

# Curriculum Maps for NOVA Degree-Awarding Programs and Select Certificates



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# NORTHERN VIRGINIA COMMUNITY COLLEGE Office of Institutional Effectiveness and Student Success

The purpose of the Office of Institutional Effectiveness and Student Success is to conduct analytical studies and provide information in support of institutional planning, policy formulation, and decision making. In addition, the office provides leadership and support in research-related activities to members of the NOVA community engaged in planning and evaluating the institution's success in accomplishing its mission.

When citing data from this report, the Northern Virginia Community College (NOVA) Office of Institutional Effectiveness and Student Success must be cited as the source.

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## Introduction

To support accreditation efforts and to improve student learning and student success, the assessment of student learning has become a priority for institutions of higher education, including NOVA. An important step in the assessment of student learning outcomes (SLOs) is the alignment of SLOs with a program's curriculum. Curriculum mapping provides an overview of the program including the identification of strengths and gaps in the program. This helps ensure that a program clearly defines and makes transparent what it has deemed crucial to its curriculum. It also establishes that students are provided enough opportunities to acquire the knowledge, skills, and attitudes they should gain from the program.

In Spring 2017 and Spring 2018, the Office of Institutional Effectiveness and Student Success offered several sessions of a workshop devoted to writing and mapping SLOs, with at least one session on each campus. At this time, each of the SLO Lead Faculty confirmed or updated a curriculum map for the respective program/certificate. The curriculum map presents the SLOs for the program and indicates in which courses those SLOs are addressed. Furthermore, the maps provide the level to which the course addresses the SLO: Introduced, Practiced, or Mastered (I, P, or M). Lastly, SLO Lead Faculty were to specify the methods by which the program will measure student achievement of SLOs. Programs were encouraged to use course-embedded assessments to measure student learning; stated differently, faculty will use assignments already present in the program's curriculum to collect evidence of student learning. As a result of building curriculum maps, programs at NOVA have developed a plan for how they will measure student learning.

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**Program: Accounting, A.A.S.** 

					С	OURSES		
STUDENT LEARNING OUTCOMES 2016-2017	ACC211	ACC212	ACC221	ACC231	ACC261	ACC222	ACC241	ASSESSMENT METHOD
Be able to apply generally accepted accounting principles (GAAP).	I,P	Р	Р	Р		P,M		Embedded in exams or assignments
Perform all steps in the accounting process, including production of basic financial statements.	I,P	Р	P,M			P,M		Embedded in exams or assignments
3. Be able to describe federal tax rules and apply them in preparing individual income tax returns.					I,P,M			Embedded in exams or assignments
4. Be able to describe and make distinctions between the various business entities (i.e., individuals, corporations and partnerships).	I,P	Р			P,M			Embedded in exams or assignments
5. Be able to use budgeting and product costing techniques and methods to evaluate business operations.		I,P		P,M				Embedded in exams or assignments
6. Be able to identify generally accepted auditing standards (GAAS) and the additional requirements imposed by the Sarbanes-Oxley Act.							I,P,M	Embedded in exams or assignments

7. Know how to access the various technical and professional publications to use as reference sources.	I		Р	Р	P,M	Р	Homework assignments
8. Be able to write and speak in English well enough to communicate accounting procedures and concepts in a professional environment.	_	Р			Р	P,M	Homework assignments
9. Be able to describe and make distinctions between various accounting methods under U.S. GAAP and international financial reporting standards (IFRS).	I		Р		P,M		Embedded in exams or assignments



Program: Administration of Justice, A.A.S.

					COURSES				
Student Learning Outcomes	ADJ 100	ADJ 105	ADJ 107	ADJ 133	ADJ 211	ADJ 212	ADJ 216	ADJ 234	ADJ 236
1. Name and describe the steps in the criminal adjudication process that involve the police, courts and corrections.	M Exams/test questions	M Exams/test questions	I/P	I/P	I/P	I/P		I/P	I/P
2. Define the basic teachings of criminology, criminalistics, criminal justice and forensic science.	M Exams/test questions	I/P			I/P	M Exams/ Test questions		I/P	M Exams/test questions
3. Describe how crime is measured by means of the Uniform Crime Report, National Crime Victimization Survey, Self-Report Data and the National Incident-Based Reporting System.	M Exams/test questions	M Exams/test questions						I/P	I/P
4. Define generally, domestic and international terrorism, organized crime, classified information, and propriety information.	M Exams/test questions					I/P	I/P/M	I/P/M	I/P

5. Identify and explain the major perspectives concerning crime causation including the classical approach, biological approach, psychological approach and the sociological approach.	I/P	I/P	I/P/M Exams/test questions				I/P	I/P	I/P
6. Present a power point presentation of an ethical dilemma or case study relating to a criminal justice system.				I/P					
7. Articulate and explain the rights of citizens contained in the 4 <sup>th</sup> , 5 <sup>th</sup> , and 6 <sup>th</sup> amendments related to any one specific case within the criminal justice system.	I/P			I/P/M Exams/test questions	I/P				
8. Explain basic investigative concepts relating to crime	I/P	I/P		I/P	I/P/M	P/M Exams/test questions			I/P
9. Describe the elements of at least five (5) crimes.	I/P	I/P			I/P	I/P/M	I/P	I/P	I/P/M Exams/test questions
10. Demonstrate a basic understanding of law enforcement, the courts and the corrections system.	I/P/M	I/P/M	I/P		M Exams/test questions	M Exams/test questions	I/P		I/P/M



Program: Air Conditioning and Refrigeration, A.A.S.

						(	OURSE	S					
Student Learning Outcomes	AIR 111	AIR 121	AIR 122	AIR 134	AIR 154	AIR 205	AIR 207	AIR 213	AIR 235	AIR 238	AIR 251	AIR 252	AIR 257
Technical knowledge and capabilities: Design, install, maintain, and repair a basic residential air conditioning and heating system.	I	I	Р	Р	_	Р	Р	М	Р	М	Р	Р	М
2. Problem prevention and solutions: Analyze an HVACR system's current operation, evaluate its ability to adequately provide for the equipment owner's comfort requirements, and if necessary, formulate a strategy to correct any deficiencies.	I	I	Р	Р	-	Р	Р	М	Р	М	Р	Р	М
3. Presentation, manners, and reliability and safety: Demonstrate the ability to choose attire appropriate to the HVACR customers being served, utilize appropriate manners that will please a diverse population of possible customers, and demonstrate they may be relied upon to perform required duties properly, safely and on time.	I	I	Р	Р	ı	Р	Р	Р	Р	Р	Р	Р	Р
4. Positive attitude and works well with others: Demonstrate a positive attitude and has a good working relationship with peers	I	I	Р	Р	Р	Р	Р	Р	Р	М	Р	Р	Р

5. Honesty, ethical behavior, and respect: Assess and demonstrate what is considered honest and ethical behavior in both, personal and business situations.  Demonstrate respect for others.	1	I	M										
6. Speech and written communication skills: Perform good communication skills, both oral and written.	I	I	Р	Р	I						M		Р
7. Empathy with both customer and employer: Analyze customer concerns, empathize with their position, and be able to differentiate between the demands of the customer and the position of the technician's employer.									Р	M	1	Р	Р
8. Priorities and self-image: Demonstrate the ability to set priorities. Demonstrate an ability to perform a personal analysis and evaluation in order to determine an accurate self-image and to formulate a program for improvement, if necessary.	_	I	Р	ı	-	Р	Р	Р	Р	M	Р	Р	Р
9. Productive: Perform good work habits, focused on the task-athand, and completing assignments on time.	_	I	Р	I	_	Р	Р	Р	Р	M	Р	Р	Р
10. Continued improvement in knowledge and skills: Evaluate what additional skills or knowledge may be necessary for personal success, then choosing a positive direction to attain them.	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р



Program: American Sign Language to English Interpretation, A.A.S.

							C	OURSE	s						
Student Learning Outcomes	INT 105	ASL 261	ASL 220	ASL 262	INT 106	INT 107	INT 130	INT 141	INT 133	INT 134	INT 233	INT 234	INT 250	INT 290	INT 235 & INT 236
1. Students will demonstrate an advanced level of receptive and expressive proficiency in American Sign Language, including knowledge of advanced linguistic structures and vocabulary.		I	Р	М											
2. Students will demonstrate an advanced level of receptive and expressive proficiency in English, including knowledge of advanced linguistic structures and vocabulary.	ı								Р		М				
3. Students will demonstrate the ability to interpret a 20 minute live and videotaped segment of American Sign Language into English with 80% accuracy.						I			Р		Р		Р	М	
Students will demonstrate     the ability to interpret a 20     minute live and videotaped						I				Р		Р	Р	М	

segment of English into American Sign Language with 80% accuracy.													
5. Students will demonstrate the ability to transliterate a 20 minute live and videotaped segment of Contact Sign into English with 80% accuracy.						I/P					Р	М	
6. Students will demonstrate the ability to transliterate a 20 minute live and videotaped segment of English into Contact Sign with 80% accuracy.						I/P					Р	М	
7. Students will apply critical thinking to make ethical decisions regarding a variety of situations, guided by ethics standards of the profession.					ı		Р	Р	Р	Р	Р	М	Р
8. Students will demonstrate professional behavior and cultural sensitivity when working with Deaf and hearing clients.	I		I	P	ı	Р	Р	Р	Р	Р	Р	М	Р
9. Students will demonstrate the ability to evaluate an interpreting situation, choose the appropriate language/ communication method, manage the environment, and work with team interpreters if	I		ı	Р	ı	Р	Р	Р	Р	Р	Р	М	Р

available.												
10. Students will be able to describe the history of the interpreting profession and identify current trends, industry standards, and resources for professional development.				-	Р	Р	Р	Р	Р	Р	M	Р



Student Learning Outcomes – Curriculum Maps for Degree Awarding Programs and Certificates Program: Architecture Technology, A.A.S.

						С	OURSES						
Student Learning Outcomes	Arc-123 Architectural Graphics I	Arc-124 Architectural Graphics II	Arc-133 Methods of Construct. I	Arc-134 Methods of Construct. II	Arc-138 Structures for Architects	Arc-200 History of Architecture	Arc-201 History of Modern Architecture	Arc-225 Site Planning	Arc-243 Environment. Systems	Drf-201 CADD I	Drf-202 CADD II	Arc-231 Arch. Design/Graphics I	Arc-232 Arch. Design/Graphics II ( Capstone )
1. Students will be able to communicate graphically architectural aspects of a building for the purposes of presentation and construction using manual drawing.	l Proje cts	l Project s										Project	P Project
2. Students will be able to describe how buildings are presently constructed.			I Exams	I Exams	Exams							Project	P Project
3. Students will be able to describe and analyze the ethics of designing sustainable environments.												Project	Project

4. Students will be able to describe and analyze how buildings are structurally supported.			I Projects/ Exams						Project	P Project
5. Students will be able to describe the systems of heating, cooling and electrical distribution in buildings.						I Projects/ Exams			Project	P Project
6. Students will be able to describe how site characteristics influence the design and construction of buildings.					l Projects/E xams				Project	P Project
7. Students will be able to communicate graphically the architectural aspects of a building for the purpose of presentation and construction using computer graphics.	Project						I Projects/ exams	I Projects/ exams	P Project	M Project
8. Students will be able to methodically design a building.									I Project	P Project

- Notes:

  1. All eight SLOs are assessed in Arc-232 through capstone project.

  2. Many skills are honed through elective courses which satisfy individual student aspirations.



Program: Automotive Technology, A.A.S.

		COURSES													
Student Learning Outcomes	100	111	112	121	122	141	142	236	241	242	245	265	266		
Use measuring tools to skillfully and accurately diagnose the internal combustion engine.	I	I	P/M Lab	I	I	Р	Р	I	I	I	I	Р	I		
2. Diagnose transmission/transaxle gear reduction/multiplication concerns using driving, driven, and held member (power flow) principles using a range reference chart.							I/P/M Test Q's								
3.Measure drive pinion bearing preload and ring gear backlash and backlash variation to compare to specifications in order to determine necessary corrective actions.	I	I	Р	I	_	P/M	I	-	1	I	-	Р	Ι		
4. Perform preliminary inspections and procedures needed to prepare a vehicle for a four-wheel alignment by checking and assessing vehicle ride height, tire condition, and inflation.	I	ı	I	ı	ı	I	I	I	ı	ı	ı	ı	P/M Lab		

5. Inspect and measure a rotor with a dial indicator and micrometer to determine the serviceability of the rotor.	I	I	I	I	I	Р	Р	I	I	I	I	P/M Lab	I
6. Apply electrical theory using wiring diagrams and schematics to diagnose automotive electrical circuits.	I	Р	Р	Р	Р	Р	Р	Р	I/P	P/M Test Q's	Р	Р	Р
7. Research applicable vehicle and service information, vehicle service history, service precautions, technical service bulletins, and components for automotive heating and ventilation systems.	I	I	I	I	ı	I	I	P/M Lab	I	I	-	ı	ı
8. Retrieve diagnostic trouble codes and monitor status using a scan tool. Using the scan tool data and wiring diagrams, determine the next logical step in the drivability diagnostic process.	I	I	I	Р	М	Р	Р	Р	Р	Р	Р	Р	I



Program: Biotechnology, CSC and A.A.S.

				С	OURSES			
Student Learning Outcomes	BIO147	BIO165	BIO250	BIO253	BIO180	BIO251/ BIO252	BIO254	BIO255
Explain the fundamental scientific concepts in biotechnology.				I Comprehens ive final exam		М	М	Р
2. Apply the scientific method including: planning an experiment, collecting data, analyzing and interpreting data.		I	I and P			M Formal lab report		Р
3. Demonstrate proficiency in standard lab procedures and in the use of basic lab equipment.			I and P Lab Practical			М		
4. Effectively communicate scientific concepts, strategies, and opinions in written and oral formats.			Р	I		Р	Р	M Data analysis project and presentation
5. Describe the ethical and regulatory aspects of the biotechnology industry.		M Final project and oral presentation		I		Р		

6. Describe the business and legal aspects of the biotechnology industry.		Р		I and P			M Final Exam	
7. Demonstrate professional communication and interpersonal skills necessary for working in a collaborative environment.			Р	I	M Mock Interview	Р	Р	Р
8. Demonstrate proficiency in standard lab calculations	I and M Final Exam		I			P and M		



Program: Business Administration, A.S.

