which the storage battery, starter, or charging system is faulted.				

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	AUTO 60F	<p>Student will differentiate ignition system primary and secondary faults. Student will apply the appropriate diagnostic steps for a given no-start symptom. Student is able to formulate a diagnostic plan based on provided data parameters. Student will assess the performance of a fuel delivery system.</p>				
		<p>Student will identify basic internal combustion principles for the gasoline engine. Student will diagnose a no-start condition in which the storage battery, starter, or charging system is faulted. Student will differentiate ignition system primary and secondary faults. Student will apply the appropriate diagnostic steps for a given no-start symptom. Student is able to formulate a diagnostic plan based on provided data parameters. Student will assess the performance of a fuel delivery system.</p>				
	AUTO 60G	<p>Student will identify the purpose of an automotive scan tool. Student will recognize the various functions of a scan tool. Student will calculate a diagnostic approach based on scan data. Student will differentiate the status of DTCs (diagnostic trouble codes). Student will evaluate a given set of data for the purpose of diagnostics. Student will categorize data values based on specific symptoms.</p> <p>Student will identify the</p>				

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		<p>purpose of an automotive scan tool. Student will recognize the various functions of a scan tool. Student will calculate a diagnostic approach based on scan data. Student will differentiate the status of DTCs (diagnostic trouble codes). Student will evaluate a given set of data for the purpose of diagnostics. Student will categorize data values based on specific symptoms.</p>				
	<p>AUTO 60H</p>	<p>Student will describe the onboard self-test and diagnostic capabilities of various manufacturers' vehicle control systems. Student will apply diagnostic self-tests as applicable for a given symptom. Student will assess generic scan tool data as compared to proprietary data. Student will select the appropriate diagnostic test procedure. Student will distinguish the results of mode \$06 test results.</p>				
		<p>Student will describe the onboard self-test and diagnostic capabilities of various manufacturers' vehicle control systems. Student will apply diagnostic self-tests as applicable for a given symptom. Student will assess generic scan tool data as compared to proprietary data. Student will select the appropriate diagnostic test procedure. Student will distinguish the results of mode \$06 test results.</p>				
	<p>AUTO</p>	<p>Student will understand the</p>				

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	60J	<p>various designs and applications of the diagnostic oscilloscope and power graphing meter. Student will interpret a diagnostic waveform as applicable to a drive fault. Student will summarize the functions of a lab scope. Student</p> <p>Student will understand the various designs and applications of the diagnostic oscilloscope and power graphing meter. Student will interpret a diagnostic waveform as applicable to a drive fault. Student will summarize the functions of a lab scope. Student</p>				
	AUTO 60K	<p>The student will show an understanding of a resistive multiplexed switch circuits operation and diagnosis through a written essay.</p> <p>The student will show an understanding of a resistive multiplexed switch circuits operation and diagnosis through a written essay.</p>				
	AUTO 60M	<p>Student will identify the function of an automotive hybrid propulsion system. Student will apply the recommended safety practices as outlined in the shop manual and ERG (emergency response guide). Student will follow recommended maintenance practices as applicable to a hybrid electric vehicle. Student will outline the service aspects of hybrid electric vehicles. Student will classify the different types of hybrid propulsion systems.</p>				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	AUTO 60M	<p>Student will define the various components of a hybrid electric vehicle. Student will demonstrate the basic operation of regenerative braking.</p>				
		<p>Student will identify the function of an automotive hybrid propulsion system. Student will apply the recommended safety practices as outlined in the shop manual and ERG (emergency response guide). Student will follow recommended maintenance practices as applicable to a hybrid electric vehicle. Student will outline the service aspects of hybrid electric vehicles. Student will classify the different types of hybrid propulsion systems. Student will define the various components of a hybrid electric vehicle. Student will demonstrate the basic operation of regenerative braking.</p>				
	AUTO 60N	<p>Student will identify the function of an automotive hybrid propulsion system. Student will apply the recommended safety practices as outlined in the shop manual and ERG (emergency response guide). Student will follow recommended maintenance practices as applicable to a hybrid electric vehicle. Student will outline the service aspects of hybrid electric vehicles.</p>				
		<p>Student will identify the function of an automotive hybrid propulsion system.</p>				

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		Student will apply the recommended safety practices as outlined in the shop manual and ERG (emergency response guide). Student will follow recommended maintenance practices as applicable to a hybrid electric vehicle. Student will outline the service aspects of hybrid electric vehicles.				
	AUTO 61A	Students will understand proper brake inspection procedures.				
		Students will understand proper brake inspection procedures.				
	AUTO 61B	The student will be able to describe the differences in the two major types of wheel speed sensors used on cars and light trucks as well as how they function, and how to diagnose a failure of the component.				
		The student will be able to describe the differences in the two major types of wheel speed sensors used on cars and light trucks as well as how they function, and how to diagnose a failure of the component.				
	AUTO 62A	Students will understand proper under car inspection procedures.				
		Students will understand proper under car inspection procedures.				
		Students will understand proper vehicle wheel alignment procedures.				
		Students will understand proper vehicle wheel				

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		alignment procedures.				
	AUTO 62B	The learner will understand the concepts and be able to diagnose vehicle wander, drift, pull, hard steering, bump steer, memory steer, torque steer, and steering return concerns; determine necessary action.				
		The learner will understand the concepts and be able to diagnose vehicle wander, drift, pull, hard steering, bump steer, memory steer, torque steer, and steering return concerns; determine necessary action.				
	AUTO 63	The student will show an understanding of how a torque converter works.				
		The student will show an understanding of how a torque converter works.				
		The student will will show an understanding of the inputs to transission that create both up and downshifts.				
		The student will will show an understanding of the inputs to transission that create both up and downshifts.				
	AUTO 63A	The student will understand the workings of a manual transmisson clutch assembly.				
		The student will understand the workings of a manual transmisson clutch assembly.				
	AUTO 63B	The student will show an understanding of how a torque converter works.				
		The student will show an understanding of how a torque converter works.				

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		The student will will show an understanding of the inputs to transission that create both up and downshifts.				
		The student will will show an understanding of the inputs to transission that create both up and downshifts.				
	AUTO 63C	The student will show an understanding of how a torque converter works.				
		The student will show an understanding of how a torque converter works.				
		The student will will show an understanding of the inputs to transission that create both up and downshifts.				
		The student will will show an understanding of the inputs to transission that create both up and downshifts.				
	AUTO 63D	The student will show an understanding of the operation of transmission solenoids and the corresponding voltage values for diagnostic purposes.				
		The student will show an understanding of the operation of transmission solenoids and the corresponding voltage values for diagnostic purposes.				
	AUTO 64	Student should be able to answer selected questions on the final concerning engine theory, valve events, engine diagnostics, and engine assembly.				
		Student should be able to answer selected questions on the final concerning engine				

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		theory, valve events, engine diagnostics, and engine assembly.				
	AUTO 64HP	Student will answer correctly, selected questions on the final exam concerning blueprinting operations, engine theory, camshaft design, parts reliability upgrades. These are areas essential to the understanding of performance engines.				
		Student will answer correctly, selected questions on the final exam concerning blueprinting operations, engine theory, camshaft design, parts reliability upgrades. These are areas essential to the understanding of performance engines.				
	AUTO 65P	Student will be able to answer correctly, selected questions on the final exam concerning Bureau of Automotive Repair rules, regulations, and proper procedures to perform a smog check in the state of CA.				
		Student will be able to answer correctly, selected questions on the final exam concerning Bureau of Automotive Repair rules, regulations, and proper procedures to perform a smog check in the state of CA.				
	AUTO 65R	Student will be able to answer correctly, selected questions on the final exam concerning electrical fundamentals, wire repair techniques, and electrical diagnostic procedures using wiring diagrams.				
		Student will be able to answer				

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		correctly, selected questions on the final exam concerning electrical fundamentals, wire repair techniques, and electrical diagnostic procedures using wiring diagrams.				
	AUTO 65S	Student will be able to answer correctly, selected questions on the final exam concerning engine mechanical, ignition, fuel system and emissions system diagnosis.				
		Student will be able to answer correctly, selected questions on the final exam concerning engine mechanical, ignition, fuel system and emissions system diagnosis.				
	AUTO 65V	Student will be able to answer correctly, selected questions on the final exam concerning advanced emissions diagnosis such as On-Board Diagnostic Generation II (OBDII), the use of lab scopes in diagnosis and enhanced evaporative systems.				
		Student will be able to answer correctly, selected questions on the final exam concerning advanced emissions diagnosis such as On-Board Diagnostic Generation II (OBDII), the use of lab scopes in diagnosis and enhanced evaporative systems.				
	AUTO 65W	Student will be able to answer correctly, selected questions on the final exam concerning repairs to lower Oxides of Nitrogen (Nox) failures and procedures to perform an acceleration simulation mode				

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	AUTO 65W	(ASM) smog inspection using a dynamometer. Student will be able to answer correctly, selected questions on the final exam concerning repairs to lower Oxides of Nitrogen (Nox) failures and procedures to perform an acceleration simulation mode (ASM) smog inspection using a dynamometer.				
	AUTO 66	Students will understand proper refrigerant recovery, recycling, and handling procedures. Students will understand proper refrigerant recovery, recycling, and handling procedures.				
	AUTO 69	Student will be able to answer correctly, selected questions on the final exam concerning CA Bureau of Automotive Repair smog inspection rules, regulations and procedures updates. Student will be able to answer correctly, selected questions on the final exam concerning CA Bureau of Automotive Repair smog inspection rules, regulations and procedures updates.				
	AUTO 91A	Given a brake drum and tools, you are to setup the brake drum on the bench lathe, measure and turn the drum as needed according to recognized industry standards in 30 minutes. Given a brake drum and tools, you are to setup the brake drum on the bench lathe, measure and turn the drum as	Performance exam			

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		needed according to recognized industry standards in 30 minutes.	Performance exam			
		Given a vehicle and tools, you are to perform a complete brake inspection, according to recognized industry standards in 30 minutes.				
		Given a vehicle and tools, you are to perform a complete brake inspection, according to recognized industry standards in 30 minutes.	Performance exam			
		Given a vehicle and tools, you are to remove one dual servo brake assembly from the vehicle, inspect and lubricate the brake assembly as needed, and reinstall the dual servo brake assembly in the vehicle, according to recognized industry standards in 30 minutes.				
		Given a vehicle and tools, you are to remove one dual servo brake assembly from the vehicle, inspect and lubricate the brake assembly as needed, and reinstall the dual servo brake assembly in the vehicle, according to recognized industry standards in 30 minutes.	Performance exam			
		Given a vehicle and tools, you are to remove one tire, wheel, and brake caliper assembly from the vehicle, turn one rotor on the car as needed, and reinstall the tire, wheel, and brake caliper assembly on the vehicle, according to recognized industry stan				
		Given a vehicle and tools, you are to remove one tire, wheel,	Performance exam			

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		and brake caliper assembly from the vehicle, turn one rotor on the car as needed, and reinstall the tire, wheel, and brake caliper assembly on the vehicle, according to recognized industry stan	Performance exam			
	AUTO 91B	Students will understand Active Brake system concepts.				
		Students will understand Active Brake system concepts.				
	AUTO 92A	Given a vehicle and tools, you are to perform a chassis inspection on a front wheel drive vehicle according to recognized industry standards in 30 minutes.				
		Given a vehicle and tools, you are to perform a chassis inspection on a front wheel drive vehicle according to recognized industry standards in 30 minutes.	Performance exam			
		Given a vehicle and tools, you are to perform a chassis inspection on a rear wheel drive vehicle according to recognized industry standards in 30 minutes.				
		Given a vehicle and tools, you are to perform a chassis inspection on a rear wheel drive vehicle according to recognized industry standards in 30 minutes.	Performance exam			
		Given a vehicle and tools, you are to remove the strut assembly from the vehicle, remove and replace the strut from the coil spring, and reinstall the strut assembly in the vehicle, according to recognized industry standards in 30 minutes.				

