

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

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Office of Institutional Effectiveness and Student Success  
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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.

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

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

STUDENT LEARNING OUTCOMES 2016-2017	COURSES							ASSESSMENT METHOD
	ACC211	ACC212	ACC221	ACC231	ACC261	ACC222	ACC241	
1. Be able to apply generally accepted accounting principles (GAAP).	I,P	P	P	P		P,M		Embedded in exams or assignments
2. Perform all steps in the accounting process, including production of basic financial statements.	I,P	P	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	P			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		P		P	P,M	P	Homework assignments
8. Be able to write and speak in English well enough to communicate accounting procedures and concepts in a professional environment.	I	P				P	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		P			P,M		Embedded in exams or assignments



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

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

Student Learning Outcomes	COURSES								
	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

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

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

Student Learning Outcomes	COURSES												
	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
1. Technical knowledge and capabilities: Design, install, maintain, and repair a basic residential air conditioning and heating system.	I	I	P	P	I	P	P	M	P	M	P	P	M
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	P	P	I	P	P	M	P	M	P	P	M
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	P	P	I	P	P	P	P	P	P	P	P
4. Positive attitude and works well with others: Demonstrate a positive attitude and has a good working relationship with peers..	I	I	P	P	P	P	P	P	P	M	P	P	P

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.	I	I	M										
6. Speech and written communication skills: Perform good communication skills, both oral and written.	I	I	P	P	I						M		P
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.									P	M	I	P	P
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	I	P	I	I	P	P	P	P	M	P	P	P
9. Productive: Perform good work habits, focused on the task-at-hand, and completing assignments on time.	I	I	P	I	I	P	P	P	P	M	P	P	P
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.	P	P	P	P	P	P	P	P	P	P	P	P	P



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

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

Student Learning Outcomes	COURSES														
	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	P	M											
2. Students will demonstrate an advanced level of receptive and expressive proficiency in English, including knowledge of advanced linguistic structures and vocabulary.	I								P		M				
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			P		P		P	M	
4. Students will demonstrate the ability to interpret a 20 minute live and videotaped						I				P		P	P	M	

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					P	M		
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					P	M		
7. Students will apply critical thinking to make ethical decisions regarding a variety of situations, guided by ethics standards of the profession.							I		P	P	P	P	P	M	P	
8. Students will demonstrate professional behavior and cultural sensitivity when working with Deaf and hearing clients.	I				I	P	I	P	P	P	P	P	P	M	P	
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 available.	I				I	P	I	P	P	P	P	P	P	M	P	

10. Students will be able to describe the history of the interpreting profession and identify current trends, industry standards, and resources for professional development.							I	P	P	P	P	P	P	M	P
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**Student Learning Outcomes – Curriculum Maps for Degree Awarding Programs and Certificates**

**Program: Architecture Technology, A.A.S.**

Student Learning Outcomes	COURSES												
	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.	I Proje cts	I 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.								I 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.





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

**Program: Automotive Technology, A.A.S.**

Student Learning Outcomes	COURSES												
	100	111	112	121	122	141	142	236	241	242	245	265	266
1. Use measuring tools to skillfully and accurately diagnose the internal combustion engine.	I	I	P/M Lab	I	I	P	P	I	I	I	I	P	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	P	I	I	P/M	I	I	I	I	I	P	I
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	I	I	I	I	I	I	I	I	I	I	I	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	P	P	I	I	I	I	P/M Lab	I
6. Apply electrical theory using wiring diagrams and schematics to diagnose automotive electrical circuits.	I	P	P	P	P	P	P	P	I/P	P/M Test Q's	P	P	P
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	I	I	I	P/M Lab	I	I	I	I	I
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	P	M	P	P	P	P	P	P	P	I



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

**Program: Biotechnology, C.S.C. and A.A.S.**

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

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



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

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

Student Learning Outcomes	COURSES						
	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 ( <i>sole proprietorship, partnership and corporation</i> ) and the multiple ways of getting a business started.	I, P, M						M
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	M		
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						M
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	M				
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	P	P	P	P	M	
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			M	M		
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			M	M		