				COURSES			
Student Learning Outcomes	BUS 100	ACC 211	ACC 212	ECO 201	ECO 202	ITE 115	BUS 200
1. Students will be able to identify the various forms of business ownership (sole proprietorship, partnership and corporation) and the multiple ways of getting a business started.	I, P, M						М
2. Students will be able to calculate the basic impact of marginal cost for the production of goods in a capitalist system.	I			P, M	М		
3. Students will be able to describe the various theories related to the development of leadership skills, motivation techniques, teamwork and effective communication.	I, P						М
4. Students will be able to construct the basic elements of a balance sheet and income statement utilizing the appropriate accounting equations.	I	P, M	М				
5. Students will be able to utilize computer skills through the Internet, word processing, and other productivity software to construct reports and presentations in the study of current business practices.	I, P	Р	Р	Р	Р	М	
6. Students will apply the planning, organizing, leading and control processes of management in identifying the various theories related to the development of leadership skills.	I, P						

7. Students will be able to identify the properties of market equilibrium and the creation of market shortages and surpluses within the scope of supply and demand.	I, P		М	М	
8. Students will be able to identify the factors of production in the creation of goods and services in an economic society.	I, P, M		М	М	



**Program: Business Management, A.A.S.** 

		COURSES													
Student Learning Outcomes	BUS 100	BUS 125	ACC 211	ACC 212	ECO 120	BUS 200	BUS 201	BUS 202	BUS 205	BUS 220	BUS 241	BUS 242	FIN 215	MKT 201	ITE 115
1. Students will be able to identify the various forms of business ownership (sole proprietorship, partnership and corporation) and the multiple ways of getting a business started.	I, P, M		Р	Р		М	М	М							
2. Students will be able to identify parties in a legal dispute within the fundamental types of business organizations (sole proprietorship, franchise, partnership, corporation, Limited Liability Company, limited partnership, and limited liability partnership).	I					М	М	М			Р	М			
3. Students will be able to calculate the basic impact of marginal cost for the production of goods in an economic system.					I, P, M										
4. Students will be able to describe the various theories related to the development of leadership skills, motivation techniques, teamwork and	I					Р	M	M							

effective communication.															
5. Students will be able to construct the basic elements of a balance sheet and income statement utilizing the appropriate accounting equations.	ı		Р, М	М											
6. Students will be able to utilize computer skills through the Internet, word processing, and other productivity software to construct reports and presentations of current business practices.	I, P	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	М
7. Students will apply the planning, organizing, leading and control processes of management in identifying the various theories related to the development of leadership skills.	I, P						M	М	M						
8. Students will be able to identify the properties of market equilibrium and the creation of market shortages and surpluses within the scope of supply and demand.	I, P				P,M										
9. Students will be able to identify the factors of production in the creation of goods and services in an economic society.	I, P, M						M	М	Р						
10. Students will be able to differentiate the ethical codes of compliance and integrity used by business	I, P					Р	Р	M	М		Р	P, M			

organizations.										
11. Students will be able to identify various challenges facing the management of human resources.	I			Р	Р	M				
12. Students will be able to generate a summary report of sample data using graphs and descriptive measures.							I, P, M			



Program: Computer Science, A.S.

		COUR	SES	
Student Learning Outcomes	CSC 200	CSC 201	CSC 202	CSC 205
Demonstrate techniques for problem analysis and algorithm design.	I/P/M Homework			
Write computer programs using fundamental software development skills.	I/P/M Homework			
Perform elementary file and directory-related activities using command-line interfaces.	I/P/M Lab work			
4. Demonstrate proficiency in mathematical modeling using a high or low level programming language.	I	P/M Homework		
Write computer programs using Object-oriented programming features.		I/P/M Homework	Р	
Demonstrate critical thinking by applying appropriate data structures and Abstract Data Types (ADTs).		I	P/M Homework	
7. Show their ability to work in groups to design and execute programs to solve problems.	I/P	Р	P/M Homework	
8. Design fundamental logic circuits.				I/P/M Homework
9. Identify the functions of basic and advanced computer hardware architecture.	ı			P/M Homework



Student Learning Outcomes – Curriculum Maps for Degree Awarding Programs and Certificates Program: Construction Management Technology, A.A.S.

		COURSES														
Student Learning Outcomes	BLD 101	BLD 165	BLD 102	BLD 231	BLD 232	BLD 241	BLD 242	BLD 247	BLD 295	CIV 171	DRF 165	DRF 201	ARC 133	ARC 134	ARC 225	ARC 243
1. Students will communicate effectively consistent with career requirements of the construction management industry (orally and written).	I/P	Р				M Project/ Present ation (rubric)			Р				Р			
2. Students will accurately interpret construction documentation.	_	Р		Р							M Exam	Р		Р		
3. Students will identify characteristics of basic construction materials and explain their application in the construction industry.	ı	Р	P/M Exam						Р				Р	Р		Р
Students will accurately estimate construction costs.	I			Р	M Exam										li di	
5. Students will accurately prepare construction plans and schedules utilizing industry standards.	I							P/M Exam								
Students will identify safe construction practices.	I		P/M Exam													

7. Students will be able to interpret construction related contractual and legal requirements.	I				M Exam	Р					
8. Students will perform surveying calculations necessary for site layout.							P/M Exam			I/P	
9. Students will successfully identify and demonstrate skills necessary to manage human resources related to the construction industry.	I			P/M Exam							



**Program: Contract Management, A.A.S.** 

		COURSES							
Student Learning Outcomes	CON-100	CCON- 104/105	CON-121	CON-124	CON-127	CON-170	CON-214	CON-216	CON-217
1. Students will be able to conduct market research in accordance with the Federal Acquisition Regulation (FAR).	I	I	I	I	I/P	Р	Р	M Test	M Test
2. Students will be able to apply sound strategic acquisition planning so that informed business decisions can be made on behalf of the government.	I	I	I	I	Р	Р	Р	M Research Paper	M Research Paper
3. Students will be able to prepare project schedules for contract implementation.	ı	I	ı	Р	Р		Р		M Test
4. Students will be able to apply fundamental contracting	ı	I	I	I	Р	Р	Р	M TEST	M TEST

techniques by utilizing the basic Federal contracting processes: i.e., cost estimation procedures, requirement determinations, and characteristics of best value analysis.									
5. Students will be able to independently apply contract administration programs in support of Federal contracts.	I	I	I	ſ	Р	Р	Р	MP Role Play Exercise	MP Role Play Exercise
6. Students will be able to conduct cost and price analysis of request for proposal in order to establish negotiation positions.	ı	ı	I	I	Р	Р	Р		M Role Play Exercise



# **Curriculum Map – Students Learning Outcomes for Degree-Awarding Programs and Certificates**

Program: Cybersecurity, A.A.S.

							Courses						
Student Learning Outcomes	ITP 100	ITE 115	ITN 100/ 101	ITN 106	ITN 107/ ITE 221	ITN 170/ 171	ITN 200	ITN 260	ITN 261	ITN 262	ITN 263	ITN 266	ITN 276
Manipulate data into meaningful information	I/P/M Exam questio ns	I Exam Questi ons							I/P/M Exam question Performanc e Comprehen sive Exams				
Create simple scripts/programs to automate and perform simple operations, including how to perform basic security practices in developing scripts/programs (e.g. bounds checking, input validation).	I/P/M Exam questio ns					I/P/M Exam question Performan ce Comprehe nsive Exams							
Describe current threats and explain how to continuously monitor the threats that may be								I/P Exam question	I/P/M Exam question Performan ce Comprehe	I/P/M Exam questi on Perfor manc	I/P/M Exam questi on Perfor manc		

present in the cyber realm						nsive Exams	e Comp rehen sive Exam s	e Comp rehen sive Exam s		
Identify the options available to mitigate threats within a system		I Exam questio ns			I/P/ Exam question	I/P/M Exam question Performan ce Comprehe nsive Exams			I/P/M Exam questi on Perfor mance Compr ehensi ve Exams	
Apply basic security design fundamentals that help create systems that are trustworthy	I						I/P/M Exam questi on Comp rehen sive Exam s			
Describe the basic concepts of information assurance fundamentals		I Exam Questio ns			I/P Exam question Comprehen sive Exams		I/P/M Exam questi on Comp rehen sive Exam s		I/P/M Exam questi on Compr ehensi ve Exams	
Explain where and how cryptography is used		I Exam Questio ns			I/P Exam question Comprehen sive Exams		I/P/M Exam questi on Comp rehen sive	I/P/M Exam questi on Comp rehen sive		

							Exam s	Exam s	
Describe the basic components in an information technology system and their roles in system operation		I Exam Questio ns	I Exam Questi ons	I Exam Questions	I/P/M Exam Questi ons Perfor mance Compr ehensi ve Exam			I/P/M Exam Quest ions Perfor manc e Comp rehen sive Exam	I Exam Questi ons
Identify network components and describe how they interact		I Exam Questio ns			I/P/M Exam Questi ons Perfor mance Compr ehensi ve Exam			I/P/M Exam questi on Perfor manc e Comp rehen sive Exam	
Explain basic operations involved in system administration					I/P/M Exam Questi ons Perfor mance Compr ehensi ve Exam				
Be able to describe memory types and allocation methods.				P/M Exam questions					



**Program: Dental Assisting, A.A.S.** 

**Program: Dental Assisting – First Semester** 

1 Togram: Dental Assisting	1 1131 00111	0010.			
PROGRAM SPECIFIC LEARNING OBJECTIVE	<b>DNA 100</b>	DNA 108	DNA 110	DNA 113	DNA 134
1. Demonstrate knowledge, understanding and skills required to chart oral		I		I	
conditions.		Exam		Proficiency	
		questions		evaluations	
2. Demonstrate knowledge, understanding and skills required to perform			I	I	
chairside assisting duties.			Lab work	Final exam	
3. Demonstrate knowledge, understanding and skills required to perform	I		I	I	
expanded duties.	Final		Lab		
4. Demonstrate knowledge, understanding and skills required to perform			I		
laboratory procedures.			Lab work		
5. Demonstrate knowledge, understanding and skills required to perform dental practice management. procedures.					
6. Demonstrate knowledge, understanding and skills required to expose					
diagnostic radiographic surveys.					Final exam
7. Demonstrate knowledge and understanding for managing protocols for	I		I	I	I
infection control practices and biohazardous waste.	Final		Final exam	Final exam	Final exam
·	exam				
8. Demonstrate knowledge and understanding of the legal and ethical	I				
aspects for clinical practice.	Final				
	exam				

**Program: Dental Assisting – Second Semester** 

i Togiain. D	ental Assisting - Seco	na Gennestei			
PROGRAM SPECIFIC LEARNING OBJECTIVE	DNA 114	DNA 119	DNA 120	DNA 130	DNA 140
1. Demonstrate knowledge, understanding and skills required to	I				Р
chart oral conditions.	Proficiency				Proficiency
	evaluations				evaluations
2. Demonstrate knowledge, understanding and skills required to	I	1	I		Р
perform chairside assisting duties.	Proficiency	Exam	Exam		Proficiency
	evaluations	questions	Questions		evaluations
3. Demonstrate knowledge, understanding and skills required to	I				Р
perform expanded duties.	Proficiency				Proficiency
	evaluations				evaluations
4. Demonstrate knowledge, understanding and skills required to					Р
perform laboratory procedures.					Proficiency
					evaluations
5.5					<b>D</b>
5. Demonstrate knowledge, understanding and skills required to				- I	P
perform dental practice management procedures.				Final exam	Proficiency
					evaluations
6. Demonstrate knowledge, understanding and skills required to					Р
expose diagnostic radiographic surveys.					Proficiency
					evaluations
7. Demonstrate knowledge and understanding for managing	I				P
protocols for infection control practices and biohazardous waste.	Proficiency				Proficiency
	evaluations				evaluations
8. Demonstrate knowledge and understanding of the legal and					Р
ethical aspects for clinical practice.				Final Exam	Proficiency
					evaluations

**Program: Dental Assisting – Summer Session** 

PROGRAM SPECIFIC LEARNING OBJECTIVE	DNA 190
Students will be able to chart oral conditions.	M Proficiency evaluations
2. Students will be able to perform chairside assisting duties.	M Proficiency evaluations
3. Students will be able to perform dental assisting expanded duties.	M Proficiency evaluations
4. Students will be able to perform dental laboratory procedures.	M Proficiency evaluations

5. Students will be able to perform dental practice management procedures.	M Proficiency evaluations
6. Students will be able to expose diagnostic dental radiographic surveys.	M Proficiency evaluations
7. Students will be able to manage dental protocols for infection control practices and biohazardous waste.	M Proficiency evaluations
8. Students will be able to identify legal and ethical aspects for clinical practice.	M Proficiency evaluations



Program: Dental Hygiene, A.A.S.

					FIRST Y	EAR COUR	SES				
Student Learning Outcomes	DNH 111	DNH 115	DNH 120	DNH 130	DNH 141	DNH 142	DNH 143	DNH 145	DNH 146	DNH 214	DNH 216
Assess a patient's oral health status	I	I		I	I	I	I/P	I	I	I	I
Plan and document a patient's treatment needs			ı			I	I/P				
3. Evaluate the outcomes of treatment for determining a patient's subsequent treatment needs.						I	I		I		
4. Expose Radiographs				I		I	I/P				
5. Interpret Radiographs				I		Р	M				
6. Communicate the provision of oral health care services with diverse population groups						I	I/P				
7. Evaluate and apply scientific literature based on critical analysis of		I			I	I					

research, scientific theories, and standards of care as a basis for evidence-based practice						
8. Provide care to a diverse population who present with slight, moderate, and advanced periodontal disease and other oral conditions			Ι	Р		
9. Recognize the importance for discerning and managing ethical issues consistent with professional code of ethics			I	I		

			S	ECOND YEAR CO	URSES		
Student Learning Outcomes	DNH 150	DNH 226	DNH 227	DNH 230	DNH 235	DNH 244	DNH 245
Assess a patient's oral health status	I/P		Р		I/P	Р	M Test Patient Periodontal Skill Evaluation
Plan and document a patient's treatment needs	I/P				I/P	Р	M Treatment Planning Skill Evaluation

3. Evaluate the outcomes of treatment for determining a patient's subsequent treatment needs.					Р	M Periodontal Recare Report Outcomes of Treatment Skill Evaluation
4. Expose Radiographs					Р	M Radiographic Technique Skill Evaluation
5. Interpret Radiographs						
6. Communicate the provision of oral health care services with diverse population groups			Р		Р	M Oral Health Education Skill Evaluation
7. Evaluate and apply scientific literature based on critical analysis of research, scientific theories, and standards of care as a basis for evidence-based practice	Р	Р			M Case Study	
8. Provide dental hygiene care to a diverse population who present with slight, moderate and advanced periodontal disease and other oral conditions					Р	M Test Patient
9. Recognize the importance for discerning and managing ethical issues consistent with professional code of ethics		Р		Р	Р	M Case Studies



Program: Diagnostic Medical Sonography, A.A.S.