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		Given a vehicle and tools, you are to remove the strut assembly from the vehicle, remove and replace the strut from the coil spring, and reinstall the strut assembly in the vehicle, according to recognized industry standards in 30 minutes.	Performance exam			
		Given a vehicle and tools, you are to remove, mount and balance, and reinstall two tire and wheel assemblies, according to recognized industry standards in 30 minutes.				
		Given a vehicle and tools, you are to remove, mount and balance, and reinstall two tire and wheel assemblies, according to recognized industry standards in 30 minutes.	Performance exam			
AUTO 92B		Given a vehicle and tools, you are to hook up the Hunter Alignment Machine to the vehicle, obtain alignment readings, determine corrective action, set front toe, and disconnect the alignment equipment, according to recognized industry standards in 30 minutes.				
		Given a vehicle and tools, you are to hook up the Hunter Alignment Machine to the vehicle, obtain alignment readings, determine corrective action, set front toe, and disconnect the alignment equipment, according to recognized industry standards in 30 minutes.				
		Given a vehicle and tools, you				

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		are to hook up the John Bean Alignment Machine to the vehicle, obtain alignment readings, determine corrective action, set front toe, and disconnect the alignment equipment, according to recognized industry standards in 30 minutes.				
		Given a vehicle and tools, you are to hook up the John Bean Alignment Machine to the vehicle, obtain alignment readings, determine corrective action, set front toe, and disconnect the alignment equipment, according to recognized industry standards in 30 minutes.				
	AUTO 92C	The learner will be able to test and diagnose components of electronically controlled suspension systems using a scan tool; determine necessary action.				
		The learner will be able to test and diagnose components of electronically controlled suspension systems using a scan tool; determine necessary action.				
	AUTO 92D	The learner will be able to check front cradle (subframe) alignment; determine necessary action.				
		The learner will be able to check front cradle (subframe) alignment; determine necessary action.				
	AUTO 93A	The student will be able to demonstrate the ability to measure the critical elements of a selected differential, analyze the readings, make				

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	AUTO 93A	the nec adjustments as well as the skill to dis and reassemble the unit.				
		The student will be able to demonstrate the ability to measure the critical elements of a selected differential, analyze the readings, make the nec adjustments as well as the skill to dis and reassemble the unit.				
	AUTO 93B	The student will show their understanding of the powerflow through a standard transaxle.				
		The student will show their understanding of the powerflow through a standard transaxle.				
	AUTO 93C	The student will be able to describe in an essay form, the function of an automatic transmission torque converter. They must show a knowledge of the components and their function as well as an understanding of of the relationship between them. A description of what each component does during acceleration, cruise, and converter lock up must be included.				
		The student will be able to describe in an essay form, the function of an automatic transmission torque converter. They must show a knowledge of the components and their function as well as an understanding of of the relationship between them. A description of what each component does during				

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		acceleration, cruise, and converter lock up must be included.				
		The student will completely disassemble an automatic transmission and then reassemble the same unit replacing any needed parts. The transmission will then have to function as designed on the transmission dynamometer in the shop.				
		The student will completely disassemble an automatic transmission and then reassemble the same unit replacing any needed parts. The transmission will then have to function as designed on the transmission dynamometer in the shop.				
	AUTO 93D	The student will show an understanding of how a torque converter works.				
		The student will show an understanding of how a torque converter works.				
		The student will will show an understanding of the inputs to transission that create both up and downshifts.				
		The student will will show an understanding of the inputs to transission that create both up and downshifts.				
	AUTO 93E	The student will be able to retrieve a transmission related fault code from the on board computer system and determine a course of action to institue a repair.				
		The student will be able to retrieve a transmission related fault code from the on board				

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		computer system and determine a course of action to institute a repair.				
	AUTO 93F	The student will perform a transmission service as required by factory maintenance schedule.				
		The student will perform a transmission service as required by factory maintenance schedule.				
	AUTO 94A	After studying the theory of a 4-stroke cycle, internal combustion engine, the student will be able to explain in detail each of the four strokes, valve overlap, and blowdown. This will be done using a cut-away engine.				
		After studying the theory of a 4-stroke cycle, internal combustion engine, the student will be able to explain in detail each of the four strokes, valve overlap, and blowdown. This will be done using a cut-away engine.				
	AUTO 94B	Student will set up and grind a valve face with the proper surface finish, while maintaining a margin thickness of no less than 1/16".				
		Student will set up and grind a valve face with the proper surface finish, while maintaining a margin thickness of no less than 1/16".				
	AUTO 94C	Student will set up and hone a cylinder to a specified size, with the proper surface finish depending on the type of piston rings being used.				

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		Student will set up and hone a cylinder to a specified size, with the proper surface finish depending on the type of piston rings being used.				
	AUTO 94D	Student will equalize the weight of the rotating ends and reciprocating ends of connecting rods within 1 gram of each other.				
		Student will equalize the weight of the rotating ends and reciprocating ends of connecting rods within 1 gram of each other.				
	AUTO 94E	Student will prepare a written estimate for a vehicle repair including all pertinent customer information on the repair order.				
		Student will prepare a written estimate for a vehicle repair including all pertinent customer information on the repair order.				
	AUTO 94F	Student will prepare a detailed checklist for an engine being assembled, including assembly of all subsystems.				
		Student will prepare a detailed checklist for an engine being assembled, including assembly of all subsystems.				
	AUTO 99A	The student will demonstrate the ability to perform a battery load test, a starter draw test, a charging system test and analyze the readings.				
		The student will demonstrate the ability to perform a battery load test, a starter draw test, a charging system test and analyze the readings.				

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	AUTO 99B	The student will demonstrate the ability to repair a copper strand wire, perform a parasitic draw test, and measure the resistance of various components.				
		The student will demonstrate the ability to repair a copper strand wire, perform a parasitic draw test, and measure the resistance of various components.				
	AUTO 99C	The student will be able to demonstrate the ability to properly install a distributor into an engine, install spark plug wires in the proper firing order and set ignition timing to specifications.				
		The student will be able to demonstrate the ability to properly install a distributor into an engine, install spark plug wires in the proper firing order and set ignition timing to specifications.				
	AUTO 99D	The student will be able to examine a vehicle with a no-start condition, and using analytical skills learned in class, be able to deduce the malfunctioning component(s) within 15 minutes.				
		The student will be able to examine a vehicle with a no-start condition, and using analytical skills learned in class, be able to deduce the				

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		malfunctioning component(s) within 15 minutes.				
	AUTO 99E	The student will be able to demonstrate how to properly retrieve DTC's from a Powertrain Control Module (PCM), retrieve Freeze Frame Data from a PCM, and retrieve Inspection/Maintenance (I/M) Readiness Status from a PCM.				
		The student will be able to demonstrate how to properly retrieve DTC's from a Powertrain Control Module (PCM), retrieve Freeze Frame Data from a PCM, and retrieve Inspection/Maintenance (I/M) Readiness Status from a PCM.				
	AUTO 99F	The student will be able to perform a Smog Inspection (Acceleration Simulation Mode), a visual inspection and functional inspection per CA State guidelines.				
		The student will be able to perform a Smog Inspection (Acceleration Simulation Mode), a visual inspection and functional inspection per CA State guidelines.				
Dept - (BHES) Biology	BIOL 10	Apply principles of the scientific method to every day problems and develop potential plans for solutions.				
		Apply principles of the scientific method to every day problems and develop potential plans for solutions.	Evaluation of student responses for 2 select questions on Exam #1 regarding the utilization of the scientific method.	The first question on the scientific method: 80% scored correctly. On the 2nd question regarding the scientific method: 85% scored correctly.	This SLO captures a foundational biological concept emphasized in all introductory biology courses. This material is taught in both lecture and laboratory settings with	In addition to the exam questions, a written homework assignment regarding the utilization of the scientific method in everyday life will be added.

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		Apply principles of the scientific method to every day problems and develop potential plans for solutions.	Evaluation of student responses for 2 select questions on Exam #1 regarding the utilization of the scientific method.	The first question on the scientific method: 80% scored correctly. On the 2nd question regarding the scientific method: 85% scored correctly.	repetition throughout the course. The SLO is valid and the 75% target is being met.	In addition to the exam questions, a written homework assignment regarding the utilization of the scientific method in everyday life will be added.
		Demonstrate an understanding of the impacts of human activities on the biosphere.				
		Demonstrate an understanding of the impacts of human activities on the biosphere.	Evaluation of student responses for 1 select question on Test #3 regarding human impacts upon the biosphere.	For the question regarding human impacts on the biosphere, 80% of the students correctly answered the question.	This SLO captures a foundational biological concept emphasized in all introductory biology courses. This material is taught in both lecture and laboratory settings with repetition throughout the course. The SLO is valid and the 75% target is being met.	In the future, a written research assignment may be incorporated in order to enhance student understanding of this topic.
		Evaluate the correlation of structure and function in plants and animals.				
		Evaluate the correlation of structure and function in plants and animals.	Evaluation of student responses for 2 Select questions on TEST # 1 regarding structure and function of animal cells and plant cells.	The question on plants: 86% scored correctly and for the question on animals: 80% scored correctly.	This SLO captures a foundational biological concept emphasized in all introductory biology courses. This material is taught in both lecture and laboratory settings with repetition throughout the course. The SLO is valid and the 75% target is being met.	Keep the SLO and diversify how it is measured to include lab assessments.
		Identify and explain the characteristics of life.				
		Identify and explain the characteristics of life.	Evaluation of student responses for one select question on TEST # 1 regarding the characteristics of life.	77% of the students answered this question correctly.	This SLO captures a foundational biological concept emphasized in all introductory biology courses. This material is presented and discussed primarily in lecture. The SLO is valid and the 75% target is being met.	Keep the SLO. Incorporate this concept into lab activities or discussions.
	BIOL 11	Investigate the forms and functions of selected human organ systems from the				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
BIOL	11	molecular/cellular level to homeostasis at the organismal level.				
		Investigate the forms and functions of selected human organ systems from the molecular/cellular level to homeostasis at the organismal level.	I emailed enrolled students the week before the start of the quarter and instructed them to complete an electronic survey before coming to class. As part of the survey, students were instructed to respond to three essay questions based on their prior knowledge. Two of those three questions were connected to this SLO. One of the questions read "Your NERVES and your GLANDS serve a very similar purpose in your body." To what extent do you agree or disagree with this statement? Why?? The other prompt asked students to place some genetically and environmentally determined traits in the order they happen in the development of a baby, and explain the reasoning for the order. Students responded to these same essay prompts on the last day of class, so I had paired pre-class and post-class data for my students. I used the same grading keys for both the pre- and post-assessments, and analyzed 1) the extent to which students changed their scores from before to after the class, and 2) the average class scores before and after the course.	For question one, students on average increased their scores by 4 points from the start to the end of the class, and for question two, students on average increased their scores by 7 points from the start to the end of the class. These are quite large improvements in scores, given that the questions were worth only 8 points and 12 points respectively. 100% of students improved their scores on the second question and 48 students out of 49 present improved their scores for the first question. The class average for question one increased from 29% to 76% from pre- to post-assessment. The class average for question two increased from 16% to 78% from pre- to post-assessment.	I was incredibly pleased with these results, not only because students scored highly at the end of the class, but more importantly because my data shows students significantly changed their understanding of biology from the start to the end of class. Even more interestingly, the pre-assessment essay responses on the development of a baby showed numerous fascinating misconceptions about biology and genetics. For example, many students commented that a person's sex is determined by hormones released by the mother or by something the mother does during pregnancy. Many other students voiced the idea that all humans begin as females and then some change to males!	I will continue to use these assessment prompts, because they have the ability to show conceptual changes in students, and because they yield interesting misconceptions to address in class. In the future, I will use quotes from students' pre-assessments as discussion prompts when beginning genetics and reproduction. This will help directly confront students' misconceptions and will hopefully make even higher post-assessment scores possible in the future.
		Use scientific reasoning to evaluate the biological principles underlying current human health dilemmas, such as the causes of disease, use of biotechnologies,				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		management of epidemics and public health, ecological/environmental health, and social health inequities.				
		Use scientific reasoning to evaluate the biological principles underlying current human health dilemmas, such as the causes of disease, use of biotechnologies, management of epidemics and public health, ecological/environmental health, and social health inequities.	I emailed enrolled students the week before the start of the quarter and instructed them to complete an electronic survey before coming to class. As part of the survey, students were instructed to respond to three essay questions based on their prior knowledge. One of those three questions was connected to this SLO, and it read "There are NOT currently any DNA technologies that treat human diseases, but researchers hope to discover some in the future. To what extent do you agree or disagree with this statement? Provide examples to support your opinion." Students also responded to this same essay prompt on the last day of class, so I had paired pre-class and post-class data for my students. I used the same grading key for both the pre- and post-assessments, and analyzed 1) the extent to which students changed their scores from before to after the class, and 2) the average class scores before and after the course.	On average, students increased their scores by 5 points from the beginning of the course to the end of the course. This is quite a substantial improvement, since only 14 points were available on this essay question. Only 3 students out of 49 present did not improve their scores from the start of the class to the end. The class average score for the pre-assessment was a 16%, whereas the class average score for the post-assessment was a 54%.	I was really pleased with how dramatically most students improved on this essay question from the start to the end of the class. Most students scored 0 or 2 points out of 14 on their pre-assessment, and could describe at least one biotechnology with an acceptable level of biological detail at the end. On the other hand, the class average at the end of the class was not as high as I would like. I think there were some technical reasons for this, which I discuss in the enhancement/action plan.	I will continue to assess this SLO using this essay prompt, but I plan to change my methodology in a few ways. For one, I think I will add another related essay question to get more information on students' concepts in this area. Also, I will administer the post-assessment differently, and will change my grading rubric. After discussions with colleagues, I realized that my grading rubric was far more rigorous than what instructors are using in other, more advanced classes. If I apply a more realistic, but still rigorous rubric, my students would have far exceeded my desired average score. I will also provide a more formal "quiz-like" environment for the post-assessment. This quarter I gave the post-assessment somewhat informally as a "participation credit only" exercise. I think if I made it clear to students that I would grade these for correctness as part of their grade, I would get more detailed responses. Overall, though, I am very happy with the results.
	BIOL 13	Critically review and differentiate the way in which nutrients are processed to perform various functions in marine plants and animals.				
		Critically review and				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		differentiate the way in which nutrients are processed to perform various functions in marine plants and animals.				
	BIOL 15	Evaluate ecological principles using California organisms.				
		Evaluate ecological principles using California organisms.				
		Evaluate the impact of human behavior on California ecology.				
		Evaluate the impact of human behavior on California ecology.				
	BIOL 26	Compare and contrast the shape, structure, nutritional and environmental requirements of bacteria, viruses, protozoa and fungi.				
		Compare and contrast the shape, structure, nutritional and environmental requirements of bacteria, viruses, protozoa and fungi.				
		Evaluate and demonstrate the importance of aseptic techniques when working with microorganisms.				
		Evaluate and demonstrate the importance of aseptic techniques when working with microorganisms.	The assessment tool I used to assess this outcome was a rubric. If the technique was completed without any errors (all criteria addressed), the resulting score was 12 points. Points were lost as errors were made.	Yes, my students did meet my expectations. 28 students were tested. Twenty three students were able to complete the process at the Exemplary level. All students were able to complete the procedure with at the most minor flaws.	I was pleased with the ability of the students to perform the technique successfully without contamination. There were more successful students in this group compared to last year's group. The change I made this year was to watch the students performing the procedure on more than one occasion which gave them twice the amount of critical input than the students received at the first implementation of the SLO's.	The students that did not receive the total points (12), will be required to practice each class period until they can complete the process successfully. The instructor will continually observe the student's progress.