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

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

Student Learning Outcomes	COURSES														
	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 ( <i>sole proprietorship, partnership and corporation</i> ) and the multiple ways of getting a business started.	I, P, M		P	P		M	M	M							
2. Students will be able to identify parties in a legal dispute within the fundamental types of business organizations ( <i>sole proprietorship, franchise, partnership, corporation, Limited Liability Company, limited partnership, and limited liability partnership</i> ).	I					M	M	M			P	M			
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					P	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.	I		P, M	M											
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	P	P	P	P	P	P	P	P	P	P	P	P	P	M
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	M	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	M	P						
10. Students will be able to differentiate the ethical codes of compliance and integrity used by business	I, P					P	P	M	M		P	P, M			



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



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

**Program: Computer Science, A.S.**

Student Learning Outcomes	COURSES			
	CSC 200	CSC 201	CSC 202	CSC 205
1. Demonstrate techniques for problem analysis and algorithm design.	I/P/M Homework			
2. Write computer programs using fundamental software development skills.	I/P/M Homework			
3. 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		
5. Write computer programs using Object-oriented programming features.		I/P/M Homework	P	
6. 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	P	P/M Homework	
8. Design fundamental logic circuits.				I/P/M Homework
9. Identify the functions of basic and advanced computer hardware architecture.	I			P/M Homework

Student Learning Outcomes	COURSES															
	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	P				M Project/ Presentation (rubric)			P				P			
2. Students will accurately interpret construction documentation.	I	P		P							M Exam	P		P		
3. Students will identify characteristics of basic construction materials and explain their application in the construction industry.	I	P	P/M Exam						P				P	P		P
4. Students will accurately estimate construction costs.	I			P	M Exam											
5. Students will accurately prepare construction plans and schedules utilizing industry standards.	I							P/M Exam								
6. 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	P								
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									



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

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

Student Learning Outcomes	COURSES								
	CON-100	CON-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	P	P	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	P	P	P	M Research Paper	M Research Paper
3. Students will be able to prepare project schedules for contract implementation.	I	I	I	P	P		P		M Test
4. Students will be able to apply fundamental contracting	I	I	I	I	P	P	P	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	I	P	P	P	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.	I	I	I	I	P	P	P		M Role Play Exercise



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

**Program: Cybersecurity, A.A.S.**

Student Learning Outcomes	COURSES												
	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
1. Manipulate data into meaningful information	I/P/M Exam questions	I Exam Questions							I/P/M Exam question Performance Comprehensive Exams				
2. 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 questions					I/P/M Exam question Performance Comprehensive Exams							
3. Describe current threats and explain how to continuously monitor the threats								I/P Exam question	I/P/M Exam question Performance	I/P/M Exam question Perform	I/P/M Exam question Perform		

that may be present in the cyber realm									Comprehensive Exams	Comprehensive Exams	Comprehensive Exams		
4. Identify the options available to mitigate threats within a system			I Exam questions					I/P/ Exam question	I/P/M Exam question Performance Comprehensive Exams			I/P/M Exam question	Performance Comprehensive Exams
5. Apply basic security design fundamentals that help create systems that are trustworthy		I								I/P/M Exam question Comprehensive Exams			
6. Describe the basic concepts of information assurance fundamentals			I Exam Questions					I/P Exam question Comprehensive Exams		I/P/M Exam question Comprehensive Exams		I/P/M Exam question Comprehensive Exams	
7. Explain where and how cryptography is used			I Exam Questions					I/P Exam question Comprehensive Exams		I/P/M Exam question Comprehensive Exams	I/P/M Exam question Comprehensive Exams		



										sive Exam s	sive Exam s		
8. 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 Questio ns Perform ance Compre hensive Exam				I/P/M Exam Questi ons Perform ance Compre hensive Exam		I Exam Questi ons
9. Identify network components and describe how they interact			I Exam Questio ns				I/P/M Exam Questio ns Perform ance Compre hensive Exam				I/P/M Exam questi on Perform ance Compre hensive Exam		
10. Explain basic operations involved in system administration							I/P/M Exam Questio ns Perform ance Compre hensive Exam						
11. Be able to describe memory types and allocation methods.					P/M Exam questions								