								СО	URSES	3								
Student Learning Outcomes	DMS 100	DMS 190	DMS 196	DMS 206	DMS 207	DMS 208	DMS 209	DMS 211	DMS 212	DMS 217	DMS 218	DMS 219	DMS 232	DMS 241	DMS 242	DMS 243	DMS 290	DMS 299
1. Provide high quality patient care in an ethical, legal, safe, and effective manner.	l Class Assign	I, P Ethics Eval	P Ethics Eval	I, P Quiz/ Exam						P Scan Final			P Ethics Eval			P Quiz/ Exam		
2. Integrate patient history, current medical condition, and sonographic findings to provide accurate diagnostic information.		I, P Scan Comp	P Scan Comp	I Class Assign	I, P Quiz/ Exam			P Quiz/ Exam	P Class Assign				P Scan Comp	M Quiz/ Exam	M Quiz/ Exam	P Quiz/ Exam		M Exam
3. Apply principles of ultrasound physics in the operation of medical sonographic equipment to recognize and		I, P Scan Comp	P Scan Comp			I, P Quiz/ Exam	I, P Quiz/ Exam	P Lab Assign	P Lab Assign	P Lab Assign	P Lab Assign	P Lab Assign	P, M Scan Comp	P Lab Assign	P Lab Assign		P, M Scan Comp	

perform image optimization techniques.																
4. Identify relational anatomy, proper diagnostic imaging techniques, and sonographic appearances of anatomical structures.		I, P Scan Comp	P Scan Comp		I Class Assign			P Quiz/ Exam	P Quiz/ Exam	P Quiz/ Exam		P, M Scan Comp		P, M Course Project		M Exam
5. Evaluate ultrasound images for diagnostic information and pertinent technical details.			P Clinical Report		I, P Quiz/ Exam	l Quiz/ Exam	l Quiz/ Exam	P Quiz/ Exam	P Quiz/ Exam	I, P Peer Review	P Lab Assign	P, M Clinical Report		P Quiz/ Exam	P, M Clinical Report	M Exam
6. Practice professional work habits and appropriate interpersonal relationships in a clinical setting when working with clinical staff, other health care providers and/or physicians.	l Class Assign	I, P Clin Eval	P Clin Eval	I, P Class Assign						P Scan Final			M Course Project		P, M Clin Eval	



**Program: Drivers Education, CSC** 

	Courses	
Student Learning Outcomes	EDU 114	EDU 214
Students will distinguish VA driving rules and laws that are necessary to teach Drivers Education in Virginia using the VADETS final exam.	Students will spend class time going over the DMV manual and take the VADETS course, which covers the same material.  Mastery of the information will be determined through VADETS scores, the accompanying workbook and classroom evaluations.  I, P	While driving with the classroom instructor, students will be quizzed on various signs and rules to confirm mastery of the material.  M
2. Students will be able to create a competent classroom lesson plan for Driver Education students under the age of 19.	Students will spend time in class going over how to create a proper lesson plan and will have present mini lessons in small groups leading up to the completion of this lesson.  I, P, M	
3. Students will be able to create a competent behind the wheel lesson plan for Driver Education students under the age of 19.	Students will be introduced to lesson plan writing and will complete a classroom lesson to include the written information of driver's education. The lesson writing practice will give students ample amount of preparation.  I, P	Creating a competent lesson plan for behind the wheel will verify that students have mastered the lesson plan writing skill as well it shows that they too are competent in what is expected of an individual when driving on the road.  M
4. Students will be able to create a skills worksheet/outline to be used for their lessons in behind the wheel.		During the driving portion of the course it is imperative that students are prepared to assess the students they will be teaching. To prepare for this assessment all students in this course will create a worksheet that they can use for this assessment. Examples will be given and students will use class time to complete this. If needed the professor will assist them to ensure that they master this skill before moving on. I, P, M

5. Students will be able to design a proper behind the wheel driving route.	An effective behind the wheel instructor needs to know how to create a driving route with which their students will perform. Students in this course will perform a driving route that the instructor has created to get an understanding of what one should look like and then they will complete one of their own.  I, P, M
6. Students will demonstrate proficiency in their own driving skills as demonstrated on the range.	Mastery of personal driving skills is fundamental to this profession so the students will complete one day on the driving range to show mastery of their own driving skills.  I, P, M



Program: Early Childhood Development, A.A.S.

\*Please note that CHD 120 is the introductory course to the program.

Student Learning Outcomes	CHD 118	CHD 119	CHD 120	CHD 145	CHD 146	CHD 165	CHD 166	CHD 205	CHD 210	CHD 215	CHD 216	CHD 265	CHD 270	CHD 298	EDU 235
1. Apply developmental knowledge to the creation and implementation of activities and programs to promote the development of all children.	ΙP	ΙP	ı	ΙP	ΙP	Р	ΙP	ΙP	Р	Р	ΙP	РМ	M *	М	I
2. Design strategies for building relationships, and working with diverse families and communities.	ΙP	IP	ı	ΙΡ	ΙΡ	ΙΡ	ΙΡ	Р	PM	Р	PM *	M	РМ	M	ΙP
3. Using observation techniques assess development and effective practices with children, families, and programs.	IP	IP	ΙP	IP	ΙΡ	IP *	ΙΡ	Р	Р	PM	ΙP	M	M	М	Р
4. Applying developmental theories and early childhood program model components, select educational strategies appropriate for the learning environment.	ΙP	IP	_	ΙP	IΡ	ΙP	IP *	PM	Р	IPM	ΙΡ	М	М	М	Р

5. Create curriculum that integrates content and developmental knowledge.	IP *	IP	1	ΙΡ	ΙΡ	Р	Р	M	Р	PM	ı	M	М	М	Р
6. Using the basic tenets of professionalism, and best practices, demonstrate one's growth and development.	IΡ	IΡ	ΙΡ	ΙΡ	ΙΡ	Р	P	Р	Р	Р	РМ	M	M	M *	Р

Note that CHD 120 is the introductory course to the program.

Note that CHD 265 and CHD 298 are the Capstone Courses for the Program

#### **Assessment Methods**

- \*SLO 1 Rubric for evaluating reflective statement
- SLO 2 Rubric for evaluating electronic file presentation
- SLO 3 Rubric for evaluating application and analysis of Observation Technique
- SLO 4 Rubric for evaluating observation essay
- SLO 5 Rubric for evaluating lesson plan design/presentation
- SLO 6 Rubric for evaluating Capstone Portfolio reflections



**Program: Emergency Medical Services, A.A.S.** 

									COURSES	6								
Student Learning Outcomes	EMS 111	EMS 151	EMS 153	EMS 155	EMS 157	EMS 159	EMS 170	EMS 172	EMS 173	EMS 201	EMS 205	EMS 207	EMS 213	EMS 216	EMS 242	EMS 243	EMS 244	EMS 245
1. Utilizing a simulation mannequin, students will be able to establish and maintain a patent airway, oxygenate and ventilate a patient utilizing basic airway maneuvers and adjuncts.	I P M Lab Exam Demo Cert	P M Lab Exam Demo Cert					P M Demo Clinic	P M Demo Clinic	P M Demo Field			P M Lab Exam Demo Cert	P M Lab Demo Cert	P M Lab Exam Demo Cert	P M Demo Clinic	P M Demo Field	P M Demo Clinic	P M Demo Field
2. When presented with a patient experiencing a medical emergency, students will be able to perform a scene size-up, conduct a primary assessment, take a patient history appropriate to the patient's condition, obtain vital signs, and	I P M Lab Exam Demo Cert	P M Lab Exam Demo Cert					P M Demo Clinic	P M Demo Clinic	P M Demo Field			P M Lab Exam Demo Cert	P M Lab Demo Cert	P M Lab Exam Demo Cert	P M Demo Clinic	P M Demo Field	P M Demo Clinic	P M Demo Field

intervene in accordance with relevant, established standards of care.															
3. When presented with a patient experiencing a traumatic injury, students will be able to perform a scene size-up, conduct a primary assessment, take a patient history appropriate to the patient's condition, obtain vital signs, and intervene in accordance with relevant, established standards of care utilizing multiple available basic and advanced intervention techniques.	I P M Lab Exam Demo Cert (Basic	P M Lab Exam Demo Cert			P M Demo Clinic	P M Demo Clinic	P M Demo Field		P M Lab Exam Demo Cert	P M Lab Demo Cert	P M Lab Exam Demo Cert	P M Demo Clinic	P M Demo Field	P M Demo Clinic	P M Demo Field
4. When presented with a patient exhibiting signs & symptoms of a fracture, the student will be able to select the appropriate immobilization device, and	I P M Lab Exam Demo Cert			P M Lab Exam Demo Cert			Demo Field			P M Lab Demo Cert			Demo Field		Demo Field

properly immobilize the affected area.																		
5. The EMS Advanced Life Support Student will demonstrate competent affective behavior related to emergency medical care, as measured by the Northern Virginia Community College EMS Program Affective Behavior Assessment tool.	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool	I P EMS Affect Assess. Tool
6. When presented with a 6-second static cardiac rhythm strip, the student will be able to correctly identify the rhythm, classify the patient's condition as "stable" or "unstable", select the appropriate treatment algorithm, and list the appropriate electrical and/or pharmacological therapy indicated in a				I P M Lab Exam HW ACLS Exam Cert		I P M Lab Exam HW PALS Exam Cert		P M Demo Clinic	P M Demo Field			P M Lab Exam Demo Cert	P M Lab Demo Cert	P M Lab Exam Demo Cert	P M Demo Clinic	P M Demo Field	P M Demo Clinic	P M Demo Field

timely manner.									
									1



Program: Engineering, A.S.

			CC	URSES		
Student Learning Outcomes	EGR 120	EGR 126	EGR 240	EGR 245	EGR 246	EGR 295
Student will apply and demonstrate engineering problem solving methodology.	I, P	Р	P, M Problem Solving Test	P, M Problem Solving Test	P, M Problem Solving Test	
2. Student will demonstrate their knowledge of engineers' professional responsibility and ethics.	I	Р	P, M Problem Solving Test	P, M Problem Solving Test	P, M Problem Solving Test	P, M Ethics Test
Student will demonstrate the ability to design algorithm in solving engineering problems.	I	P, M Computer Programming Assignment				P, M Computer Programming Assignment
4. Student will be able to analyze the position of rigid bodies and their applied forces at rest and in motion.	I		P, M Problem Solving Test	P, M Problem Solving Test	Р	
5. Student will demonstrate knowledge of mechanics of deformable bodies.	I		I, P		P, M Problem Solving Test	
6. Student will demonstrate ability to work effectively as a team.	I, P	I				P, M Team Assessment Report



Program: Engineering Technology, A.A.S.

					COURSES				
Student Learning Outcomes	CIV 171	CIV 210	CAD 140	CAD 201	CAD 202	EGR 115	EGR 130	MEC 112	MEC 118
1. Students will be able to apply their knowledge and skills of Computer Aided Drafting to start and complete engineering drafting projects.			P, M Drawing Project	I	P, M Drawing Project	I			
2. Students will demonstrate the appropriate preparation to perform the functions of an engineering aide or designer in the Engineering Technology field.	Р	Р	P, M Drawing Project	ı	P, M Drawing Project	ı	P, M Problem Solving Test	Р	I
3. Students will be able to apply the principles of mechanics including fluid mechanics in the analyses and solutions of engineering problems and designs.		P, M Problem Solving Test				I	P, M Problem Solving Test	I	I
4. Students will be able to synthesis their knowledge of the fundamentals and practices of engineering	I	P, M Problem Solving	P, M Drawing Project	ı	Р	ı	Р	I	P, M CNC

technology.		Test						Project
5. Students will demonstrate professional skills in oral, written and graphical communication.			P, M Drawing Project	I	P, M Drawing Project	I		
6. Students will demonstrate interpersonal skills to function as part of a team.	P, M Surveying Projects		Р	I	Р	I		P, M CNC Project



Program: Fire Science Technology, A.A.S.

				COURSES			
Student Learning Outcomes for Core Courses	FST 100	FST 110	FST 115	FST 120	FST 210	FST 220	FST 240
Students will be able to explain the basic theories and fundamentals of how and why fires start, spread and are controlled.	ı	P/M Examinations				P Exam Questions	
2. Students will be able to identify and analyze the components of building construction related to fire and life safety; including inspections, pre-incident planning and emergency operations.	I		P Examinations			M Major Research Project	
3. Students will be able to explain and perform basic responsibilities of company officers including supervision, delegation, problem solving, decision-making, communications and leadership as defined by NFPA 1041.	I			P Examination	P Research Project/ Examinations		M Research Paper
4. Students will be able to explain the basic philosophy, organization, and operation of fire and injury prevention programs.	I			P/M Discussions, Examinations			
5. Students will be able to apply the theory and principles for the use of water in fire suppression activities; includes hydraulic principles.	I	P Various assignments	M Exam Questions				



Program: General Studies, A.S.

					Courses	3	
Student Learning Outcomes	ENG 111	ENG 112	MTH 151	PED 116 SDV 100	BIO 101	ASL 201, ARA 202, GER 102, GER 201, FRE 201, SPA 201, SPA 202,CH 101, KOR 101, RUS 101, JPN 202.	CST 110
1 Students will demonstrate the ability to recognize when information is needed and will have the ability to locate, evaluate and use it effectively.	IP						
2. Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act.		IP					
3 Students will demonstrate the ability to use numerical, geometric and measurement data and concepts, mathematical skills, and principles of mathematical reasoning to draw logical conclusions and to make well-reasoned decisions and possess the skills and knowledge necessary to apply the use of logic, numbers and mathematics to deal effectively with common problems and issues.			IP				
Students will demonstrate the ability to develop and/or refine personal wellness goals				IP			
5. Students will demonstrate the ability to adhere to a self-correcting system of inquiry (the scientific method) and rely on empirical evidence to describe, understand, predict and control natural phenomena					IP		
6. Students will demonstrate an awareness, understanding and appreciation of the interconnectedness of the social and cultural dimensions within and across local, regional, state, national and global communities						IP	

7 Students will demonstrate the ability to interact with others resulting in understanding and being understood				IP

#### **Assessment Methods**

- SLO 1 Rubric for evaluating final research paper.
- SLO 2 Rubric for evaluating final research paper
- SLO 3 Assessment Instrument for evaluating numerical and logical proficiency.
- SLO 4 Assessment instrument for evaluating student personal wellness goals and awareness of personal wellness.
- SLO 5 Assessment instrument for evaluating scientific reasoning & inquiry.
- SLO 6 Assessment instrument for evaluating student understanding of social and cultural understanding.
- SLO 7 Assessment instrument for evaluating student knowledge and awareness of social interaction.



Student Learning Outcomes – Curriculum Maps for Degree Awarding Programs and Certificates

Program: Graphic Design, A.A.S.