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Evaluate and demonstrate the importance of aseptic techniques when working with microorganisms.	The assessment tool I used to assess this outcome was a rubric. If the technique was completed without any errors (all criteria addressed), the resulting score was 12 points. Points were lost as errors were made.	Yes, my students did meet my expectations. 28 students were tested. Twenty three students were able to complete the process at the Exemplary level. All students were able to complete the procedure with at the most minor flaws.	I was pleased with the ability of the students to perform the technique successfully without contamination. There were more successful students in this group compared to last year's group. The change I made this year was to watch the students performing the procedure on more than one occasion which gave them twice the amount of critical input than the students received at the first implementation of the SLO's.	The students that did not receive the total possible points (12), will be required to practice each class period until they can complete the process successfully. The instructor will continually observe the student's progress
		Evaluate and demonstrate the importance of aseptic techniques when working with microorganisms.	The assessment tool I used to assess this outcome was a rubric. If the technique was completed without any errors (all criteria addressed), the resulting score was 12 points. Points were lost as errors were made.	Yes, my students did meet my expectations. 28 students were tested. Twenty three students were able to complete the process at the Exemplary level. All students were able to complete the procedure with at the most minor flaws.	I was pleased with the ability of the students to perform the technique successfully without contamination. There were more successful students in this group compared to last year's group. The change I made this year was to watch the students performing the procedure on more than one occasion which gave them twice the amount of critical input than the students received at the first implementation of the SLO's.	The students that did not receive the total possible points (12), will be required to practice each class period until they can complete the process successfully. The instructor will continually observe the student's progress.
		Investigate host parasite relationships and assess their positive and negative impact on the participants.				
		Investigate host parasite relationships and assess their positive and negative impact on the participants.				
	BIOL 40A	Demonstrate the scientific method as employed by health professionals to evaluate real-world problems involving the skin, skeletal, and muscle systems.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Demonstrate the scientific method as employed by health professionals to evaluate real-world problems involving the skin, skeletal, and muscle systems.				
		Infer the homeostatic reactions of skin, skeletal, and muscle cells and tissues in reaction to external or internal changes in conditions.				
		Infer the homeostatic reactions of skin, skeletal, and muscle cells and tissues in reaction to external or internal changes in conditions.				
		Investigate the roles of molecules, organelles, and cells in the function of skin, skeletal, and muscle tissues.				
		Investigate the roles of molecules, organelles, and cells in the function of skin, skeletal, and muscle tissues.				
	BIOL 40B	Apply the structural organization of the the nervous system to how it processes information.				
		Apply the structural organization of the the nervous system to how it processes information.				
		Appraise the role of the cardiovascular system in maintaining homeostasis.				
		Appraise the role of the cardiovascular system in maintaining homeostasis.				
		Demonstrate the ability to apply basic knowledge regarding the structure and function of the respiratory system to predicting its				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		responses in maintainng homeostasis.				
		Demonstrate the ability to apply basic knowledge regarding the structure and function of the respiratory system to predicting its responses in maintainng homeostasis.				
	BIOL 40C	Appraise the role of the lymphatic and immune system in the body's defense to disease.				
		Appraise the role of the lymphatic and immune system in the body's defense to disease.				
		Generalize the way in which nutrients are processes to perform various energetic and structural functions in the body.				
		Generalize the way in which nutrients are processes to perform various energetic and structural functions in the body.				
		Integrate the structure and function of the kidneys in the regulation of fluid, electrolyte, and pH balance.				
		Integrate the structure and function of the kidneys in the regulation of fluid, electrolyte, and pH balance.				
		Predict the homeostatic responses of the endocrine system to internal and external changes or stimuli.				
		Predict the homeostatic responses of the endocrine system to internal and external changes or stimuli.	Small group In-class exercise involving graphing and analysis of data. Completion of follow-up	The average score on this exercise was 4/5. 32/78 students (41%) scored 5/5	Difficulties students had included: Problems with graphing and data analysis	Review of graphing and basics of negative feedback prior to exercise.