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

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

**Program: Dental Assisting – First Semester**

PROGRAM SPECIFIC LEARNING OBJECTIVE	COURSES				
	DNA 100	DNA 108	DNA 110	DNA 113	DNA 134
1. Demonstrate knowledge, understanding and skills required to chart oral conditions.		 Exam questions		 Proficiency evaluations	
2. Demonstrate knowledge, understanding and skills required to perform chairside assisting duties.			 Lab work	 Final exam	
3. Demonstrate knowledge, understanding and skills required to perform expanded duties.	 Final		 Lab		
4. Demonstrate knowledge, understanding and skills required to perform 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 infection control practices and biohazardous waste.	 Final exam		 Final exam	 Final exam	 Final exam
8. Demonstrate knowledge and understanding of the legal and ethical aspects for clinical practice.	 Final exam				

**Program: Dental Assisting – Second Semester**

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

**Program: Dental Assisting – Summer Session**

PROGRAM SPECIFIC LEARNING OBJECTIVE	COURSE
	DNA 190
1. 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



**Northern Virginia  
Community College**

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

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

Student Learning Outcomes	FIRST YEAR COURSES										
	DNH 111	DNH 115	DNH 120	DNH 130	DNH 141	DNH 142	DNH 143	DNH 145	DNH 146	DNH 214	DNH 216
1. Assess a patient's oral health status	I	I		I	I	I	I/P	I	I	I	I
2. Plan and document a patient's treatment needs			I			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		P	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						I	P				
9. Recognize the importance for discerning and managing ethical issues consistent with professional code of ethics						I	I				

SECOND YEAR COURSES							
Student Learning Outcomes	DNH 150	DNH 226	DNH 227	DNH 230	DNH 235	DNH 244	DNH 245
1. Assess a patient's oral health status	I/P		P		I/P	P	M Test Patient Periodontal Skill Evaluation
2. Plan and document a patient's treatment needs	I/P				I/P	P	M Treatment Planning Skill Evaluation

3. Evaluate the outcomes of treatment for determining a patient's subsequent treatment needs.						P	M Periodontal Recare Report Outcomes of Treatment Skill Evaluation
4. Expose Radiographs						P	M Radiographic Technique Skill Evaluation
5. Interpret Radiographs							
6. Communicate the provision of oral health care services with diverse population groups			P			P	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	P	P				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						P	M Test Patient
9. Recognize the importance for discerning and managing ethical issues consistent with professional code of ethics		P		P		P	M Case Studies



**Northern Virginia  
Community College**

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

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

Student Learning Outcomes	COURSES																	
	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.	I Class Assign	I, P Ethics Eval	P Ethics Eval	I, P Quiz/ Exam						P Scan Final			P Ethics Eval			P Quiz/ Exam	P, M Ethics Eval	
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	P, M Scan Comp	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 Quiz/ Exam	P, M Course Project	I, P Quiz/ Exam	P, M Scan Comp	M Exam
5. Evaluate ultrasound images for diagnostic information and pertinent technical details.		I, P Clinical Report	P Clinical Report		I, P Quiz/ Exam	I Quiz/ Exam	I Quiz/ Exam	P Quiz/ Exam	P Quiz/ Exam	I, P Peer Review	P Lab Assign	P Lab Assign	P, M Clinical Report	P Quiz/ Exam	P Quiz/ Exam	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.	I Class Assign	I, P Clin Eval	P Clin Eval	I, P Class Assign						P Scan Final			P Clin Eval	M Course Project			P, M Clin Eval	

Student Learning Outcomes	Courses	
	EDU 114	EDU 214
1. 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

<p>5. Students will be able to design a proper behind the wheel driving route.</p>		<p>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</p>
<p>6. Students will demonstrate proficiency in their own driving skills as demonstrated on the range.</p>		<p>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</p>