							Cou	rses							
Student Learning Outcomes	116	135	140	141	142	209	217	218	250	251	263	264	265	280	287
To research, formulate visual and written concepts and solve visual ideas.	I	I	I	I/P Project	P/M	l Project	Р	M Project	M	Р	Р	M	М		М
2. To analyze and evaluate artwork from various perspectives and apply to projects.	I	I	l Project	I/P	P/M	I	Р	M Critiqu e	M	Р	Р	M	P/M Critiqu e	M	М
3. To receive suggestions and criticisms of his or her own work from others and consider the recommendations and apply these recommendations to their final assignments.	I	I Critiqu e/Proj ect	I	I/P	P/M	ı	Р	M Critiqu e	М	Р	Р	M	P/M	М	M Critique /Project
To evaluate visual concepts.	I/P	I/P	I/P	I/P	P/M	I/P	P Proje ct	M Project		P Project	Р	M	Р		М
5. To design visual concepts based on set criteria.	I/P	I/P Projec t	I/P	I/P Project	P/M	I/P	Р	M Project		M	Р	M	Р		М
6. To produce visual concepts into completed projects.	l Project	I Projec t	I	I/P	P/M	I	Р	P/M Project		Р	Р	P/M	Р		P/M

7. To consider and apply technical and conceptual expertise in the creation of visual concepts.	I/P Project	I/P	I/P	I/P	P Project	I/P	Р	M Project	Р	Р	M Project	P/M	М
8. To apply the principles of design and elements of composition.	ı	I	I	I	P/M	I	Р	M Project	P/M Project	Р	M Project	М	М
9. To choose appropriate techniques and technical tools when expressing visual concepts.	ı	I	I	I/P	P/M Project	I	P Proje ct	M Project	P/M	Р	М	P/M	M Project
10. To organize a group to produce solutions to design problems.	I	I	I	I/P	Р	I Project	Р	M Prese ntation	Р	Р	M	P/M Presen tation	М



Program: Health Information Management, A.A.S.

						COL	JRSES								
Student Learning Outcomes	HIM 141	HIM 142	HIM 130	HIM 230	HIM 233	HIM 220	HIM 226	HIM 229	HIM 249	HIM 250	HIM 254	HIM 255	HIM 251	HIM 252	HIM 280
Apply diagnosis/procedure codes according to current guidelines (I.A)										I/P	P/M	I/P		P/M Codin g Lab	I/P/M
2.Analyze the documentation in the health record to ensure it supports the diagnosis and reflects the patient's progress, clinical findings, and discharge status (I.B)	I Virtual Labs Quizzes/ Exams: Homewor k Assignm ents	I/P Virtual Labs Quizzes/Ex ams: Homework Assignmen ts Class Presentatio ns								P Virtual Labs Quizzes /Exams: Assign- ments		P/M		P/M Codin g Lab	I/P/M
3.Apply policies and procedures to ensure the accuracy and integrity of health data (I.C)	I Virtual Labs Quizzes/ Exams: Homewor k Assignm ents	I/P Virtual Labs Quizzes/Ex ams: Homework Assignmen ts Class	I/P	Р	Р	I/P		I/P		Р	М	M	P/M	М	I/P/M

		Presentatio ns												
4. Differentiate the roles and responsibilities of various providers and disciplines to support documentation requirements throughout the continuum of healthcare (I.B)	I Virtual Labs Quizzes/ Exams: Homewor k Assignm ents Class Projects	I/P Virtual Labs Quizzes/Ex ams: Homework Assignmen ts Class Presentatio n	_	Р	Р		I/P Virtual Labs Quizz es/Ex ams: Home work Assig nment s Class Projec ts		Р	М	Р	P/M	М	I/P/M
5. Apply healthcare legal terminology and identify the use of legal documents (II.A)	I					I/P Vlab Assign- ments Quizze s Exams	I/P	I/P/M				Р	M	
6. Apply policies and procedures surrounding issues of access and disclosure of protected health information (II,C)	I Virtual Labs Quizzes/ Exams: Homewor k Class Assignm ents	I/P				I/P/M	I/P	I/P/M				Р	М	
7. Utilize software in the completion of HIM	I/P Virtual	I/P	I/P EHR	Р	P/M	I/P Virtual		P/M	Р	Р	Р	P/M	М	

processes (III.A)	Labs Quizzes/ Exams: Homewor k Class Assignm ents		Quizze s/ Exams Class Assign- ments				Lab								
8. Apply report generation technologies to facilitate decision-making (III.C)	I Virtual Labs Quizzes/ Exams: Homewor k Class Assignm ents	-				P/M Vlab Quiz zes/ Exa ms Case Studi es		Р	I/P Virtual Lab Quizz es/Ex ams Case Studie s			Р	P/M	М	
9. Analyze policies and procedures to ensure organization compliance with regulations and standards (V.A)	I Virtual Labs Quizzes/ Exams: Homewor k Class Assignm ents	I/P Virtual Labs Quizzes/Ex ams: Homework Class Assignmen ts	Р	I/P	Р		P/M	P/M Quizz es Exam s Home -work	М	Р	Р	Р	P/M	М	I/P/M
10. Assess how cultural issues affect health, healthcare quality, cost, and HIM (VI.H)							P/M Virtual Labs Quizze s/Exam s: Class Assign- ments						P/M	P/M	I/P/M



Program: Horticulture Technology, A.A.S.

		COURSES											
Student Learning Outcomes	HRT 100	HRT 115	HRT 127	HRT 205	HRT 207	HRT 231	HRT 232	HRT 245	HRT 246	HRT 251	HRT 252	HRT 269	HRT 275
Diagnose plant problems and recommend proper controls.	ı	Р			M Conduct Pest/dise ase diagnosis							Р	Р
2. Correctly identify plants by Family, Scientific name (Genus, Specific Epithet, variety and/or subspecies), Cultivar if appropriate and Common Name.	ı	Р				Р	Р	P/M Field Identify Plants	P/M Identify Herbace ous plants			Р	
3. Correctly identify parts of a plant under microscope or as a sample.	I	Р	M Both anatomi cally and morphol ogically									Р	
4. Use library, internet or professional resources to prepare proper horticultural information, to prepare and write an informational, research or opinion paper.	I/ M Use resourc es to explore Hort topic	Р	Р	Р	P/M Use resource s to find plant problems	Р	Р	Р			M Complet e docume nts to build garden	Р	Р

								and features		
5. Calculate areas and volumes of landscape features and amounts of materials.	ı		Р	P /M Calcul ate areas for design featur es			P/M Calculat e Cut and Fill		Р	M Calculat e soils and mulches and areas for paving
6. Neatly draw and correctly label a landscape plan.	ı			P/M Prepa re a compl ete Lands cape Plan	P/M					
7. Prepare a one or two -point perspective drawing from a landscape plan view drawing.	ı			Р	P/M				Р	
8. Correctly draw an axonometric detail of a joinery detail of a landscape feature.	I							I/P/M Prepare details for final drawing s		Р



**Program: Hospitality Management, A.A.S.** 

	Courses											
Student Learning Outcomes	HRI 101	HRI 102	HRI 120	HRI 138	HRI 158	HRI 215	HRI 235	HRI 251	HRI 255	HRI 256	HRI 265	HRI 275
1. Students will compare the various sectors of the hospitality industry and recognize the unique characteristics and attributes of each and their effect on quality of work life.	I	I/P		ı	Р				M Exam questions	Р	Р	M Exam questions
2. Students will describe and apply the four functions of management: plan, organize, lead and control.	I	I		Р			Р	I/P	M Exam questions	M Capstone catering Project	Р	Р
3. Students will prepare and evaluate a variety of different food products by following standardized recipes and using appropriate cooking techniques.			I/P			Р				M Catering Event Performance		
4. Students will scale, standardize, and cost out recipes.			I	I/P		Р		Р		M Catering Project		
5. Students will illustrate the proper use and care of commercial food production equipment.			I/P	Р	I/P					M Catering Project		

6. Students will apply approved food handling/safety standards in the preparation, service and storage of food.	I	I/P	Р	I/P	I		I	M Catering Event Performance	
7. Students will actively participate in the execution of different style catering functions.		I	1			I		M Catering Event Performance	



**Program: Information Systems Technology, A.A.S.** 

		COURSES									
Student Learning Outcomes	ITP 100	ITE 115	ITD 256	ITE 221	ITN 100	ITP 120	ITP 132	ITE 170	ITD 110	ITN 171	ITN 260
1. Be able to design problems using procedural and object oriented design and implement, sequence, selection and loop structures within the design solution.	I/P/M Exam question s					I/P/M Exam questions	I/P/M Exam questions				
2. Be able to identify correct syntax and logic in a programming language.		I	P/M Exam questions			P/M Exam questions	P/M Exam questions				
3. Be able to identify terminology, correct syntax, and appropriate uses of graphics, animation, and XHTML for a successful multimedia website.		I						P/M Exam questions	P/M Exam questions		

4. Be able to define normalization and define why it is necessary in the creation of a relational database.	I	P/M Exam questions						
5. Be able to describe memory types and allocation methods.	I		P/M Exam questions	P/M Exam questions				
6. Be able to define the OSI reference model and layers.			I	I/P/M Exam questions				
7. Be able to provide instruction in the basics of network security in depth.	I						P/M Exam questions	
8. Be able to list the advantages and disadvantages of the UNIX operating system.								I/P/M Exam questions



Program: Information Technology, A.S.

				cou	IRSES			
Student Learning Outcomes	ITP 100	ITE 115	ITD 256	ITE 221	ITN 100	ITP 120	ITP 132	ITE 170
Be able to design problems using procedural and object oriented design and implement, sequence, selection and loop structures within the design solution.	I/P/M Exam questions					I/P/M Exam questions	I/P/M Exam questions	
2. Be able to identify correct syntax and logic in a programming language.		I	P/M Exam questions			P/M Exam questions	P/M Exam questions	
3. Be able to identify terminology, correct syntax, and appropriate uses of graphics, animation, and XHTML for a successful multimedia website.		I						P/M Exam questions
4. Be able to define normalization and define why it is necessary in the creation of a relational database.		I	P/M Exam questions					
5. Be able to describe memory types and allocation methods.		I		P/M Exam questions	P/M Exam questions			
6. Be able to define the OSI reference model and layers.				I	I/P/M Exam questions			



**Program: Interior Design, A.A.S.** 

					COL	JRSES				
Student Learning Outcomes	IDS 100	IDS 105	IDS 106	IDS 109	IDS 205	IDS 206	IDS 215	IDS 221	IDS 225	IDS 245
Students will apply technical drawing skills to graphically illustrate design concepts.	I	Р	l		Р	Р	M Design Project	M Design Project	Р	Р
2. Students will utilize basic building and accessibility codes related to the health, safety and welfare of the public to develop interior floor plans.	I	Р					M Test/ Design Project	Р		Р
3. Students will practice business management including estimating, marketing, business structures and ethics as they relate to the field of interior design.	I						Р	Р	M Test/ Job Book	
4. Students will recognize and evaluate appropriate interior finish materials and textiles particularly as they relate to issues of sustainability.	I				M Test/ Report		Р	Р		
5. Students will apply critical, analytical and strategic thinking skills in the interpretation of project requirements.	I	I		Р	Р	Р	M Design Project	M Design Project	Р	
6. Students will recognize and identify major styles of art, architecture and furniture and be able	I		Р	M Image Exam/	Р					

to explain their significance in relation to the design of the present day.				Report						
7. Students will demonstrate presentation skills including technical skills required to develop finish boards and oral skills to convey ideas.	I				Р	Р	M Design Project	M Design Project	Р	
8. Students will develop accurately scaled floor plans including furniture and fixtures as well as other construction drawings needed to convey information to a furniture installer or building contractor.	ı	Р					M Design Project	M Design Project		Р
Students will produce design projects utilizing basic color theory.	I		Р		Р		M Design Project	M Design Project		
10. Students will illustrate how to light an interior space using a variety of sources of illumination.	I	Р				M Test/ Design Project	Р	Р		Р



Program: Liberal Arts, A.A.

				Course	es		
Student Learning Outcomes	ENG 111	ENG 112	MTH 151	PED 116 SDV 100	BIO 101	ASL 201, ARA 202, GER 102, GER 201, FRE 201, SPA 201, SPA 202,CH 101, KOR 101, RUS 101, JPN 202.	CST 110
1 Students will demonstrate the ability to recognize when information is needed and will have the ability to locate, evaluate and use it effectively	IP						
2. Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act.		IP					
3 Students will demonstrate the ability to use numerical, geometric and measurement data and concepts, mathematical skills, and principles of mathematical reasoning to draw logical conclusions and to make well- reasoned decisions and possess the skills and knowledge necessary to apply the use of logic, numbers and mathematics to			IP				

deal effectively with common problems and issues.					
4. Students will demonstrate the ability to develop and/or refine personal wellness goals		ΙΡ			
5. Students will demonstrate the ability to adhere to a self-correcting system of inquiry (the scientific method) and rely on empirical evidence to describe, understand, predict and control natural phenomena			IΡ		
6. Students will demonstrate an awareness, understanding and appreciation of the interconnectedness of the social and cultural dimensions within and across local, regional, state, national and global communities				IP	
7 Students will demonstrate the ability to interact with others resulting in understanding and being understood					IP



Program: Liberal Arts, A.A., Art History Specialization

	COURSES				
Student Learning Outcomes	ART 100	ART 101	ART 102	ART 106	ART 250
Identify major artists     and works of art	I-	I	ı	Р	ı
Using their stylistic traits, distinguish among art historical periods	I-	Р	M – tests, projects, presentations	M – tests, projects, presentations	Р
Develop formal vocab to describe art	Р	M - tests	Р	Р	Р
Explain the significance of the media and techniques used to create a work of art.	Р	Р	Р	Р	M – tests, projects, presentation
5. Critically evaluate works of art in historical context	I	Р	Р	Р	M – tests, projects, presentations
6. Apply information literacy skills to research art history	I	P-	Р	Р	M – tests, projects, presentations



Program: Liberal Arts: Theatre, CSC

				COURSES			
Student Learning Outcomes	CST130 Introduction to Theatre	CST131 Acting I	CST136 Theatre Workshop	CST141 Theatre Appreciation	CST132 Acting II (elective)	CST231 History of Theatre I (elective)	CST241 Introduction to Directing (elective)
Students will be able to define theatre vocabulary.	I, P	I, P	I, P	I, P	I, P, M	I, P	I, P, M
2. Students will be able to analyze a script for performance and production.	I	I, P, M	I, P, M	I	I, P, M		I, P, M
3. Students will be able to present material to an audience.		I, P, M	I, P, M		I, P, M		I, P, M
4. Students will be able to illustrate the organization of a theatrical event.	I	I	I, P, M	I, P	ı		I, P
5. Students will be able to apply appropriate technical	I	I	I, P, M	I, P	I		I, P

elements of stagecraft such as costume designs, set designs, research, lighting, sound, and make-up to a performance.					
6. Students will be able to discuss the impact of theatre on a variety of cultures and society.	I, P, M		I, P	I, P, M	



Program: Marketing, A.A.S.