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Predict the homeostatic responses of the endocrine system to internal and external changes or stimuli.	questions designed to determine if the students understand the experimental results and if they are able to explain these results using previously studied information.	12/78 students (15%) scored 3/5. No students scored below 3/5.	Understanding /application of the concept of negative feedback	Review of graphing and basics of negative feedback prior to exercise.
	BIOL 45	Demonstrate a coherent understanding of the relationship between diet and the major chronic diseases.				
		Demonstrate a coherent understanding of the relationship between diet and the major chronic diseases.				
		Evaluate a meal plan or diet for meeting the criteria of a "healthy diet."				
		Evaluate a meal plan or diet for meeting the criteria of a "healthy diet."				
	BIOL 5	Assess the impacts of human activities on the diversity and populations of birds.				
		Assess the impacts of human activities on the diversity and populations of birds.				
	BIOL 54G	Define the characteristics of life and demonstrate an understanding of how homeostatic mechanisms are important to survival.				
		Define the characteristics of life and demonstrate an understanding of how homeostatic mechanisms are important to survival.				
	BIOL 54H	Distinguish between the functions of the skeletal system and the muscular systems and evaluate the interrelationship of these two systems in producing movement.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Distinguish between the functions of the skeletal system and the muscular systems and evaluate the interrelationship of these two systems in producing movement.				
	BIOL 54I	Apply principles of homeostasis and distinguish between the mechanisms that regulate hormones and cardiovascular function.				
		Apply principles of homeostasis and distinguish between the mechanisms that regulate hormones and cardiovascular function.				
	BIOL 54J	Evaluate the anatomy and general functions of the human digestive system.				
		Evaluate the anatomy and general functions of the human digestive system.				
	BIOL 6A	Analyze and compare the process of homeostasis as applied to common physiological processes across higher taxonomy.				
		Analyze and compare the process of homeostasis as applied to common physiological processes across higher taxonomy.	Several selected exam questions specifically targeting student achievement in analyzing and comparing the processes of homeostasis as applied to common physiological processes across higher taxonomy. Successive exams over the course of the quarter continue assessing application of these skills to alternative examples of physiological processes and taxonomic groups.	Class scores on these targeted questions exceed the overall class scores on these exams.	Current instructional methods and resources are adequately achieving these learning outcomes. It is always beneficial to seek new examples of physiological processes and organisms to use to demonstrate homeostasis.	Incorporating an outline system of homework assignments to expand the exposure throughout the quarter of each student to broader examples of physiological processes and organisms to demonstrate homeostasis.
		Apply the principles of the scientific method to critique				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		case studies in comparative biology research.				
		Apply the principles of the scientific method to critique case studies in comparative biology research.				
		Contrast the Linnaean traditional phylogenetic and cladistic processes of taxonomy.				
		Contrast the Linnaean traditional phylogenetic and cladistic processes of taxonomy.				
	BIOL 6B	Demonstrate the ability to use appropriate molecular biology techniques to answer research questions and to interpret and explain the results.				
		Demonstrate the ability to use appropriate molecular biology techniques to answer research questions and to interpret and explain the results.	Lab exam questions.	Class average of 80% correct on lab exam concept questions.	Most students are meeting this objective.	Continue with current approach.
	BIOL 6C	Design and compute an independent ecological research project.				
		Design and compute an independent ecological research project.	The assessment tool that I used was a rubric. 150 points were possible. Students were graded on content (data collection, analysis, and report of findings), oral presentation, poster aesthetics, and their field notebooks.	Score/150 students 130.07 135.012 140.00 145.04 150.022	Students performed very well on their projects. Everyone earned passing grades, and most students earned A's. Although the projects were very well done, I would like to see more clarity on the students' presentation of their statistical analysis.	I will modify the assignment slightly by improving my instructions. We do several labs in preparation for this project, so my instructions will include references to the statistical analyses we did in those labs.
	BIOL 8	Appraise the biological processes unique to women and how these processes are affected by the social context in which they live.				
		Appraise the biological processes unique to women				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		and how these processes are affected by the social context in which they live.				
Dept - (BHES) Environmental Studies	E S 1	Assess (apply) the criteria necessary to be successful in the Environmental Biology class.				
		Assess (apply) the criteria necessary to be successful in the Environmental Biology class.	Students were given a final team assessment during their final exam period. This final team assessment required them to apply all of the major themes and topics covered in the quarter to create a plan for a sustainable version of Cupertino. They were given specific questions to address as a team and were given a ?sky?s the limit? budget plan to create their version of a sustainable city.			
		Demonstrate a coherent understanding of the relationships between human use and exploitation of natural resources, environmental and ecological concepts and possible solutions and sustainable practices.				
		Demonstrate a coherent understanding of the relationships between human use and exploitation of natural resources, environmental and ecological concepts and possible solutions and sustainable practices.				
	E S 2	Analyze and communicate the relationships between our health and the health of the environment in order to apply this information in a civic and community setting.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Analyze and communicate the relationships between our health and the health of the environment in order to apply this information in a civic and community setting.	Presentation/Performance Students (working in small teams) developed and made a Final Presentation designed to inform a general audience as to the importance and history of Humans, the Environment, and Sustainability (the overall subject of the course). In so doing, they were to address the major subjects/themes covered in the course (e.g., human evolution, human impacts on the environment, key issues/obstacles to obtaining a sustainable society and potential solutions). After presenting, each team was then questioned by the instructor on various aspects of their presentation, with such questions designed to probe the depth of course knowledge and/or critical thinking skills of individual team members and/or the team as a whole.	100% of the students participating in the Final Presentation achieved at least a grade of 70% (C) for their Final Presentation.	The targeted outcome for SLO #2 for this course (ES -002.-01) was achieved for the Spring 2012 quarter. In general, both faculty and students were satisfied with the objectives and outcomes of this course.	
		Assess (apply) the criteria necessary to be successful in the Humans, the Environment and Sustainability class.				
		Assess (apply) the criteria necessary to be successful in the Humans, the Environment and Sustainability class.				
	E S 3	Appraise and communicate relationships between art history and environmental impacts - what art tells us about environmental change.				
		Appraise and communicate relationships between art history and environmental impacts - what art tells us about environmental change.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	E S 50	<p>Analyze and communicate the relationships between our health and environmental toxic exposure in order to apply this information in a civic and community setting.</p> <p>Analyze and communicate the relationships between our health and environmental toxic exposure in order to apply this information in a civic and community setting.</p> <p>Assess (apply) the criteria necessary to be successful in the Environmental Health class.</p> <p>Assess (apply) the criteria necessary to be successful in the Environmental Health class.</p>				
	E S 55	<p>Assess (apply) the criteria necessary to be successful in the Ten Steps to Effective Learning in Environmental Studies class.</p> <p>Assess (apply) the criteria necessary to be successful in the Ten Steps to Effective Learning in Environmental Studies class.</p> <p>Demonstrate the ability to communicate the relationship between effective and efficient learning strategies and success in environmental studies and other college classes.</p> <p>Demonstrate the ability to communicate the relationship between effective and efficient learning strategies and success in environmental studies and other college classes.</p>				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	E S 56	<p>Assess (apply) the criteria necessary to be successful in the Environmental Health and Justice class.</p> <p>Assess (apply) the criteria necessary to be successful in the Environmental Health and Justice class.</p> <p>Investigate and communicate the relationship between the community group's objectives and the interactions of the stakeholders in creating environmental solutions.</p> <p>Investigate and communicate the relationship between the community group's objectives and the interactions of the stakeholders in creating environmental solutions.</p>				
	E S 58	<p>Assess (apply) the criteria necessary to be successful in the Introduction to Green Building class.</p> <p>Assess (apply) the criteria necessary to be successful in the Introduction to Green Building class.</p> <p>Investigate and communicate the relationship between the elements and principles of green building design and establishing a sustainable society.</p> <p>Investigate and communicate the relationship between the elements and principles of green building design and establishing a sustainable society.</p>				
	E S 6	Assess the criteria necessary to be successful in the Environmental Law class.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Assess the criteria necessary to be successful in the Environmental Law class.				
		Investigate and communicate the relationship between an environmental issue and the environmental laws that apply in order to evaluate and analyze the application of that particular environmental law to the specified area.				
		Investigate and communicate the relationship between an environmental issue and the environmental laws that apply in order to evaluate and analyze the application of that particular environmental law to the specified area.				
	E S 61A	Assess the criteria necessary to be successful in the Environmental Protection and Pollution Prevention class with an emphasis on Local and Regional communities.				
		Assess the criteria necessary to be successful in the Environmental Protection and Pollution Prevention class with an emphasis on Local and Regional communities.				
		Investigate and communicate the relationship between the local and/or regional governmental processes and the interactions of the stakeholders in establishing environment protection and pollution prevention.				
		Investigate and communicate the relationship between the local and/or regional governmental processes and the interactions of the				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		stakeholders in establishing environment protection and pollution prevention.				
	E S 61B	Assess the criteria necessary to be successful in the Environmental Protection and Pollution Prevention class with an emphasis on state and federal topics.				
		Assess the criteria necessary to be successful in the Environmental Protection and Pollution Prevention class with an emphasis on state and federal topics.				
		Investigate and communicate the relationship between the community groups objectives and the interactions of the stakeholders in establishing environment solutions.				
		Investigate and communicate the relationship between the community groups objectives and the interactions of the stakeholders in establishing environment solutions.				
	E S 62A	Assess (apply) the criteria necessary to be successful in the Introduction to SMP and ISO 14001 class.				
		Assess (apply) the criteria necessary to be successful in the Introduction to SMP and ISO 14001 class.				
		Demonstrate the ability to communicate the relationship between voluntary environmental compliance and sustainable practices, environmental protection and involvement by key stakeholders in addressing potential impacts of an				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		organization on the environment.				
		Demonstrate the ability to communicate the relationship between voluntary environmental compliance and sustainable practices, environmental protection and involvement by key stakeholders in addressing potential impacts of an organization on the environment.				
E S 62C		#1 Assess (apply) the criteria necessary to be successful in the ISO 14001: Integration of an Environmental Management System (EMS) and Sustainability Management Plans (SMP) class.				
		#1 Assess (apply) the criteria necessary to be successful in the ISO 14001: Integration of an Environmental Management System (EMS) and Sustainability Management Plans (SMP) class.				
		#2 Demonstrate the ability to communicate the concepts, protocols and practices in developing and implementing an ISO 14001 Sustainability Management Plan in addressing potential impacts of an organization on the environment.				
		#2 Demonstrate the ability to communicate the concepts, protocols and practices in developing and implementing an ISO 14001 Sustainability Management Plan in				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		addressing potential impacts of an organization on the environment.				
	E S 62D	#1 Assess (apply) the criteria necessary to be successful in the ISO 14001: Voluntary Audit class.				
		#1 Assess (apply) the criteria necessary to be successful in the ISO 14001: Voluntary Audit class.				
		#2 Demonstrate the ability to communicate the strategies and procedures used in the process of a voluntary audit of an ISO 14001 Sustainability Management Plan in addressing potential environmental impacts of an organization				
		#2 Demonstrate the ability to communicate the strategies and procedures used in the process of a voluntary audit of an ISO 14001 Sustainability Management Plan in addressing potential environmental impacts of an organization				
	E S 63	Assess (apply) the criteria necessary to be successful in the Agenda 21: Blueprint for Sustainability class.				
		Assess (apply) the criteria necessary to be successful in the Agenda 21: Blueprint for Sustainability class.				
		Demonstrate the ability to communicate the relationship between the elements, principles and agreements of the Agenda 21 and their role in designing a sustainable society.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Demonstrate the ability to communicate the relationship between the elements, principles and agreements of the Agenda 21 and their role in designing a sustainable society.				
	E S 64	Assess (apply) the criteria necessary to be successful in the AB 32 class.				
		Assess (apply) the criteria necessary to be successful in the AB 32 class.				
		Demonstrate the ability to communicate the relationship between AB 32 law, history, values, stakeholders, and strategies to assist in implementing AB 32 (or like) targets and timetables.				
		Demonstrate the ability to communicate the relationship between AB 32 law, history, values, stakeholders, and strategies to assist in implementing AB 32 (or like) targets and timetables.				
	E S 65	Assess the criteria necessary to be successful in Environmental Stewardship.				
		Assess the criteria necessary to be successful in Environmental Stewardship.				
		Demonstrate the ability to communicate the relationship between Environmental stewardship principles and the role in designing a sustainable society.				
		Demonstrate the ability to communicate the relationship between Environmental stewardship principles and the role in designing a sustainable				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		society.				
	E S 66	Assess the criteria necessary to be successful in the Environmental Leadership class.				
		Assess the criteria necessary to be successful in the Environmental Leadership class.				
		Demonstrate the ability to communicate the relationship between environmental leadership principles and practices and their role in designing a sustainable society.				
		Demonstrate the ability to communicate the relationship between environmental leadership principles and practices and their role in designing a sustainable society.				
	E S 67	Assess (apply) the criteria necessary to be successful in the Environmental Team-Building class.				
		Assess (apply) the criteria necessary to be successful in the Environmental Team-Building class.				
		Demonstrate the ability to communicate the relationship between environmental team-building and its role in environmental protection as an integral component of a sustainable society.				
		Demonstrate the ability to communicate the relationship between environmental team-building and its role in environmental protection as an integral component of a				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		sustainable society.				
	E S 68	Assess (apply) the criteria necessary to be successful in the Community-Based Coalitions and Stakeholders class.				
		Assess (apply) the criteria necessary to be successful in the Community-Based Coalitions and Stakeholders class.				
		Demonstrate the ability to communicate the relationship between environmental protection, community-based coalitions including the involvement by key stakeholders and long-term environmental regional planning.				
		Demonstrate the ability to communicate the relationship between environmental protection, community-based coalitions including the involvement by key stakeholders and long-term environmental regional planning.				
	E S 69	Assess the criteria necessary to be successful in Energy Reliability.				
		Assess the criteria necessary to be successful in Energy Reliability.				
		Investigate and communicate the relationship between: energy efficiency, ethic justice principles, ecological and biological principles and evaluate the role of energy management in establishing and fostering sustainable society.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Investigate and communicate the relationship between: energy efficiency, ethic justice principles, ecological and biological principles and evaluate the role of energy management in establishing and fostering sustainable society.				
	E S 70	Assess (apply) the criteria necessary to be successful in the Introduction to Energy Management Technology class.				
		Assess (apply) the criteria necessary to be successful in the Introduction to Energy Management Technology class.				
		Demonstrate an understanding of energy efficiency principles, economic analysis, auditing techniques and a sustainable society utilizing energy efficiency practices.				
		Demonstrate an understanding of energy efficiency principles, economic analysis, auditing techniques and a sustainable society utilizing energy efficiency practices.				
	E S 70LX	Assess the criteria and strategies necessary to be successful in the Energy Management Technology and Principles of Building Performance Laboratory course.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Assess the criteria and strategies necessary to be successful in the Energy Management Technology and Principles of Building Performance Laboratory course.				
		Demonstrate an understanding of energy efficiency and building performance principles, economic analysis, auditing techniques and a sustainable society utilizing energy efficiency and building performance tools and practices and apply to a local case study in a lab setting.				
		Demonstrate an understanding of energy efficiency and building performance principles, economic analysis, auditing techniques and a sustainable society utilizing energy efficiency and building performance tools and practices and apply to a local case study in a lab setting.				
E S 71		Assess (apply) the criteria necessary to be successful in the The Building Envelope class.				
		Assess (apply) the criteria necessary to be successful in the The Building Envelope class.				
		Demonstrate knowledge of energy efficiency principles, properties of building				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		materials, basic principles of solar orientation, sustainable building practices and sustainable society utilizing energy efficient building practices.				
		Demonstrate knowledge of energy efficiency principles, properties of building materials, basic principles of solar orientation, sustainable building practices and sustainable society utilizing energy efficient building practices.				
E S 71LX		Assess the criteria necessary to be successful in The Building Envelope and Climate Responsive Building Design and Construction Laboratory course.				
		Assess the criteria necessary to be successful in The Building Envelope and Climate Responsive Building Design and Construction Laboratory course.				