**Northern Virginia  
Community College**

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

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

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

Student Learning Outcomes	COURSES														
	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.	IP	IP	I	IP	IP	P	IP	IP	P	P	IP	PM	M*	M	I
2. Design strategies for building relationships, and working with diverse families and communities.	IP	IP	I	IP	IP	IP	IP	P	PM	P	PM*	M	PM	M	IP
3. Using observation techniques assess development and effective practices with children, families, and programs.	IP	IP	IP	IP	IP	IP*	IP	P	P	PM	IP	M	M	M	P
4. Applying developmental theories and early childhood program model components, select educational strategies appropriate for the learning environment.	IP	IP	I	IP	IP	IP	IP*	PM	P	IPM	IP	M	M	M	P

5. Create curriculum that integrates content and developmental knowledge.	IP *	IP	I	IP	IP	P	P	M	P	PM	I	M	M	M	P
6. Using the basic tenets of professionalism, and best practices, demonstrate one's growth and development.	IP	IP	IP	IP	IP	P	IP	P	P	P	PM	M	M	M *	P

*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



**Northern Virginia  
Community College**

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

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

Student Learning Outcomes	COURSES																		
	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 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.	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP EMS Affect Assess. Tool	IP 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 timely manner.				IP M Lab Exam HW ACLS Exam Cert		IP 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





**Northern Virginia  
Community College**

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

**Program: Engineering, A.S.**

Student Learning Outcomes	COURSES					
	EGR 120	EGR 126	EGR 240	EGR 245	EGR 246	EGR 295
1. Student will apply and demonstrate engineering problem solving methodology.	I, P	P	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	P	P, M Problem Solving Test	P, M Problem Solving Test	P, M Problem Solving Test	P, M Ethics Test
3. 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	P	
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



**Northern Virginia  
Community College**

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

**Program: Engineering Technology, A.A.S.**

Student Learning Outcomes	COURSES								
	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.	P	P	P, M Drawing Project	I	P, M Drawing Project	I	P, M Problem Solving Test	P	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	I	P	I	P	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		P	I	P	I			P, M CNC Project

Student Learning Outcomes for Core Courses	COURSES						
	FST 100	FST 110	FST 115	FST 120	FST 210	FST 220	FST 240
1. Students will be able to explain the basic theories and fundamentals of how and why fires start, spread and are controlled.	I	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				



**Northern Virginia  
Community College**

**Students Learning Outcomes – Curriculum Map for Degree Awarding Programs & Certificates**

**Program: General Studies, A.S.**

Student Learning Outcomes	Courses						
	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							IP
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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.



**Northern Virginia  
Community College**

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

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

Student Learning Outcomes	Courses														
	116	135	140	141	142	209	217	218	250	251	263	264	265	280	287
1. To research, formulate visual and written concepts and solve visual ideas.	I	I	I	I/P Project	P/M	I Project	P	M Project	M	P	P	M	M		M
2. To analyze and evaluate artwork from various perspectives and apply to projects.	I	I	I Project	I/P	P/M	I	P	M Critique	M	P	P	M	P/M Critique	M	M
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 Critique/Project	I	I/P	P/M	I	P	M Critique	M	P	P	M	P/M	M	M Critique/Project
4. To evaluate visual concepts.	I/P	I/P	I/P	I/P	P/M	I/P	P Project	M Project		P Project	P	M	P		M
5. To design visual concepts based on set criteria.	I/P	I/P Project	I/P	I/P Project	P/M	I/P	P	M Project		M	P	M	P		M
6. To produce visual concepts into completed projects.	I Project	I Project	I	I/P	P/M	I	P	P/M Project		P	P	P/M	P		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	P	M Project		P	P	M Project	P/M		M
8. To apply the principles of design and elements of composition.	I	I	I	I	P/M	I	P	M Project		P/M Project	P	M Project	M		M
9. To choose appropriate techniques and technical tools when expressing visual concepts.	I	I	I	I/P	P/M Project	I	P Project	M Project		P/M	P	M	P/M		M Project
10. To organize a group to produce solutions to design problems.	I	I	I	I/P	P	I Project	P	M Presentation		P	P	M	P/M Presentation		M