					COURSES				
Student Learning Outcomes	MKT 200 Consumers, Mkt. & Society	MKT 201 Intro. to Marketing	MKT 215 Sales & Mkt. Mgt.	MKT 216 Retail Org. & Mgt.	MKT 221 Public Relations	MKT 227 Merch. Buying & Control	MKT 228 Promotion	MKT 282 eCommerce	MKT 284 Social Media Marketing
Communicate effectively to the public, press, and employees in both oral and written formats with grammatical accuracy	I/P	I/P	Р	Р	M Media kit and press conference	Р	М	Р	ı
2. Describe the elements of the marketing mix (product, price, place, and promotion) and their use to achieve customer satisfaction.	_	M Student survey	Р	Р	Р	Р	Р	Р	Р
3. Demonstrate how to achieve organizational objectives by effectively interacting with others as team members and as team leaders.	I	Р	Р	Р	Р	Р	Р	M Group web site project	

4. Apply basic business math to inventory planning and control, pricing strategies, budget calculations, stock turns, and inventory loss.	I	I	Р			M Comprehensive. math exam	I		
5. Apply the marketing principles such as marketing strategies, sales promotion, sales mgt., good customer service, public relations and ethical procedures in consumer and business transactions.	l/P	I/P	M Student sales presentation	Р	Р	Р	Р	Р	Р



**Program: Massage Therapy, CSC** 

					COUR	SES		
	Student Learning Outcomes	HLT 170	HLT 180	HLT 280	HLT 281	HLT 195	HLT 190	HLT 105
1.	Effectively blend Swedish and deep tissue strokes to perform a full body massage.	I	I/P/M Lab Practical	Р	Р		Р	
2.	Integrate musculoskeletal anatomy and physiology into massage techniques.		I	I	Р		M Lab Practical	
<ol> <li>3.</li> <li>4.</li> </ol>	Identify indications and contraindications to determine techniques appropriate for each client.	I	Р	Р	P/M Essay Exams		Р	
5.	Demonstrate ethical behavior in the client/therapist relationship.	I	Р	Р	Р	Р	P/M Lab Practical/Client Feedback Forms	
6.	Incorporate body mobilization and stretching techniques into bodywork.		I	Р	M Lab Practical		Р	
7.	Demonstrate the principles of proper body mechanics when performing massage	I	Р	M Lab Practical	Р		Р	
8.	Perform pre-massage consultations with clients using		I	Р	Р	Р	P/M SOAP note	

proper notations on session charts and post-massage evaluations.			evaluation	
<ul><li>9. Construct a business plan that addresses business structures, management techniques and ethics.</li><li>10.</li></ul>			I/P/M Business plan	
11. Perform cardio/pulmonary resuscitation and basic first aid.				I/P/M Written exam/lab practical



Program: Medical Laboratory Technology, A.A.S.

								COUR	SES						
Student Learning Outcomes	MDL 101	MDL 125/ 225 (Replac es MDL 127 in Fall 17)	MDL 130	MDL 140 (New Fall 17)	MDL 215	MDL 260	MDL 216	MDL 251/ 252	MDL 261	MDL 243	MDL 281	MDL 266	MDL 276	MDL 277	MDL 278
1. Communicate sufficiently to serve the needs of patients, the public, and members of the health care delivery team.  METHOD OF ASSESSMENT: Rubrics for evaluating: Portfolios of student work	I/P	Р	I/P	Р	Р	Р	Р	Р	Р	Р	Р	М	М	М	М
2.Comply with the application of safety and government regulations.	I/P	Р	I/P	Р		Р	Р	Р	Р			M	M	M	М

METHOD OF ASSESSMENT: Locally developed tests/embedded test questions															
3.Collect, process, and analyze biological specimens and other substances.															
METHOD OF ASSESSMENT: Rubrics for evaluating: Exam questions, Certificate exams, Lab work	I/P	Р	I/P	P		Р	Р	Р	Р		Р	М	M	М	М
4.Perform, discuss, and demonstrate principles and methodologies of diagnostic assays, problem- solving, and troubleshooting techniques.	I/P	Р	I/P	P/M	Р	Р	Р	Р	Р	Р	Р	М	M	M	M
ASSESSMENT: Rubrics for evaluating: Portfolios of student work,															

Lab work Locally developed tests/embedded test questions Certificate exams														
5.Discuss significance of clinical procedure results and the principles and practices of quality assessment.  METHOD OF ASSESSMENT: Rubrics for evaluating: Lab work Portfolios of student work, locally developed tests/embedded test questions Certificate exams	I/P	Р	Р/М		Р	Р	Р	P		Р	М	M	M	М
6. Practice and discuss principles of professional conduct and the significance of continuing professional development.	I/P	Р	Р	Р	Р	Р	Р	Р	Р	Р	М	М	М	М

METHOD OF ASSESSMENT: Rubrics for evaluating: Portfolios of student work Exam questions								



Program: Music, A.A.A., Jazz/Popular Music Specialization

				COU	RSES			
Student Learning Outcomes	Applied Music	Chorus/ Band/ Orchestra/ Ensemble	MUS 111 Music Theory 1	MUS 112 Music Theory 2	MUS 211 Advanced Music Theory	MUS 212 Advanced Music Theory	MUS 221 History of Music 1	MUS 222 History of Music 2
1. The student will be able to render a performance that is musically expressive and technically accurate.	M Method of assessment: Performance s	M Method of assessment: Performance s						
2. The student will be able to analyze the musical structure of a composition.			I Method of assessment: Essays/Paper s Exam questions	P Method of assessment: Essays/Paper s Exam questions	P Method of assessment: Essays/Paper s Exam questions	M Method of assessment: Essays/Paper s Exam questions		
3. The student will be able to perform pieces, exercises, scales and progressions accurately.	I Method of assessment: Performance s	I Method of assessment: Performance s	P Method of assessment: Performances	M Method of assessment: Performance s	·			
4. The student will be able to perform effectively in a group.	M Method of assessment: Performance s	M Method of assessment: Performance s						
5. The student will be able to provide an							I Method of	I Method of

overview of the history of music history of jazz and popular music.				assessment: Essays/Papers Exam questions	
6. The student will be able to effectively research and write on topics in the area of jazz and popular music.				I Method of assessment: Essays/Papers Exam questions	M Method of assessment: Essays/Papers Exam questions



**Program: Music Recording Technology, Certificate** 

				Courses		
Student Learning Outcomes	MUS 140	MUS 157	MUS 158	MUS 179	MUS 235	MUS 227
Creatively use technical knowledge of microphones and/or microphone techniques in audio applications.	I,P.				P, M (EXAM,PROJECT, LAB WORK)	
2. Appropriately use an equalizer, compressor, and/or time based effects in audio applications.	I, P					P, M(PROJECT, LAB WORK)
3. Distinguish five frequency bands in audio aurally.	I,P		I,P		I,P,M	I,P,M(PROJECT, COMPREHENSIVE EXAM)
Explain current issues in copyright law.				I,P,M(PAPER)		
5. Record a live band.	I,P				P,M(PROJECT, LAB WORK)	
6. Calculate basic electrical circuit resistance, amperage, and voltage.			I,P,M(COMPREH ENSIVE EXAM)			

7. Use techniques to predict room reverberation time (RT <sub>60</sub> ) with regard to proper musical acoustic support for a traditional recording studio space exhibiting frequency-dependent exponential decay.		I,P,M (COMPR EHENSI VE EXAM)		Р	Р
8. Define terms used in pro-audio.	I,P			P,M (COMPREHENSIVE EXAM)	
9. Seamlessly edit digital audio files.	I,P				P,M (PROJECT, LAB WORK)



Program: Nursing, A.A.S.

Student Learning Outcomes		First Year	COURSES	
Student Learning Outcomes	NUR111 or 115/116	NUR150	NUR180	NUR201
Demonstrate quantitative reasoning in the practice of nursing.	<ul> <li>Diagnostic math assessment prior to beginning nursing program</li> <li>Drug Dosage Calculation</li> <li>Practice math test</li> <li>Questions unit exam and Final</li> <li>ST (HESI)</li> </ul>		1/P:     Drug Dosage Calculation (DDC)     DDC test (180/201)     Questions unit exam and Final     ST (HESI)	1/P: Drug Dosage Calculation (DDC) DDC test (180/201) Questions unit exam and Final ST (HESI)
2. Demonstrate using community-based nursing in the promotion of health, in providing for a safe and effective environment, and promoting/maintaining physiological and psychological integrity.	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>A= Care plan assignment (NUR111)</li> <li>Clinical assessment (NUR111)</li> <li>Campus lab (NUR111 &amp; NUR116)</li> <li>ST (HESI)</li> </ul>	I/P/M  Unit Exams  A= Community Assessment  A= Disaster Plan	P/M:  Unit Exams  A= Teaching Project  Clinical assessment  Campus lab  ST (HESI)	P/M:  Unit Exams  A= Care Plan  A= Weekly nurse/patient interaction journal  Clinical assessment  ST (HESI)
3. Utilize the nursing process, critical thinking strategies, and Maslow's Hierarchy of Needs to provide nursing care along the health/illness continuum throughout the life cycle.	I/P:  Unit Exams  A= Care plan assignment (NUR111)  Clinical assessment (NUR111)  Campus lab (NUR111 & NUR116)  ST (HESI)	I/P:  • Unit Exams • A= Community Assessment	I/P:  Unit Exams  A = Teaching Project  Clinical assessment  Campus lab  ST (HESI)	I/P:  Unit Exams A = Care Plan Clinical assessment ST (HESI)

Student Learning Outcomes		First Year	COURSES	
Student Learning Outcomes	NUR111 or 115/116	NUR150	NUR180	NUR201
4. Provide culturally competent therapeutic nursing care to clients with common, well-defined health needs in community-based settings.	I/P:  Unit Exams Clinical assessment (NUR111) ST (HESI)	<ul> <li>I/P/(M):</li> <li>Midterm &amp; Final Exam</li> <li>A = Cultural Assessment</li> <li>A = Community         Assessment     </li> </ul>	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>A =Teaching Plan</li> <li>Clinical assessment</li> <li>ST (HESI)</li> </ul>	I/P:  Unit Exams A = Care Plan Clinical assessment ST (HESI)
5. Communicate effectively in diverse settings.	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>P= Care plan assignment (NUR111)</li> <li>Clinical assessment (NUR111)</li> <li>Campus lab (NUR111 &amp; NUR116)</li> <li>ST: HESI</li> </ul>	<ul> <li>I/P:</li> <li>Midterm &amp; Final Exam</li> <li>A = Community     Assessment</li> <li>A = Cultural Assessment</li> <li>ST: HESI</li> </ul>	I/P:  Unit Exams  A =Teaching Plan  Clinical assessment  ST: HESI	<ul> <li>I/P/M:</li> <li>Unit Exams</li> <li>A = Care Plan</li> <li>A = Weekly nurse/patient interaction journal</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>
6. Utilize the teaching/learning process in providing nursing care.	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>A = Care plan assignment (NUR111)</li> <li>Clinical assessment (NUR111)</li> <li>Campus lab (NUR111 &amp; NUR116)</li> <li>ST: HESI</li> </ul>	<ul> <li>I/P:</li> <li>Midterm &amp; Final Exam</li> <li>A = Community         Assessment </li> <li>ST: HESI</li> </ul>	I/P/M:  Unit Exams  A =Teaching Plan  Clinical assessment  ST: HESI	I/P:  Unit Exams  A = Care Plan  Clinical assessment  ST: HESI
7. Demonstrate the ability to manage client care.	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>A = Care plan assignment (NUR111)</li> <li>Clinical assessment (NUR111)</li> <li>ST: HESI</li> </ul>	<ul> <li>I/P:</li> <li>Midterm &amp; Final Exam</li> <li>A = Community     Assessment</li> <li>ST: HESI</li> </ul>	I/P/M:  • Unit Exams  • A =Teaching Plan  • Clinical assessment  • ST: HESI	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>A = Care Plan</li> <li>A = Weekly nurse/patient interaction journal</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>
8. Demonstrate the use of critical thinking throughout the nursing process in the provision of client care.	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>A = Care plan assignment (NUR111)</li> <li>Clinical assessment (NUR111)</li> <li>ST: HESI</li> </ul>	<ul> <li>I/P:</li> <li>Midterm &amp; Final Exam</li> <li>A = Community</li></ul>	I/P/M:  • Unit Exams  • A =Teaching Plan  • Clinical assessment  • ST: HESI	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>A = Care Plan</li> <li>A = Weekly nurse/patient interaction journal</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>

Student Learning Outcomes	First Year COURSES						
	NUR111 or 115/116	NUR150	NUR180	NUR201			

Student Learning Outcomes		Second Yo	ear Courses	
3	NUR221	NUR222	NUR254	NUR255
Demonstrate quantitative reasoning in the practice of nursing.	P:     Drug Dosage Calculation     DDC test     Questions unit exam and Final	M:     Drug Dosage Calculation     DDC test     Questions unit exam and Final     ST=HESI	N/A	M: • ST=HESI
2. Demonstrate using community-based nursing in the promotion of health, in providing for a safe and effective environment, and promoting/maintaining physiological and psychological integrity.	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>A = Concept Map</li> <li>Clinical assessment</li> <li>Campus lab</li> </ul>	P/M:  Unit Exams  A = Concept Map  Clinical assessment  Campus lab  ST=HESI	N/A	M:      Questions midterm and Final     A: EBP project     ST=HESI
3. Utilize the nursing process, critical thinking strategies, and Maslow's Hierarchy of Needs to provide nursing care along the health/illness continuum throughout the life cycle.	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>A = Concept Map</li> <li>Clinical assessment</li> <li>Campus lab</li> </ul>	P/M:  Unit Exams  A = Concept Map  Clinical assessment  Campus lab  ST=HESI	N/A	M:      Questions midterm and Final     A: EBP project     ST=HESI
4. Provide culturally competent therapeutic nursing care to clients with common, well-defined health needs in community-based settings.	<ul> <li>I/P:</li> <li>Unit Exams</li> <li>A =Concept Map</li> <li>Clinical assessment</li> </ul>	P/M:  Unit Exams  A =Concept Map  Clinical assessment  ST=HESI	N/A	M:     A: EBP project     ST=HESI
5. Communicate effectively in diverse settings.	P:     Unit Exams     A =Concept Map     Clinical assessment	P/M:  Unit Exams  A =Concept Map  Clinical assessment  ST: HESI	P/M • Final Exam	M:      Questions midterm and Final     A: EBP project     ST=HESI

Student Learning Outcomes		Second Ye	ear Courses	
	NUR221	NUR222	NUR254	NUR255
6. Utilize the teaching/learning process in providing nursing care.	P:     Unit Exams     A =Concept Map     Clinical assessment	P/M:  Unit Exams  A = Concept Map  Clinical assessment  ST: HESI	N/A	M:     Questions midterm and Final     A: EBP project     ST=HESI
7. Demonstrate the ability to manage client care.	P:     Unit Exams     A =Concept Map     Clinical assessment	P/M:  Unit Exams  A = Concept Map  Clinical assessment  ST: HESI	N/A	M:     Questions midterm and Final     A: EBP project     ST=HESI
8. Demonstrate the use of critical thinking throughout the nursing process in the provision of client care.	P:     Unit Exams     A =Concept Map     Clinical assessment	P/M:  Unit Exams  A = Concept Map  Clinical assessment  ST: HESI	N/A	M:     Questions midterm and Final     A: EBP project     ST=HESI

Note: Measured/Assessed ST=Standardized Test A=Assignment (Specify)