		Demonstrate knowledge of energy efficiency principles, components of the building envelope and building materials, basic principles of solar orientation and sustainable building and a sustainable society using energy efficiency, sustainable design and construction practices and techniques in a lab setting and applied to a local case study.				
		Demonstrate knowledge of energy efficiency principles, components of the building envelope and building				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		materials, basic principles of solar orientation and sustainable building and a sustainable society using energy efficiency, sustainable design and construction practices and techniques in a lab setting and applied to a local case study.				
	E S 72	Assess (apply) the criteria necessary to be successful in the Heating, Ventilation and Air Conditioning (HVAC) Systemsclass.				
		Assess (apply) the criteria necessary to be successful in the Heating, Ventilation and Air Conditioning (HVAC) Systemsclass.	1)A survey to understand comfort in the context of residential and commercial settings; Review of HVAC drawings and name plate data; Two field trips to see firsthand different types of HVAC equipment (including the Kirsch Ctr; a written assignment to assess the understanding of the lecture materials.			
		Demonstrate an understanding of energy efficiency principles, laws of thermodynamics, effective design of HVAC systems and a sustainable society utilizing energy efficient HVAC systems.				
		Demonstrate an understanding of energy efficiency principles, laws of thermodynamics, effective design of HVAC systems and a sustainable society utilizing energy efficient HVAC systems.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	E S 72LX	Assess the criteria and strategies necessary to be successful in the heating, ventilating and air conditioning (HVAC) Laboratory course.				
		Assess the criteria and strategies necessary to be successful in the heating, ventilating and air conditioning (HVAC) Laboratory course.				
		Demonstration of an understanding of energy efficiency principles, laws of thermodynamics, effective design, installation, commissioning and operation of heating, ventilating and air conditioning (HVAC) systems and a sustainable society utilizing HVAC practices and tools in a lab setting and applied to local case studies.				
		Demonstration of an understanding of energy efficiency principles, laws of thermodynamics, effective design, installation, commissioning and operation of heating, ventilating and air conditioning (HVAC) systems and a sustainable society utilizing HVAC practices and tools in a lab setting and applied to local case studies.				
	E S 73	Assess (apply) the criteria necessary to be successful in the Electric Motors and Drives class.				
		Assess (apply) the criteria necessary to be successful in the Electric Motors and Drives class.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		<p>Demonstrate an understanding of energy efficiency principles, economic analysis, basic principles of electricity, principles of electric motor design and the importance of a sustainable society utilizing energy efficient electric motor systems.</p>				
		<p>Demonstrate an understanding of energy efficiency principles, economic analysis, basic principles of electricity, principles of electric motor design and the importance of a sustainable society utilizing energy efficient electric motor systems.</p>				
	E S 74	<p>Assess (apply) the criteria necessary to be successful in the Photovoltaic Technology class.</p>				
		<p>Assess (apply) the criteria necessary to be successful in the Photovoltaic Technology class.</p>				
		<p>Demonstrate an understanding of energy efficiency principles, economic analysis, basic principles of light, design of lighting systems and importance of a sustainable society utilizing energy efficient lighting distribution systems.</p>				
		<p>Demonstrate an</p>				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		understanding of energy efficiency principles, economic analysis, basic principles of light, design of lighting systems and importance of a sustainable society utilizing energy efficient lighting distribution systems.				
	E S 75	Assess (apply) the criteria necessary to be successful in the Electric Power Systems class.				
		Assess (apply) the criteria necessary to be successful in the Electric Power Systems class.				
		Demonstrate an understanding of energy efficiency principles, basic principles of electricity, principles of electric power generation, distribution and a sustainable society utilizing efficient electric power systems.				
		Demonstrate an understanding of energy efficiency principles, basic principles of electricity, principles of electric power generation, distribution and a sustainable society utilizing efficient electric power systems.				
	E S 76	Assess (apply) the criteria necessary to be successful in the Energy Star Products class				
		Assess (apply) the criteria necessary to be successful in				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		the Energy Star Products class				
		Demonstrate an understanding of the US EPA's Energy Star program principles, those affected by the program and how the program is implemented nationwide.				
		Demonstrate an understanding of the US EPA's Energy Star program principles, those affected by the program and how the program is implemented nationwide.				
E S 76A		Assess (apply) the criteria necessary to be successful in the Solar Thermal Systems class.				
		Assess (apply) the criteria necessary to be successful in the Solar Thermal Systems class.				
		Demonstrate an understanding of the basic principles of solar thermal energy, residential/utility scale solar system principles and a sustainable society utilizing.				
		Demonstrate an understanding of the basic principles of solar thermal energy, residential/utility scale solar system principles and a sustainable society utilizing.				
E S 77X		Assess (apply) the criteria necessary to be successful in the Special Projects in Environmental Studies class.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Assess (apply) the criteria necessary to be successful in the Special Projects in Environmental Studies class.				
		Demonstrate the ability to communicate work place or field studies principles and practices learned from an Environmental Studies special project experience.				
		Demonstrate the ability to communicate work place or field studies principles and practices learned from an Environmental Studies special project experience.				
E S 78		Assess (apply) the criteria necessary to be successful in the Energy Management Systems and Controls class.				
		Assess (apply) the criteria necessary to be successful in the Energy Management Systems and Controls class.				
		Demonstrate an understanding of energy efficiency principles, principles of energy management, control system design and a sustainable society utilizing energy management and control systems.				
		Demonstrate an understanding of energy efficiency principles, principles of energy management, control system design and a sustainable society utilizing energy management and control systems.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	E S 78LX	Assess the criteria and strategies necessary to be successful in the Energy Management Systems and Controls Laboratory course.				
		Assess the criteria and strategies necessary to be successful in the Energy Management Systems and Controls Laboratory course.				
		Demonstrate an understanding of energy efficiency principles, principles of energy management systems (EMS) and controls design, installation, commissioning and operation and a sustainable society utilizing EMS/controls practices and tools in a lab setting and applied to local case studies.				
		Demonstrate an understanding of energy efficiency principles, principles of energy management systems (EMS) and controls design, installation, commissioning and operation and a sustainable society utilizing EMS/controls practices and tools in a lab setting and applied to local case studies.				
	E S 79	Assess (apply) the criteria necessary to be successful in the Renewable and Alternative Energy Systems class.				
		Assess (apply) the criteria necessary to be successful in the Renewable and				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Alternative Energy Systems class.				
		Demonstrate an understanding of the principles of renewable energy generation, economic analysis and a sustainable society utilizing renewable energy generation.				
		Demonstrate an understanding of the principles of renewable energy generation, economic analysis and a sustainable society utilizing renewable energy generation.				
	E S 79LX	Assess criteria and strategies to be successful in the Renewable and Alternative Energy Systems Laboratory course.				
		Assess criteria and strategies to be successful in the Renewable and Alternative Energy Systems Laboratory course.				
		Demonstrate an understanding of renewable energy generation, economic analysis, alternative systems and applications and a sustainable society utilizing energy efficiency and renewable energy principles, practices and tools in a lab and applied to local case studies.				
		Demonstrate an understanding of renewable energy generation, economic analysis, alternative systems and applications and a				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		sustainable society utilizing energy efficiency and renewable energy principles, practices and tools in a lab and applied to local case studies.				
	E S 80, X-Z	Assess (apply) the criteria necessary to be successful in the California Field Studies class.				
		Assess (apply) the criteria necessary to be successful in the California Field Studies class.				
		Identify and assess natural communities and watersheds in the California Floristic Province and demonstrate an understanding of the social and environmental parameters that affect these communities.				
		Identify and assess natural communities and watersheds in the California Floristic Province and demonstrate an understanding of the social and environmental parameters that affect these communities.				
	E S 85A	Assess the criteria necessary to be successful in California Native Plants and Animals class.				
		Assess the criteria necessary to be successful in California Native Plants and Animals class.				
		Identify and access the dominant components within native plant communities in the California Floristic province. And demonstrate an understanding of the environmental parameters that affect the presence of these				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		communities.				
		Identify and access the dominant components within native plant communities in the California Floristic province. And demonstrate an understanding of the environmental parameters that affect the presence of these communities.	Students had a final presentation on a California native plant community in the Cheeseman Environmental Studies Area. Their presentation focused on their ability to conduct research and organize their presentation to cover specific topics of the characteristics, climate, plants, animals and threats posed to a specific plant community.	100% of the students in this course achieved the required expectations by accurately communicating the set requirements for their final presentation to the faculty of this course and the other students in this class.	The students learning objectives for the ES85A course were achieved for the Spring 2012 quarter.	
E S 85B		Assess the criteria necessary to be successful in Cheesemen Environmental Study Area Interpretive class.				
		Assess the criteria necessary to be successful in Cheesemen Environmental Study Area Interpretive class.				
		Research plant communities in the Cheeseman Environmental Study Area land understand plant adaptation to varying climates and habitats in California.				
		Research plant communities in the Cheeseman Environmental Study Area land understand plant adaptation to varying climates and habitats in California.				
E S 86		Assess (apply) the criteria necessary to be successful in the Global Field Studies class.				
		Assess (apply) the criteria necessary to be successful in the Global Field Studies class.				
		Identify and assess the aquatic and terrestrial ecosystems (worldwide) including the tropical regions of the Americas. Demonstrate				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		an understanding of the environmental parameters that affect the presence of these aquatic life zones & biomes.				
		Identify and assess the aquatic and terrestrial ecosystems (worldwide) including the tropical regions of the Americas. Demonstrate an understanding of the environmental parameters that affect the presence of these aquatic life zones & biomes.				
	E S 90	Assess (apply) the criteria necessary to be successful in the Environmental Research and Field Methods class.				
		Assess (apply) the criteria necessary to be successful in the Environmental Research and Field Methods class.				
		Investigate and communicate the relationship between environmental case studies and the environmental research methods (including field methods) that apply in order to evaluate and analyze the scope and limitations possessed by elected officials and regulatory agencies in addressing such issues.				
		Investigate and communicate the relationship between environmental case studies and the environmental research methods (including field methods) that apply in order to evaluate and analyze the scope and limitations possessed by elected officials and regulatory agencies in addressing such issues.				
	E S 91	Assess (apply) the criteria				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	E S 91	necessary to be successful in Environmental Education and Nature-Based Learning.				
		Assess (apply) the criteria necessary to be successful in Environmental Education and Nature-Based Learning.				
		Demonstrate an understanding of nature-based learning, interpretive techniques and development of classroom lesson plans with emphasis environmental curricula.				
		Demonstrate an understanding of nature-based learning, interpretive techniques and development of classroom lesson plans with emphasis environmental curricula.				
	E S 93	Assess (apply) the criteria necessary to be successful in the Sustainability Across the Curriculum class.				
		Assess (apply) the criteria necessary to be successful in the Sustainability Across the Curriculum class.				
		Demonstrate the ability to communicate the strategies needed to implement sustainability across the curriculum in academic institutions and the critical role of education and educators in this process.				
		Demonstrate the ability to communicate the strategies needed to implement sustainability across the curriculum in academic institutions and the critical role of education and educators in				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		this process.				
	E S 95	Assess (apply) the criteria necessary to be successful in the Introduction to Environmental Careers class.				
		Assess (apply) the criteria necessary to be successful in the Introduction to Environmental Careers class.				
		Demonstrate the ability to communicate the relationship between values, skills, environmental education, and environmental careers in order to play a role in furthering a sustainable society.				
		Demonstrate the ability to communicate the relationship between values, skills, environmental education, and environmental careers in order to play a role in furthering a sustainable society.				
	E S 95A	Assess (apply) the criteria necessary to be successful in the Environmental Studies Internship class.				
		Assess (apply) the criteria necessary to be successful in the Environmental Studies Internship class.				
		Demonstrate the ability to communicate work place principles and practices learned from an internship experience.				
		Demonstrate the ability to communicate work place principles and practices learned from an internship experience.				
	E S 96	Assess the criteria and strategies necessary to be				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	E S 96	successful in the Environmental Stewardship of the Earth's Natural Resources for Educators course.				
		Assess the criteria and strategies necessary to be successful in the Environmental Stewardship of the Earth's Natural Resources for Educators course.				
		Demonstrate an understanding of environmental stewardship principles, concepts and models that can be applied in academic institutions, resource agencies, citizens groups and others and the value of integrating stewardship into education for the student and a sustainable society.				
		Demonstrate an understanding of environmental stewardship principles, concepts and models that can be applied in academic institutions, resource agencies, citizens groups and others and the value of integrating stewardship into education for the student and a sustainable society.				
	E S 97	Assess the criteria and strategies necessary to be successful in the Environmental Leadership Teaching and Learning Model for Educators course.				
		Assess the criteria and strategies necessary to be successful in the Environmental Leadership				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Teaching and Learning Model for Educators course.				
		Demonstrate an understanding of environmental leadership principles, concepts and models that can be applied in academic institutions, resource agencies, citizens groups and others and the value of institutionalizing leadership guidelines applied to protection of natural resources into education for the student and a sustainable society.				
		Demonstrate an understanding of environmental leadership principles, concepts and models that can be applied in academic institutions, resource agencies, citizens groups and others and the value of institutionalizing leadership guidelines applied to protection of natural resources into education for the student and a sustainable society.				
E S 98		Assess the criteria and strategies necessary to be successful in the Environmental Team-Building and Community-Based Coalitions for Educators course.				
		Assess the criteria and strategies necessary to be successful in the Environmental Team-Building and Community-Based Coalitions for Educators course.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Demonstrate an understanding of environmental team-building and community-based coalitions principles, concepts, goals and models that can be applied in academic institutions, resource agencies, citizens groups and others and the value of integrating team-building strategies into education for the student and a sustainable society.				
		Demonstrate an understanding of environmental team-building and community-based coalitions principles, concepts, goals and models that can be applied in academic institutions, resource agencies, citizens groups and others and the value of integrating team-building strategies into education for the student and a sustainable society.				
ESCI 1		Utilize the environmental method to demonstrate role of scientist and public to determine a strategy to create a sustainable society using scientific principles.				
		Utilize the environmental method to demonstrate role of scientist and public to determine a strategy to create a sustainable society using scientific principles.	Demonstration OR presentation/performance (Team Assessment and Final Team Assessment) ? student presents a competence of the skills for SLO 2.	100% of the students successfully achieved the student learning outcome required in this course.	Review the basis for the performance (team assessment and final assessment requirements Review the performance scores of the students in ESCI 001.01	Require improved monitoring of team assessment preparation
		Utilize the scientific method to demonstrate role of scientist and public to determine a				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		strategy to create a sustainable society using scientific principles.				
		Utilize the scientific method to demonstrate role of scientist and public to determine a strategy to create a sustainable society using scientific principles.				
ESCI 19		Compare Environmental and ecological principles, concepts, and possible solutions and sustainable practices.				
		Compare Environmental and ecological principles, concepts, and possible solutions and sustainable practices.	Oral presentation of sustainable solutions to an environmental problem, students presented on an assigned topic that was provided to them based on case studies conducted in class, lectures and research projects.	The vast majority of students had a good understanding of the concepts discussed and researched in class during the quarter	Hands-on projects were a great tool to get students to comprehend the material discussed in class, lectures were provide first, then class discussion then follow up research and presentation from students	
		Compare Environmental and ecological principles, concepts, and possible solutions and sustainable practices.	Students are assessed based on realistic environmental scenario and asked to prepare and present a Powerpoint Presentation that focuses on their ability to explain the concepts they learned throughout the quarter. Their Powerpoint and presentation must be in their own words and showcase their ability to utilize critical thinking skills to find creative ways to explain complex concepts in a simple manner.	100% of students achieved the expected results of the concepts covered in class.	The Target Outcomes have been met for this course. ESCI-019.61 Spring 2012	
		Compare Environmental and ecological principles, concepts, and possible solutions and sustainable practices.	Students are given a realistic scenario and asked to prepare and present a Powerpoint Presentation that focuses on their ability to explain the concepts they learned	Approximately 90% of students showed obvious comprehension of the concepts covered in class, to the extent that they were capable of accurately	The Target Outcomes have been met for this course. ESCI-019.62 Spring 2012	