**Northern Virginia  
Community College**

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

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

Student Learning Outcomes	COURSES														
	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
1. Apply diagnosis/procedure codes according to current guidelines (I.A)										I/P	P/M	I/P		P/M Coding 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: Homework Assignments	I/P Virtual Labs Quizzes/Exams: Homework Assignments Class Presentations								P Virtual Labs Quizzes/Exams: Assignments	P/M Virtual Labs Quizzes/Exams: Assignments	P/M		P/M Coding 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: Homework Assignments	I/P Virtual Labs Quizzes/Exams: Homework Assignments Class	I/P	P	P	I/P		I/P		P	M	M	P/M	M	I/P/M

		Presentations													
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: Homework Assignments Class Projects	I/P Virtual Labs Quizzes/Exams: Homework Assignments Class Presentation	I	P	P			I/P Virtual Labs Quizzes/Exams: Homework Assignments Class Projects	P	P	M	P	P/M	M	I/P/M
5. Apply healthcare legal terminology and identify the use of legal documents (II.A)	I						I/P Vlab Assignments Quizzes Exams	I/P	I/P/M				P	M	
6. Apply policies and procedures surrounding issues of access and disclosure of protected health information (II,C)	I Virtual Labs Quizzes/Exams: Homework Class Assignments	I/P					I/P/M	I/P	I/P/M				P	M	
7. Utilize software in the completion of HIM	I/P Virtual	I/P	I/P EHR	P	P/M		I/P Virtual		P/M	P	P	P	P/M	M	

processes (III.A)	Labs Quizzes/ Exams: Homework Class Assignments		Quizzes/ Exams Class Assignments				Lab								
8. Apply report generation technologies to facilitate decision-making (III.C)	I Virtual Labs Quizzes/ Exams: Homework Class Assignments	I				P/M Vlab Quizzes/ Exams Case Studies		P	I/P Virtual Lab Quizzes/ Exams Case Studies			P	P/M	M	
9. Analyze policies and procedures to ensure organization compliance with regulations and standards (V.A)	I Virtual Labs Quizzes/ Exams: Homework Class Assignments	I/P Virtual Labs Quizzes/ Exams: Homework Class Assignments	P	I/P	P		P/M	P/M Quizzes Exams Home- work	M	P	P	P	P/M	M	I/P/M
10. Assess how cultural issues affect health, healthcare quality, cost, and HIM (VI.H)							P/M Virtual Labs Quizzes/ Exams: Class Assignments						P/M	P/M	I/P/M



**Northern Virginia  
Community College**

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

**Program: Horticulture Technology, A.A.S.**

Student Learning Outcomes	COURSES												
	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
1. Diagnose plant problems and recommend proper controls.	I	P			M Conduct Pest/disease diagnosis							P	P
2. Correctly identify plants by Family, Scientific name (Genus, Specific Epithet, variety and/or subspecies), Cultivar if appropriate and Common Name.	I	P				P	P	P/M Field Identify Plants	P/M Identify Herbaceous plants			P	
3. Correctly identify parts of a plant under microscope or as a sample.	I	P	M Both anatomically and morphologically									P	
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 resources to explore Hort topic	P	P	P	P/M Use resources to find plant problems	P	P	P			M Complete documents to build garden	P	P

											and features		
5. Calculate areas and volumes of landscape features and amounts of materials.	I			P		P/M Calculate areas for design features				P/M Calculate Cut and Fill		P	M Calculate soils and mulches and areas for paving
6. Neatly draw and correctly label a landscape plan.	I					P/M Prepare a complete Landscape Plan	P/M						
7. Prepare a one or two-point perspective drawing from a landscape plan view drawing.	I					P	P/M					P	
8. Correctly draw an axonometric detail of a joinery detail of a landscape feature.	I										I/P/M Prepare details for final drawings		P