**Program: Occupational Therapy Assistant, A.A.S.** 

		COURSES (List – Part 1 of 2)								
Student Learning Outcomes	OCT 100	OCT 205	OCT 225	OCT 203	OCT 207	OCT 190 (1 of 3)	OCT 195	OCT 190 (2 of 3)	OCT 201	
1. Establish and maintain a therapeutic rapport with clients, families, colleagues, and other health care professionals through effective communication and appropriate professional behaviors during the screening and evaluation process. (Screening and Evaluation/Fieldwork)	I Introduce concepts in lecture; Method of Assessment: Final Exam	I, P Introduce concepts in lecture; practice therapeutic rapport skills on two fieldtrips Method of Assessme nt: Rubric from the fieldtrip analysis assignmen t		P Practices establishing therapeutic rapport with children in pediatric labs Method of Assessme nt: Rubric to demonstrat e student exhibits these skills	P Practices establishing therapeutic rapport in Therapeutic Skills labs Method of Assessme nt: On the rubric for the final lab practical for this course	P Practices on pediatric fieldwork experienc e with clients, families, teachers, OT practitione rs, etc. Method of Assessm ent: Level I Fieldwork Evaluation		P Practices on psychosocia I fieldwork experience with clients, families, OT practitioners , etc. Method of Assessmen t: Level I Fieldwork Evaluation		
2. Implement evidence-based practice skills when working with clientele across the lifespan and across cultures.				I, P Introduced to evidence- based practice in pediatrics;			I, P This is an evidence- based practice course. In this course, students must		P Introduced to evidence- based practice in psychosocial practice; must complete an	

(Scholarship/Contex			must			show		evidence-
t of Service			complete			competency		based practice
			•					•
Delivery)			an evidence-			with		group
						implementing		presentation
			based			evidence-		Method of
			practice			based practice		Assessment:
			group			skills by		Evidence
			presentatio			completing a		shown on
			n			critically		rubric for group
			Method of			appraised		presentation
			Assessme			topic (CAT).		
			nt:			Method of		
			Evidence			Assessment:		
			shown on			Rubric and		
			rubric for			completion of		
			group			the CAT paper		
			presentatio			and		
			n			presentation		
3. Effectively and		I, P	Р	Р	Р		Р	Р
creatively solve		Introduce	Must	Must	Must		Must	Must
problems and make		d to	demonstrat	demonstrat	creatively		creatively	demonstrate
reflective treatment		basics of	e effective	e effective	solve		solve	effective
decisions based on		treatment	problem-	problem-	problems		problems and	problem-
the stated needs of		for	solving	solving	and make		make	solving skills to
the clients who are		individual	skills to	skills during	effective		effective	meet the needs
being served.		s with	meet the	Therapeutic	treatment		treatment	of psych social
(Intervention/Imple		neuro	needs of	Skill labs	decisions		decisions	clients as
mentation)		conditions	pediatric	(i.e. treating	alongside		alongside the	shown.
,		Method	clients in	after taking	the		fieldwork	Method of
		of	labs.	vital signs,	fieldwork		educator in a	Assessment
		Assessm	Method of	etc.)	educator		psychosocial	Final exam
		ent	Assessme	Method of	in a		setting.	
		Four	nt	Assessme	pediatric		Method of	
		neuro	Final	nt	setting.		Assessment	
		analyses	practical	Final Lab	Method		Level I	
		and	and final	practical	of		fieldwork	
		correspon	exam	rubric	Assessm		evaluation	
	i		-		I			

			alia a					
			ding			ent		
			rubric			Level I		
						fieldwork		
						evaluation		
4. Provide	I	I, P		I, P	I, P	Р	Р	I
meaningful and	Students are	Students		Students	Students	Students	Students	Students are
purposeful	introduced to	are		are	are	provide	provide	introduced to
therapeutic	ethical and	introduced		introduced	introduced	interventio	interventions	appropriate
interventions to	legal issues in	to what it		to	to	ns to	to	therapeutic
clients in a safe,	OT and the	means to		appropriate	appropriate	pediatric	psychosocial	interventions
ethical, and legal	supervisory	provide		therapeutic	therapeutic	clientele	clientele with	when working
manner under the	process	meaningful		intervention	skills when	with close	close	with
direction and	Method of	therapeutic		s when	working	supervisio	supervision	psychosocial
supervision of an	Assessment	interventio		working	with	n on Level	on Level I	clientele in
occupational	OCT 100 final	ns and the		with	individuals	I fieldwork	fieldwork to	lecture
therapist.	exam	various		pediatric	across the	to engage	engage client.	Methods of
(Intervention/Imple		types		clientele in	lifespan	client.	Method of	Assessment
mentation;		through		both lecture	with a	Method	Assessment	Final exam
Professional ethics,		lecture and		and	variety of	of	Level I	
values,		lab.		practice in	conditions	Assessm	fieldwork	
responsibilities)		Students		lab.	in both	ent	evaluation	
,		attend 2		Methods of	lecture and	Level I		
		fieldtrips,		Assessme	practice in	fieldwork		
		allowing		nt	lab.	evaluation		
		them to		Final	Methods of			
		practice		practical	assessmen			
		these		and final	t:			
		skills.		exam	Final exam			
		Method of		Oxam	and rubrics			
		Assessme			from the			
		nt			midterm			
		Midterm			and final			
		exam and			practical			
		rubric from			exams			
		the fieldtrip			GAGIIIS			
		•						
		analysis						
		assignmen						

		t					
5. Effectively	I		I, P		Р	Р	I, P
document using	Introduced to		Introduced		Start	Start	Introduced to
electronic medical	the		to important		practicing	practicing	important
records and written	significance of		documentat		document	documentatio	documentation
documentation in	effective		ion skills as		ation skills	n skills	skills as related
order to best ensure	documentation		related to		(dependin	(depending on	to psychosocial
effective	as a method		pediatric		g on the	the fieldwork	practice. Must
communication with	of		practice.		fieldwork	site) on the	incorporate
colleagues, other	communicatio		Must		site) on	job in a	these skills in
healthcare	n with others		incorporate		the job in	psychosocial	SOAP note
professionals,	and to ensure		these skills		a pediatric	setting.	writing
administration, and	reimbursemen		in lab		setting.	Method of	activities.
reimbursement	t in OT		activities		Method	Assessment	Method of
agencies.	practice.		and on the		of	Level I	Assessment
(Assistance with	Method of		final		Assessm	fieldwork	SOAP note
Management of OT	Assessment		practical		ent	evaluation	rubric.
Services, Fieldwork)	OCT 100 final		exam.		Level I		
	exam		Method of		fieldwork		
			Assessme		evaluation		
			nt				
			Final				
			practical				
			exam				
6. Utilize principles		I, P	Р	Р		Р	Р
of occupational and		Students	Students	Students,		Students,	Students apply
activity analysis and		are	apply the	while in the		while in the	the principles of
synthesis used in		introduced	principles of	field, apply		field, apply	occupational
occupational		to the	occupationa	the		the principles	and activity
therapy intervention		principles	I and	principles of		of	analysis during
during laboratory		of	activity	occupationa		occupational	lecture
activities and		occupation	analysis	I and		and activity	experiences
fieldwork		al analysis	during lab	activity		analysis when	_
opportunities.		and	experiences	analysis		working with	with the
(Occupational		synthesis	when	when		the	psychosocial
Therapy Theoretical		during	working	working		psychosocial	clientele.

Perspectives/		lecture and	with the	with the		clientele.	Method of
Fieldwork)		lab and	pediatric	pediatric		Method of	Assessment
,		they	clientele.	clientele.		Assessment	OCT 201 Final
		practice	Method of	Method of		Level I	exam
		these skills	Assessme	Assessme		fieldwork	
		in lab and	nt	nt		evaluation	
		during	Final	Level I			
		fieldtrip	practical	fieldwork			
		opportuniti	exam	evaluation			
		es.					
		Methods					
		of					
		Assessme					
		nt					
		Midterm					
		exam and					
		rubric from					
		the fieldtrip					
		analysis					
		assignmen					
		t					
7. Utilize the	I	I, P	Р	Р	Р	Р	Р
teaching and	Students are	Students	Students	Students	Students	Students will	Students
learning process in	introduced to	are	practice	are required	will start	start applying	practice
providing	the concepts	introduced	incorporatin	to educate	applying	their skills of	incorporating
occupational	of teaching	to how the	g teaching	clients and	their skills	teaching and	teaching and
therapy	and learning in	teaching	and	their	of	learning when	learning in the
interventions.	OT practice.	and	learning in	families on	teaching	providing	psychosocial
	Method of	learning	the	how to	and	interventions	intervention
	Assessment	process	pediatric	perform	learning	to	class when
	Final exam	varies	intervention	various	when	psychosocial	working with
		when	labs when	therapeutic	providing	clientele in	the
		working	working	skills.	interventio	their Level I	psychosocial
		with clients	with	Method of	ns to	fieldwork	clientele.
		across the	pediatric	Assessme	pediatric	experience.	Method of
		lifespan.	clientele.	nt	clientele in	Method of	Assessment:
		They then	Method of	Final lab	their Level	Assessment	Final exam

		evaluate their own learning styles and preferred teaching styles while incorporati ng these preference s into lab activities. Method of Assessme nt Learning and teaching style lab assignmen t rubric	Assessme nt Final lab practical	practical	I fieldwork experienc e.  Method of Assessm ent Level I fieldwork evaluation		Level I fieldwork evaluation	
8. Develop lifelong learning capabilities required for enhanced professional development.	I Introduced to lifelong learning and professional development requirements and opportunities in occupational therapy.  Method of Assessment OCT 100 final					P Practice lifelong learning skills of being able to find evidence- based information to influence OT practice. Method of Assessment Discussion Board forum		

0.14	vom			rubrio	
I EX	xam			rubric	
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Part 2 of 2

Student Learning Outcomes	OCT 202	OCT 208	OCT 210	OCT 190 (3 of 3)	OCT 290 (1 of 2)	OCT 290 (2 of 2)	OCT 295
1. Establish and maintain a	Р			Р	M	M	
therapeutic rapport with clients,	Practices			Practices on	Demonstrates	Demonstrates	
families, colleagues, and other	effective			adult/elderly	competency	competency	
health care professionals through	communication			fieldwork	with developing	with developing	
effective communication and	necessary OT			experience	and	and	
appropriate professional	practice in lab.			with clients,	maintaining	maintaining	
behaviors during the screening	Method of			families,	therapeutic	therapeutic	
and evaluation process.	Assessment:			teachers, OT	rapport on	rapport on	
(Screening and	On the rubric			practitioners,	Level II	Level II	
Evaluation/Fieldwork)	for the final lab			etc.	fieldwork	fieldwork	
	practical for			Method of	experience	experience	
	this course			Assessment:	with clients,	with clients,	
				Level I	families, OT	families, OT	
				Fieldwork	practitioners,	practitioners,	
				Evaluation	etc.	etc.	
					Method of	Method of	
					Assessment:	Assessment:	
					AOTA Level II	AOTA Level II	
					Fieldwork	Fieldwork	
					Evaluation	Evaluation	
2. Implement evidence-based	Р				M	M	
practice skills when working with	Introduced to				Demonstrates	Demonstrates	
clientele across the lifespan and	evidence-				mastery with	mastery with	
across cultures.	based practice				implementing	implementing	
(Scholarship/Context of Service	with				evidence-	evidence-	
Delivery)	adults/elderly;				based practice	based practice	
	must complete				skills while	skills while	
	an evidence-				incorporating	incorporating	
	based practice				evidence into	evidence into	
	individual				everyday	everyday	
	paper				practice with	practice with	

3. Effectively and creatively solve problems and make reflective treatment decisions based on the stated needs of the clients who are being served. (Intervention/Implementation)	presentation  Method of  Assessment:  Evidence shown on rubric for individual paper presentation  P  Must demonstrate effective problem- solving skills to meet the needs of adult and elderly clients in labs.  Method of Assessment Rubrics of midterm and final practical		P Must demonstrate effective problem- solving skills to meet the needs of clients across the lifespan with assistive technologies. Method of Assessment Rubric of the final group assistive technology project	P Must creatively solve problems and make effective treatment decisions alongside the fieldwork educator in an adult/elderly setting. Method of Assessment Level I fieldwork evaluation	clients across the lifespan on Level II fieldwork. Method of Assessment: AOTA Level II Fieldwork Evaluation  M Demonstrate competency with creatively solving problems and making effective treatment decisions. Method of Assessment: AOTA Level II Fieldwork Evaluation	clients across the lifespan on Level II fieldwork. Method of Assessment: AOTA Level II Fieldwork Evaluation  M Demonstrate competency with creatively solving problems and making effective treatment decisions. Method of Assessment: AOTA Level II Fieldwork Evaluation	
4. Provide meaningful and purposeful therapeutic interventions to clients in a safe, ethical, and legal manner under the direction and supervision of an occupational therapist. (Intervention/Implementation; Professional ethics, values, responsibilities)	I, P Students are introduced to appropriate therapeutic interventions when working with adult/elderly	Students are introduced to greater depths of understanding of ethical and legal issues that influence		P Students provide interventions to adult/elderly clientele with close supervision on Level I	M Demonstrate competency with providing meaningful and purposeful therapeutic intervention safely,	M Demonstrate competency with providing meaningful and purposeful therapeutic intervention safely,	

	clientele in both lecture and practice in lab. Methods of Assessment Final practical exam rubric and midterm exam	OT practice.  Method of Assessment: OCT 208 final exam		fieldwork to engage client. Method of Assessment Level I fieldwork evaluation	ethically, and legally under the supervision of an OT while on Level II fieldwork.  Method of Assessment: AOTA Level II Fieldwork Evaluation	ethically, and legally under the supervision of an OT while on Level II fieldwork.  Method of Assessment: AOTA Level II Fieldwork Evaluation	
5. Effectively document using electronic medical records and written documentation in order to best ensure effective communication with colleagues, other healthcare professionals, administration, and reimbursement agencies. (Assistance with Management of OT Services, Fieldwork)	I, P Introduced to important documentation skills as related to adult and elderly practice. Must incorporate these skills in SOAP note writing activities.  Method of Assessment SOAP note rubric.	I Introduced to greater depth of understanding of reimbursement standards as related to OT practice.  Method of Assessment OCT 208 final exam		P Start practicing documentation skills (depending on the fieldwork site) on the job in an adult/elderly setting. Method of Assessment Level I fieldwork evaluation	M Demonstrate efficiency and effectiveness in electronic medical record documentation in accordance with site and reimbursement standards. Method of Assessment: AOTA Level II Fieldwork Evaluation	M Demonstrate efficiency and effectiveness in electronic medical record documentation in accordance with site and reimbursement standards. Method of Assessment: AOTA Level II Fieldwork Evaluation	
6. Utilize principles of occupational and activity analysis and synthesis used in occupational therapy intervention during laboratory activities and fieldwork opportunities.  (Occupational Therapy Theoretical Perspectives/ Fieldwork)	P Students apply the principles of occupational and activity analysis during lab experiences when working		P Students apply the principles of occupational and activity analysis during lab experiences	P Students, while in the field, apply the principles of occupational and activity analysis when working with	M Demonstrate competency and effectiveness in applying the principles of activity analysis and	M Demonstrate competency and effectiveness in applying the principles of activity analysis and	

	with the adult and elderly clientele.  Method of Assessment Final practical exam rubric	when deciding on the appropriate incorporation of assistive technologies. Method of Assessment Final exam in OCT 210	the adult and elderly clientele. Method of Assessment Level I fieldwork evaluation	synthesis during Level II fieldwork experiences. Method of Assessment: AOTA Level II Fieldwork Evaluation	synthesis during Level II fieldwork experiences. Method of Assessment: AOTA Level II Fieldwork Evaluation	
7. Utilize the teaching and learning process in providing occupational therapy interventions.	P Students practice incorporating teaching and learning in the adult and elderly intervention labs. Method of Assessment Final lab practical		P Students will start applying their skills of teaching and learning when providing interventions to adult and elderly clientele in their Level I fieldwork experience. Method of Assessment Level I fieldwork evaluation	M Demonstrate effectiveness in using the teaching and learning process while providing OT interventions to clients and their families under the supervision of their fieldwork educator. Method of Assessment AOTA Level II fieldwork evaluation	M Demonstrate effectiveness in using the teaching and learning process while providing OT interventions to clients and their families under the supervision of their fieldwork educator. Method of Assessment AOTA Level II fieldwork evaluation	
8. Develop lifelong learning capabilities required for enhanced professional development.						M Demonstrate mastery and reflective analysis of lifelong

			loorning
			learning
			capabilities
			in
			preparation
			for
			graduation
			from the
			NOVA OTA
			program.
			Method of
			Assessmen
			t
			Rubric of the
			Self-
			reflective
			professional
			development
			plan paper



Program: Paralegal Studies, A.A.S.