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Compare Environmental and ecological principles, concepts, and possible solutions and sustainable practices.	throughout the quarter. Their presentation must be in their own words and showcase their ability to utilize critical thinking skills to find creative ways to explain complex concepts in a simple manner.	explaining the information during their final presentations. The other 10% showed comprehension of the material but had some difficulty explaining it accurately during the final presentation.	The Target Outcomes have been met for this course. ESCI-019.62 Spring 2012	
		Demonstrate a coherent understanding of the relationship between human use and exploitation of natural resources.				
		Demonstrate a coherent understanding of the relationship between human use and exploitation of natural resources.				
	ESCI 1L	Assess (apply) the criteria necessary to be successful in the Environmental Science Lab class.				
		Assess (apply) the criteria necessary to be successful in the Environmental Science Lab class.				
		In a outdoor laboratory setting; survey local open space areas such as major aquatic life zones (coastal wetlands, inland wetlands, coastal ocean, and riparian) and terrestrial biomes (grasslands, forests, savannah and transitional areas (ecotones)) and the impacts on these systems by humans; as well as human systems including sanitary landfills, sewage treatment facilities and others.				
		In a outdoor laboratory setting; survey local open space areas such as major aquatic life zones (coastal wetlands, inland wetlands, coastal				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		ocean, and riparian) and terrestrial biomes (grasslands, forests, savannah and transitional areas (ecotones)) and the impacts on these systems by humans; as well as human systems including sanitary landfills, sewage treatment facilities and others.				
	ESCI 20	Assess the criteria necessary to be successful in the Introduction to Biodiversity class.				
		Assess the criteria necessary to be successful in the Introduction to Biodiversity class.				
		Utilize the scientific principles to evaluate biological diversity and the methods to analyze the underlying cause of biodiversity loss and the trends to conserve it.				
		Utilize the scientific principles to evaluate biological diversity and the methods to analyze the underlying cause of biodiversity loss and the trends to conserve it.				
	ESCI 21	Appraise the impacts of human activity affecting California's biodiversity, historically and today.				
		Appraise the impacts of human activity affecting California's biodiversity, historically and today.				
		Assess and apply the criteria and requirements needed to be successful in the California Biodiversity class.				
		Assess and apply the criteria and requirements needed to be successful in the California				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		<p>Biodiversity class.</p> <p>Evaluate the long-term impacts on California's landforms and biodiversity of their major determinants, with the Pacific and Sierra acting as major physical/biological barriers.</p>				
		<p>Evaluate the long-term impacts on California's landforms and biodiversity of their major determinants, with the Pacific and Sierra acting as major physical/biological barriers.</p>				
	ESCI 30	<p>Appraise current national and extra national conservation issues and critique solutions to stop and/or mitigate species decline or loss.</p>				
		<p>Appraise current national and extra national conservation issues and critique solutions to stop and/or mitigate species decline or loss.</p>				
		<p>Assess and apply the criteria and requirements needed to be successful in the Conservation Biology class.</p>				
		<p>Assess and apply the criteria and requirements needed to be successful in the Conservation Biology class.</p>				
		<p>Defend the importance of genetic diversity within species as a key conservation tool aiding species' long-term survival.</p>				
		<p>Defend the importance of genetic diversity within species as a key conservation tool aiding species' long-term survival.</p>				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	ESCI 50	Assess (apply) the criteria necessary to be successful in the Introduction to WCT: Connectivity class including reviewing the course objectives.				
		Assess (apply) the criteria necessary to be successful in the Introduction to WCT: Connectivity class including reviewing the course objectives.				
		Students will research and utilize the practices, technologies and principles utilized in wildlife corridor (connectivity) assessments.				
		Students will research and utilize the practices, technologies and principles utilized in wildlife corridor (connectivity) assessments.				
	ESCI 52	Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Animal Tracking Techniques class including reviewing the course objectives.				
		Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Animal Tracking Techniques class including reviewing the course objectives.				
		Students will research and assess the techniques and practices of animal tracking and observation and apply these concepts to a local corridor case study				
		Students will research and assess the techniques and				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		practices of animal tracking and observation and apply these concepts to a local corridor case study				
	ESCI 53	#1 Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Data Collection class including reviewing the course objectives.				
		#1 Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Data Collection class including reviewing the course objectives.				
		#2 Students will analyze and assess the techniques and practices of data collection used in wildlife corridor technology and apply these concepts to a local corridor case study				
		#2 Students will analyze and assess the techniques and practices of data collection used in wildlife corridor technology and apply these concepts to a local corridor case study				
	ESCI 54	Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Data Analysis class including reviewing the course objectives.				
		Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Data Analysis class including reviewing the course objectives.				
		Students will analyze and assess the techniques and				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		practices of data analysis used in wildlife corridor technology and apply these concepts to a local corridor case study				
		Students will analyze and assess the techniques and practices of data analysis used in wildlife corridor technology and apply these concepts to a local corridor case study				
	ESCI 55	Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Corridor Design class including reviewing the course objectives.				
		Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Corridor Design class including reviewing the course objectives.				
		Students will analyze and assess the process of wildlife corridor design and ecosystem management and apply these concepts to a local corridor design case study				
		Students will analyze and assess the process of wildlife corridor design and ecosystem management and apply these concepts to a local corridor design case study				
	ESCI 56	Assess the criteria necessary to be successful in Plant Techniques class.				
		Research and conduct the various plant survey techniques utilized in vegetation assessments.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Research and conduct the various plant survey techniques utilized in vegetation assessments.				
	ESCI 57	Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Advanced Tracking class.				
		Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Advanced Tracking class.				
		Students will research and analyze, in a field setting, the advanced tracking techniques utilized in wildlife corridor/connectivity assessments.				
		Students will research and analyze, in a field setting, the advanced tracking techniques utilized in wildlife corridor/connectivity assessments.				
	ESCI 58	Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Advanced Tracking 2 class.				
		Assess (apply) the criteria necessary to be successful in the Wildlife Corridor Technician Advanced Tracking 2 class.				
		Students will research and analyze, in a field setting, the advanced tracking, level 2, techniques utilized in wildlife corridor/connectivity assessments.				
		Students will research and analyze, in a field setting, the				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		advanced tracking, level 2, techniques utilized in wildlife corridor/connectivity assessments.				
	ESCI 61	Assess (apply) the criteria necessary to be successful in the Introduction to Photovoltaic Technology class.				
		Assess (apply) the criteria necessary to be successful in the Introduction to Photovoltaic Technology class.				
		Investigate and communicate the fundamentals of solar electricity (including conversion of sunlight to electricity, solar potential and types of solar systems) and the role of this form of renewable energy in establishing a sustainable society.				
		Investigate and communicate the fundamentals of solar electricity (including conversion of sunlight to electricity, solar potential and types of solar systems) and the role of this form of renewable energy in establishing a sustainable society.				
	ESCI 63	Assess (apply) the criteria necessary to be successful in the Photovoltaic Technology class.				
		Assess (apply) the criteria necessary to be successful in the Photovoltaic Technology class.				
		Investigate and communicate the relationship between the				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		sun and the role of solar power in establishing a sustainable society.				
		Investigate and communicate the relationship between the sun and the role of solar power in establishing a sustainable society.				
	ESCI 77	Assess (apply) the criteria necessary to be successful in the Special Projects in Environmental Science class.				
		Assess (apply) the criteria necessary to be successful in the Special Projects in Environmental Science class.				
		Demonstrate the ability to communicate work place or field studies principles and practices learned from an Environmental Science special project experience				
		Demonstrate the ability to communicate work place or field studies principles and practices learned from an Environmental Science special project experience				
	ESCI 81	Assess (apply) the criteria necessary to be successful in the Introduction to Ecotourism in the 21st Century class.				
		Assess (apply) the criteria necessary to be successful in the Introduction to Ecotourism in the 21st Century class.				
		Identify and assess the concepts, guiding principles and practices of the emerging field of ecotourism in the 21st Century. Demonstrate an understanding of the environmental parameters that affect natural systems and				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		human settlements and collaborative efforts necessary in this field.				
		Identify and assess the concepts, guiding principles and practices of the emerging field of ecotourism in the 21st Century. Demonstrate an understanding of the environmental parameters that affect natural systems and human settlements and collaborative efforts necessary in this field.				
	ESCI 82	Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Coyote Valley class.				
		Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Coyote Valley class.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Coyote Valley wildlife corridor.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Coyote Valley wildlife corridor.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	ESCI 83	Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Salinas River class.				
		Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Salinas River class.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Salinas River wildlife corridor.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Salinas River wildlife corridor.				
	ESCI 84	Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: San Benito River class.				
		Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: San Benito River class.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the San Benito River wildlife corridor.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the San Benito River wildlife corridor.				
	ESCI 85	Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Pajaro River class.				
		Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Pajaro River class.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Pajaro River wildlife corridor.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		along roads, highways, culverts and related structures within the Pajaro River wildlife corridor.				
	ESCI 86	Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Pacheco Pass class.				
		Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Pacheco Pass class.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Pacheco Pass wildlife corridor.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Pacheco Pass wildlife corridor.				
	ESCI 87	Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Diablo Range class.				
		Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Diablo Range class.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Diablo Range wildlife corridor.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Diablo Range wildlife corridor.				
	ESCI 88	Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Santa Cruz Mountains class.				
		Assess (apply) the criteria necessary to be successful in the Central Coast Wildlife Corridors: Santa Cruz Mountains class.				
		Students will utilize wildlife field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Santa Cruz Mountains wildlife corridor.				
		Students will utilize wildlife				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		field identification techniques including animal tracking, bird surveys and field observation to analyze the movement, activity and core corridor areas utilized by wildlife including along roads, highways, culverts and related structures within the Santa Cruz Mountains wildlife corridor.				
	ESCI 90	Assess (apply) the criteria necessary to be successful in the Santa Clara County Field Studies: Tule Elk class.				
		Assess (apply) the criteria necessary to be successful in the Santa Clara County Field Studies: Tule Elk class.				
		Identify and assess tule elk natural history including habitat utilization, home range use, behavior, distribution and abundance. Demonstrate an understanding of the environmental parameters that affect the presence of this subspecies of North American elk.				
		Identify and assess tule elk natural history including habitat utilization, home range use, behavior, distribution and abundance. Demonstrate an understanding of the environmental parameters that affect the presence of this subspecies of North American elk.				
	ESCI 91	Assess (apply) the criteria necessary to be successful in the Santa Clara County Field Studies: American Badger class.				
		Assess (apply) the criteria				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		necessary to be successful in the Santa Clara County Field Studies: American Badger class.				
		Identify and assess badger natural history including habitat utilization, home range use, behavior, distribution and abundance. Demonstrate an understanding of the environmental parameters that affect the presence of this species in North America.				
		Identify and assess badger natural history including habitat utilization, home range use, behavior, distribution and abundance. Demonstrate an understanding of the environmental parameters that affect the presence of this species in North America.				
	ESCI 92	Assess (apply) the criteria necessary to be successful in the Santa Clara County Field Studies: Raptors class.				
		Assess (apply) the criteria necessary to be successful in the Santa Clara County Field Studies: Raptors class.				
		Identify and assess raptor natural history including habitat utilization, home range use, behavior, distribution and abundance. Demonstrate an understanding of the environmental parameters that affect the past and present distribution and abundance of raptors in Santa Clara County.				
		Identify and assess raptor natural history including habitat utilization, home range use, behavior, distribution and				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		abundance. Demonstrate an understanding of the environmental parameters that affect the past and present distribution and abundance of raptors in Santa Clara County.				
Dept - (BHES) Health Technologies	HTEC 101A	Demonstrate proper blood collection, hematocrit, white blood cell count and differential techniques.				
		Demonstrate proper blood collection, hematocrit, white blood cell count and differential techniques.				
		Practice proper application of OSHA standards.				
		Practice proper application of OSHA standards.				
	HTEC 101B	Demonstrate medical asepsis, nutrition, diet therapy, vital signs, preparation of patients and examination rooms, and various procedures in the medical office.				
		Demonstrate medical asepsis, nutrition, diet therapy, vital signs, preparation of patients and examination rooms, and various procedures in the medical office.				
	HTEC 101C	Demonstrate a level of competence in the skills learned in Medical Communications and Medical Transcription.				
		Demonstrate a level of competence in the skills learned in Medical Communications and Medical Transcription.				
		Demonstrate improvement in speed and accuracy in				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		keyboarding medical reports and transcription.				
		Demonstrate improvement in speed and accuracy in keyboarding medical reports and transcription.				
	HTEC 101D	Demonstrate billing and collection procedures and the various steps in preparing insurance claim forms.				
		Demonstrate billing and collection procedures and the various steps in preparing insurance claim forms.				
		Illustrate the ICD-9-CM and CPT codes used in medical office.				
		Illustrate the ICD-9-CM and CPT codes used in medical office.				
	HTEC 101E	Demonstrate the local application of heat and cold, use of medical office instruments, application of sterile gloves.				
		Demonstrate the local application of heat and cold, use of medical office instruments, application of sterile gloves.				
		Demonstrate the sterilization and disinfection of equipment and instruments and techniques in assisting in minor surgery.				
		Demonstrate the sterilization and disinfection of equipment and instruments and techniques in assisting in minor surgery.				
	HTEC 101F	Demonstrate measuring and assessing heart rhythms using an electrocardiograph				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	HTEC 101F	including analyzing normal and abnormal electrocardiograms.				
		Demonstrate measuring and assessing heart rhythms using an electrocardiograph including analyzing normal and abnormal electrocardiograms.				
	HTEC 110	Illustrate steps involved in seeking employment in medical facilities which include preparation of resumes and interviewing and preparation for certification examinations.				
		Illustrate steps involved in seeking employment in medical facilities which include preparation of resumes and interviewing and preparation for certification examinations.				
	HTEC 180	Safely and accurately perform analytical procedures in Clinical Hematology/Urinalysis/Coagulation departments identifying normal and abnormal lab tests and factors affecting results and take				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	HTEC 180	appropriate action.				
		Safely and accurately perform analytical procedures in Clinical Hematology/Urinalysis/Coagulation departments identifying normal and abnormal lab tests and factors affecting results and take appropriate action.				
	HTEC 183	Safely and accurately perform analytical procedures in Clinical Microbiology identifying normal and abnormal lab tests and factors affecting results and take appropriate action.				
		Safely and accurately perform analytical procedures in Clinical Microbiology identifying normal and abnormal lab tests and factors affecting results and take appropriate action.				
	HTEC 184	Safely and accurately perform analytical procedures in Clinical Immunology/Immunoematology identifying normal and abnormal lab tests				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	HTEC 184	and factors affecting results and take appropriate action.				
		Safely and accurately perform analytical procedures in Clinical Immunology/ Immunohematology identifying normal and abnormal lab tests and factors affecting results and take appropriate action.				
	HTEC 185	Safely and accurately perform analytical procedures in Clinical Chemistry department identifying normal and abnormal lab tests and factors affecting results and take appropriate action.				
		Safely and accurately perform analytical procedures in Clinical Chemistry department identifying normal and abnormal lab tests and factors affecting results and take appropriate action.				
	HTEC 50	Develop the evolution, desirable characteristics and abilities of various roles of health technologies team members as it relates to the health care team.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Develop the evolution, desirable characteristics and abilities of various roles of health technologies team members as it relates to the health care team.	Embedded test and assignment questions	Refer to Archived from ECMS/HTEC 50	Refer to Archived from ECMS/HTEC 50	
		Develop various methods of coping with loss.				
		Develop various methods of coping with loss.	Embedded exam and assignment questions.	Refer to Archived from ECMS/HTEC 50	Refer to Archived from ECMS/HTEC 50	
	HTEC 60A	Demonstrate the interpretation of medical abbreviations.				
		Demonstrate the interpretation of medical abbreviations.	Embedded test and assignment questions.	Refer to Archived from ECMS/HTEC 60A under "Documents" tab.	Refer to Archived from ECMS/HTEC 60A under "Documents" tab.	Refer to Archived from ECMS/HTEC 60A under "Documents" tab.
		Develop medical terms as they relate to the body's structure, diseases of the various body systems, medical specialties and medical specialists.				
		Develop medical terms as they relate to the body's structure, diseases of the various body systems, medical specialties and medical specialists.	Embedded test and assignment questions.	Refer to Archived from ECMS/HTEC 60A under "Documents" tab.	Refer to Archived from ECMS/HTEC 60A under "Documents" tab.	Refer to Archived from ECMS/HTEC 60A under "Documents" tab.
		Illustrate the word components of medical terminology.				
		Illustrate the word components of medical terminology.	Embedded test and assignment questions.	Refer to Archived from ECMS/HTEC in Documents	Refer to Archived from ECMS/HTEC in Documents	Refer to Archived from ECMS/HTEC in Documents
	HTEC 60G	Demonstrate the anatomy, physiology, and diseases of the digestive, urinary, female reproductive, male reproductive, nervous, sensory, and integumentary body systems.				
		Demonstrate the anatomy, physiology, and diseases of the digestive, urinary, female reproductive, male reproductive, nervous, sensory, and integumentary body systems.	Embedded test and assignment questions.	Refer to Archived from ECMS/HTEC 60G under "Documents" tab.	Refer to Archived from ECMS/HTEC 60G under "Documents" tab.	Refer to Archived from ECMS/HTEC 60G under "Documents" tab.

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Develop case studies that concern diagnostic, conditions, and diseases of systems and/or medical specialties.				
		Develop case studies that concern diagnostic, conditions, and diseases of systems and/or medical specialties.	Embedded test and assignment questions.	Refer to Archived from ECMS/HTEC 60G under "Documents" tab.	Refer to Archived from ECMS/HTEC 60G under "Documents" tab.	Refer to Archived from ECMS/HTEC 60G under "Documents" tab.
	HTEC 60H	Demonstrate the anatomy, physiology and diseases of the cardiovascular, respiratory, blood, lymphatic, musculoskeletal and endocrine systems.				
		Demonstrate the anatomy, physiology and diseases of the cardiovascular, respiratory, blood, lymphatic, musculoskeletal and endocrine systems.	Embedded test and assignment questions.	Refer to Archived from ECMS/HTEC 60G under "Documents" tab.	Refer to Archived from ECMS/HTEC 60G under "Documents" tab.	Refer to Archived from ECMS/HTEC 60G under "Documents" tab.
		Develop case studies that concern diagnostic conditions and diseases of systems and/or medical specialties.				
		Develop case studies that concern diagnostic conditions and diseases of systems and/or medical specialties.	Design scenarios that relate to the disease process.	Refer to Archived from ECMS/HTEC 60H under "Documents" tab.	Refer to Archived from ECMS/HTEC 60H under "Documents" tab.	
	HTEC 61	Demonstrate words concerned with keyboarding, proofreading and editing of manuscripts and abstracts.				
		Demonstrate words concerned with keyboarding, proofreading and editing of manuscripts and abstracts.				
		Develop the various mechanical formats and guidelines used to prepare a medical history and physical report and design the information which appears in				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		various medical reports.				
		Develop the various mechanical formats and guidelines used to prepare a medical history and physical report and design the information which appears in various medical reports.				
	HTEC 64A	Demonstrate the classification of bacteria and identification of infectious diseases.				
		Demonstrate the classification of bacteria and identification of infectious diseases.				
		Demonstrate the handling and storage of specimens.				
		Demonstrate the handling and storage of specimens.				
		Demonstrate the practice of proper application of OSHA standards.				
		Demonstrate the practice of proper application of OSHA standards.				
	HTEC 64B	Demonstrate proper procedures for the collection of blood by venipuncture and skin puncture.				
		Demonstrate proper procedures for the collection of blood by venipuncture and skin puncture.				
		Demonstrate the practice of proper application of OSHA standards.				
		Demonstrate the practice of proper application of OSHA standards.				
		Recognize and respond to potential problems encountered during venipuncture that can impact patient care.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Recognize and respond to potential problems encountered during venipuncture that can impact patient care.				
	HTEC 68	Demonstrate proper medical reception techniques in the clinical environment.				
		Demonstrate proper medical reception techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the doctors office.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the doctors office.				
	HTEC 71	Demonstrate appropriate communication skills with patients and colleagues.				
		Demonstrate appropriate communication skills with patients and colleagues.				
		Identify and discuss the advantages and disadvantages of the different types of appointment scheduling including demonstrating computer skills.				
		Identify and discuss the advantages and disadvantages of the different types of appointment scheduling including demonstrating computer skills.				
		Illustrate skills necessary to assist incoming and outgoing patients in the medical reception area of the doctor's				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		office.				
		Illustrate skills necessary to assist incoming and outgoing patients in the medical reception area of the doctor's office.				
	HTEC 72	Demonstrate eligibility, benefits and guidelines for health insurance companies.				
		Demonstrate eligibility, benefits and guidelines for health insurance companies.				
		Illustrate fee determination, billing, diagnostic and procedural coding in the medical facility.				
		Illustrate fee determination, billing, diagnostic and procedural coding in the medical facility.				
		Illustrate the guidelines for credit arrangement when using payment for medical services.				
		Illustrate the guidelines for credit arrangement when using payment for medical services.				
	HTEC 73	Illustrate medical ethics. Medical practice act, legal relationship of patient and physician, legal responsibilities of the health technology team member, professional liability, physicians civic duties and arbitration.				
		Illustrate medical ethics. Medical practice act, legal relationship of patient and physician, legal responsibilities of the health technology team member, professional liability, physicians civic duties and				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		arbitration.				
	HTEC 74	Demonstrate transcription skills necessary for medical office using actual diction from various medical specialties.				
		Demonstrate transcription skills necessary for medical office using actual diction from various medical specialties.				
		Illustrate the anatomy, physiology and diseases of the various body systems and utilize them in medical transcription.				
		Illustrate the anatomy, physiology and diseases of the various body systems and utilize them in medical transcription.				
	HTEC 75	Illustrate advanced administrative skills including computerized accounts, management duties of the medical office manager, personnel recruitment and training, financial management, office policy and procedural manuals, and editorial and research duties and meeting arrangements.				
		Illustrate advanced administrative skills including computerized accounts, management duties of the medical office manager, personnel recruitment and training, financial management, office policy and procedural manuals, and editorial and research duties and meeting arrangements.				
	HTEC 77	Develop in conjunction with student and instructor.				
		Develop in conjunction with				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		student and instructor.				
	HTEC 80	Identify abnormal CBC results and correlate to possible causes.				
		Identify abnormal CBC results and correlate to possible causes.				
		Practice proper application of OSHA standards.				
		Practice proper application of OSHA standards.				
		Use proper technique and follow written laboratory procedures to perform Complete Blood Count (CBC) with differential and platelet estimate on a minimum of 2 normal blood samples.				
		Use proper technique and follow written laboratory procedures to perform Complete Blood Count (CBC) with differential and platelet estimate on a minimum of 2 normal blood samples.				
	HTEC 80A	Given patient history information and laboratory results identify the hematological disorder displayed by the patient.				
		Given patient history information and laboratory results identify the hematological disorder displayed by the patient.				
	HTEC 81	Identify abnormal urinalysis results and correlate these results with possible causes.				
		Identify abnormal urinalysis results and correlate these results with possible causes.				
		Perform routine urinalysis on a minimum of 2 normal urine				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		samples with 100% accuracy to include both physical and chemical analysis.				
		Perform routine urinalysis on a minimum of 2 normal urine samples with 100% accuracy to include both physical and chemical analysis.				
		Practice proper application of OSHA standards.				
		Practice proper application of OSHA standards.				
	HTEC 81A	Given a diagram of the kidney, labels its parts, trace the path of blood flow and urine formation to include reabsorption and secretion.				
		Given a diagram of the kidney, labels its parts, trace the path of blood flow and urine formation to include reabsorption and secretion.				
	HTEC 82	Analyze blood samples for Protine (PT) and Activated Partial Thromboplastin Time (APTT) following proper techniques and procedures.				
		Analyze blood samples for Protine (PT) and Activated Partial Thromboplastin Time (APTT) following proper techniques and procedures.				
		Identify abnormal PT and APTT results and correlate to possible causes.				
		Identify abnormal PT and APTT results and correlate to possible causes.				
		Practice proper application of OSHA standards.				
		Practice proper application of OSHA standards.				
	HTEC	Evaluate laboratory data to				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	82A	distinguish between primary and secondary hemostasis disorders and defend your response.				
		Evaluate laboratory data to distinguish between primary and secondary hemostasis disorders and defend your response.				
	HTEC 83	Distinguish between normal flora and pathogenic bacteria for selected body sites				
		Distinguish between normal flora and pathogenic bacteria for selected body sites				
		Practice proper application of OSHA standards				
		Practice proper application of OSHA standards				
	HTEC 83A	Given patient history information, specimen source and laboratory results including biochemical profile, media used, gram stain, and other selected identification results identify the hematological organism isolated from the patient.				
		Given patient history information, specimen source and laboratory results including biochemical profile, media used, gram stain, and other selected identification results identify the hematological organism isolated from the patient.				
	HTEC 84	Practice proper application of OSHA standards				
		Practice proper application of OSHA standards				
		Use proper technique and follow written laboratory				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		procedures to perform all testing necessary to find a mock patient a compatible unit of blood.				
		Use proper technique and follow written laboratory procedures to perform all testing necessary to find a mock patient a compatible unit of blood.				
	HTEC 84A	Correlate clinical significance of serologic test results with possible disease states.				
		Correlate clinical significance of serologic test results with possible disease states.				
		Given patient history and various immunoheamatolgy testing evaluate the results and correalte them with various disease states.				
		Given patient history and various immunoheamatolgy testing evaluate the results and correalte them with various disease states.				
	HTEC 85A	Practice proper application of OSHA standards.				
		Practice proper application of OSHA standards.				
		Use proper techniques to perform serial diltion.				
		Use proper techniques to perform serial diltion.				
		Using spectrophotometer and proper techniques, dilute a given standard to establish a calibration curve. Analyze and determine the concentration of an unknown sample using the curve.				
		Using spectrophotometer and proper techniques, dilute a				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		given standard to establish a calibration curve. Analyze and determine the concentration of an unknown sample using the curve.				
	HTEC 85B	Practice proper application of OSHA standards				
		Practice proper application of OSHA standards				
		Use troubleshooting skills to identify potential errors in laboratory testing.				
		Use troubleshooting skills to identify potential errors in laboratory testing.				
	HTEC 85C	Identify sources of error in clinical laboratory testing and classify them as pre-analytical, analytical and post-analytical.				
		Identify sources of error in clinical laboratory testing and classify them as pre-analytical, analytical and post-analytical.				
	HTEC 85D	Given patient history and chest x-ray laboratory testing results identify normal and abnormal results and correlate with possible disease states.				
		Given patient history and chest x-ray laboratory testing results identify normal and abnormal results and correlate with possible disease states.				
	HTEC 90G	Demonstrate proper application of OSHA standards.				
		Demonstrate proper application of OSHA standards.				
		Demonstrate the regulation and measurement of vital signs.				
		Demonstrate the regulation				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		and measurement of vital signs.				
		Differentiate between component parts of the medical asepsis process.				
		Differentiate between component parts of the medical asepsis process.				
	HTEC 90H	Demonstrate the local application of heat and cold, use of medical office instruments, application of sterile gloves.				
		Demonstrate the local application of heat and cold, use of medical office instruments, application of sterile gloves.				
		Demonstrate the sterilization and disinfection of equipment and instruments and techniques in assisting in minor surgery.				
		Demonstrate the sterilization and disinfection of equipment and instruments and techniques in assisting in minor surgery.				
	HTEC 91	Demonstrate measuring and assessing heart rhythms using an electrocardiograph including analyzing normal and abnormal electrocardiograms.				
		Demonstrate measuring and assessing heart rhythms using an electrocardiograph including analyzing normal and abnormal electrocardiograms.				
		Illustrate common terms used in electrocardiography, physical therapy and radiology				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		procedures.				
		Illustrate common terms used in electrocardiography, physical therapy and radiology procedures.				
		Illustrate the structure and electrical conduction system of the heart.				
		Illustrate the structure and electrical conduction system of the heart.				
	HTEC 93	Demonstrate dosage calculation, drug legislation and standards, drug preparations and information affecting various body systems.				
		Demonstrate dosage calculation, drug legislation and standards, drug preparations and information affecting various body systems.				
	HTEC 94	Demonstrate proper techniques, hazards and complications, post-treatment and test patient of a minimum of 10 intramuscular, 10 subcutaneous and 10 intradermal injections.				
		Demonstrate proper techniques, hazards and complications, post-treatment and test patient of a minimum of 10 intramuscular, 10 subcutaneous and 10 intradermal injections.				
		Illustrate pertinent anatomy and physiology and choice of equipment for injections.				
		Illustrate pertinent anatomy and physiology and choice of equipment for injections.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	HTEC 95A	Demonstrate proper Medical Assisting techniques in the clinical environment.				
		Demonstrate proper Medical Assisting techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
	HTEC 95B	Demonstrate proper Phlebotomy Technician I techniques in the clinical environment.				
		Demonstrate proper Phlebotomy Technician I techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
	HTEC 96A	Demonstrate proper Medical Assisting techniques in the clinical environment.				
		Demonstrate proper Medical Assisting techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		daily operation of the clinical facilities.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
	HTEC 96B	Demonstrate proper Medical Secretary techniques in the clinical environment.				
		Demonstrate proper Medical Secretary techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
	HTEC 96C	Demonstrate proper Medical File Clerk techniques in the clinical environment.				
		Demonstrate proper Medical File Clerk techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
	HTEC 96D	Demonstrate proper Medical Record Clerk techniques in the clinical environment.				
		Demonstrate proper Medical				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Record Clerk techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
	HTEC 96E	Demonstrate proper Business Office Clerk techniques in the clinical environment.				
		Demonstrate proper Business Office Clerk techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
	HTEC 96F	Demonstrate proper Insurance and Coding techniques in the clinical environment.				
		Demonstrate proper Insurance and Coding techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		facilities.				
	HTEC 96G	Demonstrate proper Medical Transcription techniques in the clinical environment.				
		Demonstrate proper Medical Transcription techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
	HTEC 96H	Demonstrate proper EKG techniques in the clinical environment.				
		Demonstrate proper EKG techniques in the clinical environment.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
		Illustrate medicolegal principles and codes of ethics that must be considered in the daily operation of the clinical facilities.				
Dept - (BHES) Manufacturing & CNC Technology	MCNC 200	Complete advanced/additional assignments and practice skills from other related MCNC classes.				
		Complete advanced/additional assignments and practice skills from other related MCNC				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		classes.				
	MCNC 56	Complete advanced project or projects utilizing skills learned in previous completed MCNC classes.				
		Complete advanced project or projects utilizing skills learned in previous completed MCNC classes.				