		Courses											
Student Learning Outcomes	LGL 110	LGL 125	LGL 126	LGL 115	LGL 117	LGL 215	LGL 217	LGL 218	LGL 225	LGL 230	LGL 235		
Distinguish     between the roles     of attorney and     paralegal.	I	Р	Р	Р	P	Р	Р	P/M Hypothetical problem solving	Р	Р	р		
2. Research federal and state laws using manual and computer assisted methods such as Lexis or Westlaw.	I	P/M Rese arch projec t	Р		Р	Р		Р					
3. Locate and prepare standard forms appropriate to specific legal problems.	I		Р	Р	Р		Р		P/M Draft estate planning & probate document s	Р	Р		

4. Draft legal documents including but not limited to pleadings, contracts, wills, and deeds.	I		Р	Р	Р		Р	Р	Р	Р	P/M Draft business organizati on document s
5. Distinguish between personal and subject matter jurisdiction for federal and state courts.	ı	Р	Р				P/M Hypothet ical problem solving				
6. Solve issues using proper legal citation form and writing style.	I		P/M Draft trial and appellate court briefs		Р	Р	Р	Р		Р	
7. Identify and solve legal ethics and professional responsibility issues.	I	Р	Р	Р	Р	Hypothetical problem solving	Р	Р	Р	Р	Р
8. Demonstrate competency in the use of timekeeping and scheduling software applications.		Р	Р		Р		P/M Assignm ent using time- keeping and scheduli ng applicati ons		Р		



**Program: Personal Training, CSC** 

					COU	RSES			
Student Learning Outcomes	PED 116	PED 111	PED 100, 103, 109	PED 220	PED 168	HLT 206	HLT 105	DIT 121	Assessment
1. Graduates will explain the principles of fitness and demonstrate proper techniques for flexibility, muscular strength, muscular endurance, and cardiovascular exercises.	I	Р	Р	М	М				Local Tests Presentations Demonstrations Certification Exam
2. Graduates will be able to identify the major nutrients and discuss their role in overall wellness.	I/P	I		I	Р	Р		М	Local tests Assignments Journals Certificate exam
3. Graduates will interpret results of body composition assessments and apply to weight management strategies.	I	I			P/M			I	Local tests Fitness assessments Assignments Certificate exam
4.Graduates will be able to identify and understand basic treatment and prevention of common related injuries.	ſ	ı	I	I/P	Р				Local tests  Lab Assignments  Certificate exam

5. Graduates will analyze case studies to demonstrate their understanding of the physical training concepts and physiological factors of training.	I	Р	Р	М	М	Р		Local tests Assignments Demonstrations Final Paper Certificate exam
6. Graduates will instruct individual and group exercise sessions.	I	I	I/P	М	P/M			Demonstrate Performance Video taping
7. Graduates will administer physical assessments on muscular strength, muscular endurance, cardiovascular endurance, flexibility, and body composition.	l	Р	Р	М	М			Demonstration Performance Assignments
8. Graduates will demonstrate correct procedures for cardiopulmonary resuscitation and AED.							M	Demonstration Comprehensive exam
9. Graduates will be able to identify and describe the academic areas of study in exercise science and professional opportunities in the fitness industry.	I			I/P	Р	М		Lecture Written Assignments Local Tests
10. Graduates will be able to describe the historical background of exercise science and the role it plays in current practices.	I				Р	М		Lecture  Local Tests  Written Assignments



Program: Phlebotomy, CSC

	cou	JRSES
Student Learning Outcomes	MDL 105	MDL 106
Communicate effectively to serve the needs of patients, the public, and the health care delivery team.  METHOD OF ASSESMENT: Rubrics for evaluating student performance	I/P	М
Demonstrate laboratory safety and regulatory compliance.  METHOD OF ASSESMENT: Standardized exam questions	I/P	М
Perform venipunctures and dermal puncture collection, handling, and processing.  METHOD OF ASSESMENT: Rubrics for evaluating student performance, Portfolios of student work	I/P	М
Demonstrate ethical and professional conduct.  METHOD OF ASSESMENT: Rubrics for evaluating student performance,	I/P	М
<ol> <li>Develop problem-solving skills in the pre-analytical phase of specimen collection.</li> <li>METHOD OF ASSESMENT: Rubrics for Portfolios of student work</li> </ol>	I/P	М
6. Relate knowledge of body systems with the most common diagnostic laboratory testing for each system.  METHOD OF ASSESMENT: Locally developed tests/embedded test questions, Certificate exams	I/P/M	



Program: Photography and Media, A.A.S.

Student Learning Outcomes	PHT101	PHT103	PHT110	PHT102	PHT104	PHT270	PHT130	PHT201	PHT202	PHT227
Control the image capture process	<u>IP</u>	IP		РМ	PM	1	IP	PM	М	
Control the image output process	IP	IP		<u>PM</u>	PM	IP	IP	PM	М	
Manage image/media assets and workflow	I	IP		<u>P</u>	PM	IP	IP	PM	М	
Solve technical and aesthetic problems independently and creatively	IP	IP		<u>P</u>	Р	IP	IP	PM	М	
Produce and present a coherent body of work in a chosen genre	Ι	I		<u>P</u>	Р	I	Ι	PM	М	I
Discuss work in the medium with correct and appropriate vocabulary	IP	<u>IP</u>	IPM	Р	Р	IP	IP	PM	М	
Discuss images in terms of the history and theory of the medium	Ι	I	<u>IPM</u>	Р	Р	I	I	Р	М	I
Identify career options in the field	I	I	I	I	I	I	I	I	I	<u>IPM</u>

Make effective editing and postproduction decisions	l	I	Р	Р	IP	<u>IP</u>	PM	М	
									i



**Program: Physical Therapist Assistant, A.A.S.** 

						COL	IRSES					
Student Learning Outcomes	PTH 105	PTH 121	PTH 151	PTH 115	PTH 122	PTH 131	PTH 225	PTH 231	PTH 210	PTH 227	PTH 245	PTH 232
1. Implement a treatment under the direction and supervision of a physical therapist.	I/P/M Exam questions, check- outs, lab practical and clinical evaluation	I/P/M Exam questions , check- outs, lab practical and clinical evaluatio n	I	I/P/M Exam questions, check- outs, lab practical	I/P	Р	I/P/M Exam questions, check-outs and lab practical exams	P/M Clinical evaluation and portfolio development		-		P/M Clinical evaluation and portfolio development
2. Perform data collection and measurement techniques selected by a physical therapist.	I/P	I/P	I	I/P/M Exam questions, check- outs, lab practical exams	I/P/M Exam questions , check- outs and lab practical exams	Р	I/P/M Exam questions, check-outs and lab practical exams	P/M Clinical evaluation and portfolio development				P/M Clinical evaluation and portfolio development
3. Solve clinical problems and make treatment decisions based on the plan of care established by a physical therapist.	I/P	I/P	I	I/P	I/P	Р	I/P/M Exam questions, check-outs and lab practical exams	P/M Clinical evaluation and portfolio development	Р	I	Р	P/M Clinical evaluation and portfolio development

4. Effectively communicate when working with patients, families, colleagues, and other health care professionals.	I/P	I/P		Р	Р	Р	P/M Exam questions, check-outs and lab practical exams	MAVAIMMINAM	questions	Р		P/M Clinical evaluation and portfolio development
5. Work in an ethical, legal, safe and effective manner under the direction and supervision of a physical therapist.	I/P	I/P		Р	Р	Р	Р	P/M Clinical evaluation, portfolio development and case study presentation		I	Р	P/M Clinical evaluation
6. Develop lifelong learning habits that reflect professional development.	Р	I	I	l/P	Р	Р	Р	P/M Clinical evaluation and portfolio development		Р	P/M Oral presentatio n and capstone project	P/M Clinical evaluation



**Program: Professional Writing, Certificate** 

					COURSES	3			
Student Learning Outcomes	ENG 111	CST 110	ENG 115	ENG 116	ENG 121	ENG 123	ENG 205	ENG 280	ENG 298
Apply all phases of writing process including prewriting, drafting, and revision, documenting sources, and avoiding plagiarism.	M Essay	Р	Р	Р	Р	Р	Р	Р	M Portfolio
Write a precise, clear, and properly formatted technical report.			M Report	Р				Р	
Compose written business document in contemporary business format and style.	Р	Р	Р	M Letter w/attachment	Р	Р	Р	Р	M Portfolio
4. Plan, write and finalize effective business letter with attachments.			Р	M Letter w/attachment	Р			Р	M Portfolio
5. Write and research articles following conventions and ethics of journalistic writing.	Р	Р	Р	Р	M Article	Р			P Portfolio
6. Compose and edit hypertext documents with consistent tone, ethics, and style for world wide web.					P Website			Р	M Portfolio
7. Employ correct fundamentals of English grammar, including punctuation, and basic logic of written communication.	P Essay		Р	Р	Р	Р	Р	Р	M Portfolio
8. Produce edited document with application of copy and comprehensive editing.	I		Р	Р	Р	Р	M Final Exam/ Edited		M Portfolio

							Document		
9. Design, write, and test a User Manual.				I				M Complete User Manual	M Portfolio
10. Apply knowledge gained in entire program in Capstone Writing Course.	Р	Р	Р	Р	Р	Р	Р	Р	M Portfolio



**Program: Public History and Historic Preservation, CSC** 

			Courses		
Student Learning Outcomes	HIS 180	HIS 181	HIS 183	HIS 187	HIS 190
Students will synthesize knowledge of historical preservation / public history with practical experience in the field.		P & M Project / Presentation		I Paper / Presentation	P & M Project / Reflection Paper
Students will analyze and assess museum exhibits and objects.	I Essay / Paper / Presentation		I & P Essay / Paper / Presentation	P & M Essay / Paper / Presentation	
3. Students will explain the role and function of preservation in society.	I Essay / Paper / Presentation	I & M Essay / Paper / Presentation	I & P Essay / Paper	l Essay / Paper	P Essay / Paper
4. Students will explain the historical development of preservation law and its applications in local, state, and national government.		P & M Essay / Paper / Presentation		I & P Essay / Paper	



Program: Radiography, A.A.S.

								СО	URSES	6					
Student Learning Outcome s	RAD 105	RA D 121	RA D 12 5	RAD 141	RAD 221	RAD 142	RAD 205	RAD 255	RAD 240	RAD 246	RAD 196	RAD 131	RAD 135	RAD 231	RAD 232
1. Apply knowledge of radiation protections to minimize patient dose.	ı	Р	Р	Р	Р	Р	M Exam Prof Eval	Р	Р	Р	M Clinical Comp Profession al Evaluation	M Clinical Comp Profession al Evaluation	M Clinical Comp Profession al Evaluatio n	M Clinical Comp Professiona I Evaluation	M Clinical Comp Professio nal Evaluatio n
2. Communicat e effectively to serve needs of community and other health care providers.	_	Р	Р		Р	Р	Р	Р	Р	Р	M Clinical Comp Profession al Evaluation	M Clinical Comp Profession al Evaluation	M Clinical Comp Profession al Evaluatio n	M Clinical Comp Professiona I Evaluation	M Clinical Comp Professio nal Evaluatio n
3. Provide patient care essentials to radiologic sciences.	I	Р	Р	Р	Р	Р	Р	Р	Р	Р	al	M Clinical Comp Profession al Evaluation	M Clinical Comp Profession al Evaluatio n	M Clinical Comp Professiona I Evaluation	M Clinical Comp Professio nal Evaluatio n

4. Apply knowledge of anatomy, positioning, and radiographic techniques to accurately image anatomical structures.	I	Р	Р	Р	Р	Р	Р	Р	Р	Р	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Profession al Evaluation
5. Evaluate images for diagnostic informatio n.	-	Р	Р	Р	Р	Р	Р	Р	Р	Р	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Profession al Evaluation
6. Determine proper exposure factors to achieve optimum images of anatomical structures.	I	Р	Р	Р	Р	Р	Р	Р	Р	Р	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Profession al Evaluation
7. Work in an ethical, legal, safe and effective manner in diagnostic imaging.	I	Р	Р	Р	Р	Р	Р	Р	Р	Р	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Profession al Evaluation

8. Develop lifelong learning habits that reflect professional developmen	ı	Р	Р	Р	Р	Р	Р	Р	Р	Р	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation	M Clinical Comp Professional Evaluation
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Student Learning Outcomes – Curriculum Maps for Degree Awarding Programs and Certificates Program: Respiratory Therapy, A.A.S.

									C	OURSES								
Student Learning Outcomes	RTH 120	RTH 195	RTH 151	RTH 111	RTH 121	RTH 131	RTH 145	RTH196	RTH 135	RTH296	RTH 217	RTH 222	RTH 236	RTH253	RTH 295		RTH 227	RTH254
1. Perform psychomotor and cognitive skills in all areas of non-critical care.	I/P	-	I/P	I	I	I/P	I	P/M Profession al Practice experience Practice Site Evaluation	I/P	P/M Professiona I Practice experience Practice Site Evaluation		I		M Profession al Practice experience Practice Site Evaluation	I/P	I/P	M	P/M Professio nal Practice experienc e Practice Site Evaluatio n
2. Perform the psychomotor and demonstrate the cognitive skills in all areas of adult critical care.	_	_				I/P	Ι	I/P	I/P	P/M Professiona I Practice experience Practice Site Evaluation		1	I/P	P/M Profession al Practice experience Practice Site Evaluation	I/P		Μ	P/M Professio nal Practice experienc e Practice Site Evaluatio n

3. Perform the psychomotor and demonstrate the cognitive skills in all areas of neonatal/pediatric critical care.															I/P	М	P/M Professio nal Practice experienc e Practice Site Evaluatio n
4. Perform the psychomotor and demonstrate the cognitive skills in the areas of respiratory therapy home care, patient education/disease management, pulmonary rehabilitation and cardiac diagnostics.			l	I		I	Р	I/P	I/P	I/P	I	I/P	I/P	P/M	I	M	
5. Apply the knowledge of respiratory therapy information into patient care case studies and scenarios.	I	I/P	1	I	I/P	I	Р	I/P	P/M Professiona I Practice experience Practice Site Evaluation		I/P	I/P	P/M Profession al Practice experience Practice Site Evaluation		I/P	М	P/M Professio nal Practice experienc e Practice Site Evaluatio n

6. Demonstrate ethical and professional conduct in the classroom, laboratory and clinical settings.	I	Р	I/P	Р	Р	I/P	Р	P/M Profession al Practice experience Practice Site Evaluation	Р	I/P Professiona I Practice experience Practice Site Evaluation	Р	Р	P/M Profession al Practice experience Practice Site Evaluation	P/M	P/M	P/M	P/M Professio nal Practice experienc e Practice Site Evaluatio n
7. Communicate effectively with respiratory care and other healthcare professionals.	ı		I/P			I/P		I/P Profession al Practice experience Practice Site Evaluation	I/P	I/P Professiona I Practice experience Practice Site Evaluation		I/P	P/M Profession al Practice experience Practice Site Evaluation		I/P		P/M Professio nal Practice experienc e Practice Site Evaluatio n



Program: Science, A.S.

				COI	URSES				
Student Learning Outcomes	BIO 101	BIO 102	CHM 111	CHM 112	PHY 201	GOL 105	GOL 106	MTH 173	MTH 174
Students will be able to use quantitative reasoning coupled with scientific knowledge to draw logical conclusions and make well-reasoned decisions.			ΙP	Р	M Properly set up and solve equation	Р	Р		
2. Students will apply the scientific method and identify methods of inquiry that lead to scientific knowledge.	I P M Quiz on Black- board	Р	ΙP			ΙP	ΙP		
3. Students will use graphical methods to organize and interpret data.	I	Р	ΙP	Р		M Earth- quake lab	I		
4. Students will explain the atomic structure of basic chemical elements.	ΙP		I P M Questions on final exams			ΙP	ΙP		
5. Students will be able to explain the principles of chemical bonding in the formation and properties of molecules.	ΙP	Р	I P M Questions on final exams	I P M Questions on final exams		ΙP	I		

6. Students will be able to utilize mathematical calculation skills to resolve STEM-related problems							ΙP	I P M Questions on final exams
7. Students will be able to use standard laboratory techniques to describe and quantify compounds or objects.	ΙP	P M Power Point quiz on Black- board	ΙP	Р	Р	Р		



Program: Social Sciences, A.S.

					Courses	s	
Student Learning Outcomes	ENG 111	ENG 112	MTH 151	PED 116 SDV 100	BIO 101	ASL 201, ARA 202, GER 102, GER 201, FRE 201, SPA 201, SPA 202,CH 101, KOR 101, RUS 101, JPN 202.	CST 110
1 Students will demonstrate the ability to recognize when information is needed and will have the ability to locate, evaluate and use it effectively	IP						
2. Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act.		IP					
3 Students will demonstrate the ability to use numerical, geometric and measurement data and concepts, mathematical skills, and principles of mathematical reasoning to draw logical conclusions and to make well-reasoned decisions and possess the skills and knowledge necessary to apply the use of logic, numbers and mathematics to deal effectively with common problems and issues.			IP				
4. Students will demonstrate the ability to develop and/or refine personal wellness goals.				IP			
5. Students will demonstrate the ability to adhere to a self-correcting system of inquiry (the scientific method) and rely on empirical evidence to describe, understand, predict and control natural phenomena.					IP		
6. Students will demonstrate an awareness, understanding and appreciation of the interconnectedness of the social and cultural dimensions within and across local, regional, state, national and global communities.						IP	
7 Students will demonstrate the ability to interact with others resulting in understanding and being understood.							ΙP

#### **Assessment Methods**

- SLO 1 Rubric for evaluating final research paper.
- SLO 2 Rubric for evaluating final research paper
- SLO 3 Assessment Instrument for evaluating numerical and logical proficiency.
- SLO 4 Assessment instrument for evaluating student personal wellness goals and awareness of personal wellness.
- SLO 5 Assessment instrument for evaluating scientific reasoning & inquiry.
- SLO 6 Assessment instrument for evaluating student understanding of social and cultural understanding.
- SLO 7 Assessment instrument for evaluating student knowledge and awareness of social interaction.



### Program: Social Sciences, A.S., Geospatial Specialization

		C	COURSES			
Student Learning Outcomes	GIS 200	GIS 201	GIS 205	GIS 255	GIS 290	GIS2 93
Students will demonstrate the ability to define and employ geospatial vocabulary.	I	Р	M Multiple Choice Exam	Р	Р	
2. Students will demonstrate the ability to plan and perform spatial analysis.	I	Р	M "Practical" Exam (GIS problem solving exam)		Р	
3. Students will demonstrate the ability to prepare and present geo-spatial material to an end-user.	ı	Р	M Term Project		Р	Р
4. Students will demonstrate the ability to manage diverse spatial data.	I	Р	M Term Project	Р	Р	
5. Students will demonstrate the ability to plan, develop and maintain a GIS.	I	Р	M Term Project		Р	



**Program: Social Sciences, A.S., Teacher Education Specialization** 

	Courses								
Student Learning Outcomes	SDV 101 Orientation to Education	EDU 200 Intro to Teaching as a Profession	Assessment Method SDV 101	Assessment Method EDU 200					
Students will identify and describe the licensure/certification requirements for teacher education.	I	P, M	Career Plan	Midterm Exam Essay					
2. Students will summarize, reflect upon and outline their field experiences in the public school systems during their 40 -hour field placement.		I, P, M		Field Placement Journal					
3. Students will compare and analyze principles, theories, and history of education in the U.S. to actual practice in the classroom.		I, P, M		Education Court Case Research Paper					
4. Students will summarize and give examples of their understanding of the field of education; focusing on the interrelationship of teaching, learning, students, and society.	I	P, M	Teacher Interview Learning Styles Essay	Portfolio					
5. Students will illustrate and explain their understanding of assessment techniques in the public school systems.	I	P, M	Teacher Interview	Portfolio and Final Exam Essay					
6. Students will prepare and compose topics related to practice in a variety of communities; identifying students of differing ages and with culturally diverse and exceptional populations.	I	P, M	Teacher Interview Diversity Essay Learning Styles Essay	Portfolio and Final Exam Essay					



Program: HMS Substance Abuse Rehab. Counselor, Certificate

				С	OURSES				
Student Learning Outcomes	HMS 121	HMS 141	HMS 142	HMS 251	HMS 252	HMS 145	HMS 258	HMS 290	HMS 266
Conduct a client screening assessment including a medical, legal, and family history.	I	Р	Р				Tests M	Tests M	
2. Prepare information for use with a client that includes facts about the disease, potential for relapse, and codependency.				Tests IP	Tests/HW M	I			
Design a comprehensive substance abuse treatment program appropriate for use with a client that meets state standards.				I	Р		Project M		
4. Identify and explain the developmental stages of group.		Paper I	Presentation PM						
5. Attend several support group meetings, summarize the group experience, and present findings.		I	Tests PM						
6. Conduct a site visit of an addiction treatment facility and make a presentation on the findings including levels of care, theoretical basis, modalities of treatment, and the requirements of staff.	ı	Р		Р	Presentation M				
7. Summarize journal articles related to various theoretical orientations and participate in small groups comparing the application of the approaches.		I	Р						Journal Review M



Program: Veterinary Technology, A.A.S.

		COURSES (List – Part 1 of 2)									
Student Learning Outcomes	VET 105	VET 111	VET 116	VET 121	VET 122	VET 131	VET 132		VET 135		
Safely and accurately prepare, dispense, administer, and explain use of prescribed medications.	I/P								I/P		
2. Perform surgical assistance.				I/P Proctored Iaboratory skills practical exam for both On campus and Online cohorts					Р		
3. Perform and assist with dental procedures including dental equipment preparation and maintenance.		I (Applied Anatomy)									
4. Properly collect, accurately prepare, and analyze laboratory specimens.		I (Applied Anatomy)		I/P (On-Campus Program Only)		I/P/M (for Urinalysis Only)	I/P	I/P/M Minimum 3 questions in each part of SLO as separate proctored review quiz (administer 2 <sup>nd</sup> lab visit for	Р		

					Online cohort)	
5. Explain animal patient assessment, nursing procedures, and the implementation of prescribed diagnostics and treatments, including basic animal care or husbandry (excluding emergency and critical care).	I/P Surgical patient case study project with grading rubric for each part of SLO (divided between 2 courses) and both On campus and Online cohorts		I/P Surgical patient case study project with grading rubric for each part of SLO (divided between 2 courses) and both On campus and Online cohorts			
6. Produce diagnostic images (excluding dental) following protocols for quality and demonstrate knowledge of proper operator and animal patient safety.				I/P/M Radiograph portfolio with rubric and separate knowledge quiz regarding safety protocols (minimum 3 questions)		
7. Safely and effectively administer and monitor animal patient anesthesia.				•		I/P Minimum 3 exam questions along with laboratory practical exam on anesthesia machine set-up and safety with grading rubric
8. Assess need for analgesia and assist in the development and implementation of the						I/P Minimum 3 questions in

pain management plan to optimize animal patient comfort and/or healing.						each part of SLO as separate proctored review quiz (administer 2 <sup>nd</sup> lab visit for Online cohort)
9. Explain how to perform and expedite triage, emergency and critical care nursing procedures in the implementation of prescribed treatments.			I			I/P
10. Communicate effectively in an ethical, legal, and professional manner with veterinary clients and the veterinary health care team.	I/P	Р				



Program: Visual Art, AFA

		COU	RSES	
Student Learning Outcomes	ART 121	ART 131	ART 122	ART 132
Apply technical skills of craftsmanship to create a two or three-dimensional artwork.	IP Faculty evaluation of student artwork	IP Faculty evaluation of student artwork	IPM Faculty evaluation of student artwork	IPM Faculty evaluation of student artwork
Evaluate a work of art using critical thinking and an accurate vocabulary.	IP Faculty evaluation of student artwork, studio critiques, or written paragraph	IP Faculty evaluation of student artwork, studio critiques, or written paragraph	IPM Faculty evaluation of student artwork, studio critiques, or written paragraph	IPM Faculty evaluation of student artwork, studio critiques, or written paragraph
Create artwork from direct observation	IP Faculty evaluation of student artwork	IP Faculty evaluation of student artwork	IPM Faculty evaluation of student artwork	IPM Faculty evaluation of student artwork
4. Recognize the role of social, community and global connections to understand historical and/or contemporary art.	IP Faculty evaluation of student artwork, studio critiques, or written paragraph	IP Faculty evaluation of student artwork, studio critiques, or written paragraph	IPM Faculty evaluation of student artwork, studio critiques, or written paragraph	IPM Faculty evaluation of student artwork, studio critiques, or written paragraph
5. Use the elements and principles of design to create an artwork.	IP Faculty evaluation of student artwork	IP Faculty evaluation of student artwork	IPM Faculty evaluation of student artwork	IPM Faculty evaluation of student artwork
6. Create a portfolio of work.	IP Faculty evaluation of student portfolio	IP Faculty evaluation of student portfolio	IPM Faculty evaluation of student portfolio	IPM Faculty evaluation of student portfolio



**Program: Welding Basic Techniques, CSC** 

		COURSES								
	Student Learning Outcomes	WEL 116	WEL 121	WEL 122	WEL 126	WEL 130	WEL 160			
1.	Perform technical work related to welding applying OSHA safety and industry standards in a work environment.	IP	IPM	IPM	IPM	I	IPM			
2.	Apply basic machine and technique adjustments to solve typical welding problems.	IP	IP	М	I	I	IP			
3.	Select appropriate filler material for compatible admixing and dilution in the writing of welding procedure for various ferrous and non-ferrous metals.	IP	IP	Р	PM	I	IP			
4.	Read and correctly interpret basic welding fabrication drawings, sketches, symbols, and/or welding specifications.	I	IP	PM	IP	IPM	IP			

# PATHWAY TO THE AMERICAN DREAM—NOVA'S STRATEGIC PLAN 2017-2023 THE NOVA COMMITMENT

As its primary contributions to meeting the needs of the Commonwealth of Virginia, the Northern Virginia Community College pledges to advance the social and economic mobility of its students while producing an educated citizenry for the 21st Century.

#### THE STRATEGIC PLAN GOALS AND OBJECTIVES

To deliver on this commitment NOVA will focus its creativity and talent, its effort and energy, and its resources and persistence, on achieving three overarching goals—success, achievement, and prosperity. It will strive to enable **Every Student to Succeed, Every Program to Achieve, and Every Community to Prosper.** 

To advance the completion agenda described above, thereby promoting students' success and enhancing their social mobility, ensuring that programs achieve, and producing an educated citizenry for the 21st Century, the following goals and objectives are adopted:

#### **GOAL 1: Every Student Succeeds**

- Objective 1: Develop a College-wide approach to advising that ensures all students are advised and have access to support throughout their time at NOVA
- Objective 2: Implement VIP-PASS System as the foundational technology based on NOVA Informed Pathways for student self-advising, assignment and coordination of advisors, and course registration

#### **GOAL 2: Every Program Achieves**

- Objective 3: Develop comprehensive, fully integrated Informed Pathways for every program to ensure seamless transitions from high school and other entry points to NOVA, and from NOVA to four-year transfer institutions or the workforce
- Objective 4: Develop effective processes and protocols for programmatic College-wide collective decisions that include consistent, accountable leadership and oversight of each academic program with designated "owners," active advisory committees, clear student learning outcomes and assessments, and program reviews in all modalities of instruction
- **Objective 5:** Align NOVA's organizational structures, position descriptions, and expectations for accountability with its overarching mission to support student engagement, learning, success and institutional effectiveness

#### **GOAL 3: Every Community Prospers**

- · Objective 6: Enhance the prosperity of every community in Northern Virginia by refocusing and prioritizing NOVA's workforce development efforts
- Objective 7: Further develop NOVA's IT and Cybersecurity programs to support regional job demand and position NOVA as the leading IT community college in the nation
- Objective 8: Re-envision workforce strategies and integrate workforce development into a NOVA core focus
- Objective 9: Plan to expand the breadth and reach of NOVA's healthcare and biotechnologyprograms, and prioritize future programs to support regional economic development goals

# Northern Virginia Community College

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