	MCNC 61A	Apply basic skills to produce a spreadsheet to track and calculate data related to the career technical fields.				
		Apply basic skills to produce a spreadsheet to track and calculate data related to the career technical fields.				
		Use basic word processing skills to produce documents in career technical fields.				
		Use basic word processing skills to produce documents in career technical fields.				
	MCNC 62A	Using computer technology, apply fundamental math calculations to solve mathematical problems in applied technologies.				
		Using computer technology, apply fundamental math calculations to solve mathematical problems in applied technologies.				
	MCNC 64	Analyze, compare, and explain manufacturing processes such as molding, forming, forging and casting.				
		Analyze, compare, and explain manufacturing processes such as molding, forming, forging and casting.				
		Conduct material property analysis to determine				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		appropriate material selection and use.				
		Conduct material property analysis to determine appropriate material selection and use.				
	MCNC 71	Analyze, construct, and inspect assigned machined projects using the introductory principles of machining.				
		Analyze, construct, and inspect assigned machined projects using the introductory principles of machining.				
		Operate machines and equipment safely.				
		Operate machines and equipment safely.				
	MCNC 72	Apply geometric dimensioning and tolerancing standards to interpret drawings and inspect manufactured parts.				
		Apply geometric dimensioning and tolerancing standards to interpret drawings and inspect manufactured parts.				
		Demonstrate basic operation of the coordinate measuring machine to inspect manufactured parts.				
		Demonstrate basic operation of the coordinate measuring machine to inspect manufactured parts.				
	MCNC 74A	Use computer drafting software to create basic shapes and models.				
		Use computer drafting software to create basic shapes and models.				
	MCNC 74B	Create and modify new and existing CAD geometry.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Create and modify new and existing CAD geometry.				
		Explain industrial applications of computer-generated prints.				
		Explain industrial applications of computer-generated prints.				
	MCNC 75A	Create basic word-address programs to successfully construct projects using vertical machining centers.				
		Create basic word-address programs to successfully construct projects using vertical machining centers.				
		Demonstrate the set up and basic operation of vertical machining centers.				
		Demonstrate the set up and basic operation of vertical machining centers.				
	MCNC 75B	Create advanced word-address programs to successfully construct projects using vertical machining centers.				
		Create advanced word-address programs to successfully construct projects using vertical machining centers.				
		Demonstrate the set up and advanced operation of vertical machining centers.				
		Demonstrate the set up and advanced operation of vertical machining centers.				
	MCNC 75C	Create word-address programs to successfully construct projects using lathes, horizontal machining centers, and rotary axis.				
		Create word-address programs to successfully				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		construct projects using lathes, horizontal machining centers, and rotary axis.				
		Demonstrate the set up and operation of lathes, horizontal machining centers, and rotary axis.				
		Demonstrate the set up and operation of lathes, horizontal machining centers, and rotary axis.				
	MCNC 76A	Construct basic part geometry using Mastercam.				
		Construct basic part geometry using Mastercam.				
		Produce tool paths from basic part geometry to create word address programs.				
		Produce tool paths from basic part geometry to create word address programs.				
	MCNC 76B	Construct basic part geometry using Mastercam.				
		Construct basic part geometry using Mastercam.				
		Produce tool paths from basic part geometry to create word address programs.				
		Produce tool paths from basic part geometry to create word address programs.				
	MCNC 76F	Construct advanced surface geometry using Mastercam.				
		Construct advanced surface geometry using Mastercam.				
		Produce tool paths from advanced surface geometry to create word address programs.				
		Produce tool paths from advanced surface geometry to create word address				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		programs.				
	MCNC 76G	Construct advanced surface geometry using Mastercam.				
		Construct advanced surface geometry using Mastercam.				
		Produce tool paths from advanced surface geometry to create word address programs.				
		Produce tool paths from advanced surface geometry to create word address programs.				
	MCNC 76L	Construct and import advanced part geometry using Mastercam.				
		Construct and import advanced part geometry using Mastercam.				
		Produce tool paths from advanced part geometry to create word address programs for lathes and multi-axis machining centers.				
		Produce tool paths from advanced part geometry to create word address programs for lathes and multi-axis machining centers.				
	MCNC 77	Analyze, construct, and inspect assigned machined projects using advanced principles of machining.				
		Analyze, construct, and inspect assigned machined projects using advanced principles of machining.				
		Demonstrate safe operation of specialized machining equipment to construct advanced assemblies.				
		Demonstrate safe operation of specialized machining				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		equipment to construct advanced assemblies.				
Dept - (BHES) Nursing	NURS 150	Demonstrate the nursing skills appropriate to the clinical course the student is enrolled in according to the critical elements.				
		Demonstrate the nursing skills appropriate to the clinical course the student is enrolled in according to the critical elements.				
	NURS 202	Using Orem, the nurse will apply current nursing theory and concepts to clinical situations.				
		Using Orem, the nurse will apply current nursing theory and concepts to clinical situations.				
	NURS 50	Determine the personal potential for success in the field of nursing based on emotional, physical and intellectual abilities.				
		Determine the personal potential for success in the field of nursing based on emotional, physical and intellectual abilities.				
		Differentiate among the various nursing educational programs both the educational preparation and scope of nursing practice.				
		Differentiate among the various nursing educational programs both the educational preparation and scope of nursing practice.				
	NURS 77	Achieve a score of 80% or better on sample NCLEX exam.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Achieve a score of 80% or better on sample NCLEX exam.				
	NURS 81	Incorporate cultural assessment as part of a wholistic approach to assessment of client biopsychosocial healthcare needs.				
		Incorporate cultural assessment as part of a wholistic approach to assessment of client biopsychosocial healthcare needs.				
		Incorporate patient teaching into the plan of care for a health-deviation of a non-acute elderly client.				
		Incorporate patient teaching into the plan of care for a health-deviation of a non-acute elderly client.				
	NURS 81L	Following college regulations and facility protocols, provide safe and client-centered nursing care for one or two patients in a non-acute care setting.				
		Following college regulations and facility protocols, provide safe and client-centered nursing care for one or two patients in a non-acute care setting.				
		Using Orem's model of nursing and the nursing process, determine client-specific plans of care.				
		Using Orem's model of nursing and the nursing process, determine client-				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		specific plans of care.				
	NURS 81N	Incorporate cultural assessment as part of a wholistic approach to assessment of client biopsychosocial healthcare needs.				
		Incorporate cultural assessment as part of a wholistic approach to assessment of client biopsychosocial healthcare needs.				
		Incorporate patient teaching into the plan of care for a health-deviation of a non-acute elderly client.				
		Incorporate patient teaching into the plan of care for a health-deviation of a non-acute elderly client.				
	NURS 81NL	Following college regulations and facility protocols, provide safe and client-centered nursing care for one or two patients in a non-acute care setting.				
		Following college regulations and facility protocols, provide safe and client-centered nursing care for one or two patients in a non-acute care setting.				
		Using Orem's model of nursing and the nursing process, determine client-specific plans of care.				
		Using Orem's model of nursing and the nursing process, determine client-specific plans of care.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	NURS 81P	Accurately calculate the correct dose of medication.				
		Accurately calculate the correct dose of medication.				
		Using Orem's model of nursing, apply the nursing process to 2 specific groups of medications.				
		Using Orem's model of nursing, apply the nursing process to 2 specific groups of medications.				
	NURS 82	Apply correct nursing care to pre and post op patients.				
		Apply correct nursing care to pre and post op patients.				
		Plan appropriate nursing care for patients with fluid and electrolyte imbalances.				
		Plan appropriate nursing care for patients with fluid and electrolyte imbalances.				
	NURS 82L	Demonstrate the assessment of a pre or post op patient using Orem's theory.				
		Demonstrate the assessment of a pre or post op patient using Orem's theory.				
		Demonstrate the safe administration of parenteral medications.				
		Demonstrate the safe administration of parenteral medications.				
		Demonstrate the safe and competent care of one patient in the acute care setting.				
		Demonstrate the safe and competent care of one patient in the acute care setting.				
	NURS 82P	Student will develop a teaching plan for medications				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	NURS 82P	for a client newly diagnosed with a specific pathology, such as diabetes, infection.				
		Student will develop a teaching plan for medications for a client newly diagnosed with a specific pathology, such as diabetes, infection.				
		Students will apply theoretical knowledge about medication interactions during examinations and quizzes.				
		Students will apply theoretical knowledge about medication interactions during examinations and quizzes.				
		Students will integrate pharmacological concepts in the clinical setting.				
		Students will integrate pharmacological concepts in the clinical setting.				
	NURS 83	Apply the theoretical knowledge of pregnancy, birth physiology and perinatal care to specific patient care situations.				
		Apply the theoretical knowledge of pregnancy, birth physiology and perinatal care to specific patient care situations.				
	NURS 83A	Compare the physiologic, cognitive, and psychosocial stages of a toddler and a preschooler.				
		Compare the physiologic, cognitive, and psychosocial stages of a toddler and a preschooler.				
		Differentiate the common etiologies of morbidity and mortality in children.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Differentiate the common etiologies of morbidity and mortality in children.				
	NURS 83AL	Construct a concept map for a child diagnosed with head trauma from a motor vehicle accident (MVA).				
		Construct a concept map for a child diagnosed with head trauma from a motor vehicle accident (MVA).				
		Demonstrate a focused physical assessment of an infant admitted with respiratory distress.				
		Demonstrate a focused physical assessment of an infant admitted with respiratory distress.				
	NURS 83L	Employ the nursing process in assisting clients to meet universal, developmental and health deviations self-care requisites during the perinatal period.				
		Employ the nursing process in assisting clients to meet universal, developmental and health deviations self-care requisites during the perinatal period.				
	NURS 83P	Accurately calculate the correct doses of medications for the maternal and child populations.				
		Accurately calculate the correct doses of medications for the maternal and child populations.				
		Incorporate medication evaluation and patient/family teaching into care of the maternal and child population				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		patients. Incorporate medication evaluation and patient/ family teaching into care of the maternal and child population patients.				
	NURS 83PL	Following OSHA protocols, maintain an injury-free environment during intravenous insertion and blood-draw procedures.				
		Following OSHA protocols, maintain an injury-free environment during intravenous insertion and blood-draw procedures.				
		Following universal precautions and nursing standards of care, successfully insert, secure and maintain six (6) intravenous catheters.				
		Following universal precautions and nursing standards of care, successfully insert, secure and maintain six (6) intravenous catheters.				
	NURS 84	Apply legal and ethical principles to an ethical dilemma.				
		Apply legal and ethical principles to an ethical dilemma.				
		Utilizing the nursing process, analyze and apply principles of normal aging in designing a plan of care for an older adult experiencing a chronic health problem.				
		Utilizing the nursing process, analyze and apply principles of normal aging in designing a plan of care for an older adult experiencing a chronic health				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		problem.				
	NURS 84C	Correctly apply critical thinking skills to patient care scenarios.				
		Correctly apply critical thinking skills to patient care scenarios.				
	NURS 84L	Analyzes comprehensive assessment data to identify real problems and predict and minimize potential problems.				
		Analyzes comprehensive assessment data to identify real problems and predict and minimize potential problems.				
		Apply age-related changes and developmental tasks to formulate a plan of care for an older adult.				
		Apply age-related changes and developmental tasks to formulate a plan of care for an older adult.				
	NURS 85	Apply the nursing process for adult clients with complications of diabetes and acute renal disease.				
		Apply the nursing process for adult clients with complications of diabetes and acute renal disease.				
		Apply the nursing process for adult clients with major cardiac disease.				
		Apply the nursing process for adult clients with major cardiac disease.				
		Apply the nursing process for adult clients with major respiratory illnesses.				
		Apply the nursing process for adult clients with major respiratory illnesses.				
	NURS	Apply own cultural background				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
	85A	to concepts of mental health and mental illness.				
		Apply own cultural background to concepts of mental health and mental illness.				
		Demonstrate knowledge of Alcoholics Anonymous meetings and identify professional implications for the nurse.				
		Demonstrate knowledge of Alcoholics Anonymous meetings and identify professional implications for the nurse.				
		Design a critical thinking component in relation to the nursing care of a patient with a given psychiatric diagnosis.				
		Design a critical thinking component in relation to the nursing care of a patient with a given psychiatric diagnosis.				
	NURS 85AL	Analyze own personal responses to selected one-on-one or group therapy patient interactions.				
		Analyze own personal responses to selected one-on-one or group therapy patient interactions.				
		Demonstrate the use of the nursing process, from assessment through evaluation, as applied to a patient with a psychiatric diagnosis.				
		Demonstrate the use of the nursing process, from assessment through evaluation, as applied to a patient with a psychiatric diagnosis.				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		Identify concepts that link learning in the clinical setting to knowledge gained from the course textbook.				
		Identify concepts that link learning in the clinical setting to knowledge gained from the course textbook.				
	NURS 85L	Analyze the basic and comprehensive assessment of acutely ill adult client to determine the appropriate nursing care.				
		Analyze the basic and comprehensive assessment of acutely ill adult client to determine the appropriate nursing care.				
		Using the nursing process provide safe and competent care of two patients in the clinical setting.				
		Using the nursing process provide safe and competent care of two patients in the clinical setting.				
	NURS 86	Demonstrate beginning management skills in nursing.				
		Demonstrate beginning management skills in nursing.				
		Demonstrate beginning leadership skills in nursing.				
		Demonstrate beginning leadership skills in nursing.				
	NURS 86L	Provide safe and effective nursing care to 75-100% of a typical nursing patient assignment in clinical setting				
		Provide safe and effective nursing care to 75-100% of a typical nursing patient assignment in clinical setting				
		Using Orem's model of				

Unit Name	Course/Service ID	Student Learning Outcome (SLO)	Assessment Method	Assessment Data Summary	Reflection and Analysis	Enhancement/Action
		nursing, apply the nursing process to assigned clinical setting				
		Using Orem's model of nursing, apply the nursing process to assigned clinical setting				