**Northern Virginia  
Community College**

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

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

Student Learning Outcomes	COURSES											
	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		I	P				M Exam questions	P	P	M Exam questions
2. Students will describe and apply the four functions of management: plan, organize, lead and control.	I	I		P			P	I/P	M Exam questions	M Capstone catering Project	P	P
3. Students will prepare and evaluate a variety of different food products by following standardized recipes and using appropriate cooking techniques.			I/P				P			M Catering Event Performance		
4. Students will scale, standardize, and cost out recipes.			I	I/P			P	P		M Catering Project		
5. Students will illustrate the proper use and care of commercial food production equipment.			I/P	P	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	P	I/P	I		I		M Catering Event Performance		
7. Students will actively participate in the execution of different style catering functions.			I	I			I			M Catering Event Performance		



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

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

Student Learning Outcomes	COURSES										
	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 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	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



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

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

Student Learning Outcomes	COURSES							
	ITP 100	ITE 115	ITD 256	ITE 221	ITN 100	ITP 120	ITP 132	ITE 170
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 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			

Student Learning Outcomes	COURSES									
	IDS 100	IDS 105	IDS 106	IDS 109	IDS 205	IDS 206	IDS 215	IDS 221	IDS 225	IDS 245
1. Students will apply technical drawing skills to graphically illustrate design concepts.	I	P	I		P	P	M Design Project	M Design Project	P	P
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	P					M Test/ Design Project	P		P
3. Students will practice business management including estimating, marketing, business structures and ethics as they relate to the field of interior design.	I						P	P	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		P	P		
5. Students will apply critical, analytical and strategic thinking skills in the interpretation of project requirements.	I	I		P	P	P	M Design Project	M Design Project	P	
6. Students will recognize and identify major styles of art, architecture and furniture and be able	I		P	M Image Exam/	P					

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				P	P	M Design Project	M Design Project	P	
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.	I	P					M Design Project	M Design Project		P
9. Students will produce design projects utilizing basic color theory.	I		P		P		M Design Project	M Design Project		
10. Students will illustrate how to light an interior space using a variety of sources of illumination.	I	P				M Test/ Design Project	P	P		P

Student Learning Outcomes	COURSES						
	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				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



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**Student Learning Outcomes - Curriculum Maps for Degree Awarding Programs and Certificates**

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

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



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**Student Learning Outcomes - Curriculum Maps for Degree Awarding Programs and Certificates**

**Program: Liberal Arts: Theatre, C.S.C.**

Student Learning Outcomes	COURSES						
	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)
1. 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	I		I, P
5. Students will be able to apply appropriate technical	I	I	I, P, M	I, P	I		I, P



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

Student Learning Outcomes	COURSES								
	MKT 200 Consumers, Mkt. & Society	MKT 201 Intro. to Marketing	MKT 215 Intro. To Marketing	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
1. Communicate effectively to the public, press, and employees in both oral and written formats with grammatical accuracy	I/P	I/P	P	P	M Media kit and press conference	P	M	P	I
2. Describe the elements of the marketing mix (product, price, place, and promotion) and their use to achieve customer satisfaction.	I	M Student survey	P	P	P	P	P	P	P
3. Demonstrate how to achieve organizational objectives by effectively interacting with others as team members and as team leaders.	I	P	P	P	P	P	P	M Group web site project	I

4. Apply basic business math to inventory planning and control, pricing strategies, budget calculations, stock turns, and inventory loss.	I	I	P			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.	I/P	I/P	M Student sales presentation	P	P	P	P	P	P



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

**Program: Massage Therapy, C.S.C.**

Student Learning Outcomes	COURSES						
	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	P	P		P	
2. Integrate musculoskeletal anatomy and physiology into massage techniques.		I	I	P		M Lab Practical	
3. Identify indications and contraindications to determine techniques appropriate for each client.	I	P	P	P/M Essay Exams		P	
4. Demonstrate ethical behavior in the client/therapist relationship.	I	P	P	P	P	P/M Lab Practical/Client Feedback Forms	
5. Incorporate body mobilization and stretching techniques into bodywork.		I	P	M Lab Practical		P	
6. Demonstrate the principles of proper body mechanics when performing massage	I	P	M Lab Practical	P		P	
7. Perform pre-massage consultations with clients using		I	P	P	P	P/M SOAP note	

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

Student Learning Outcomes	COURSES														
	MDL 101	MDL 125/225 (Replaces MDL 127 in Fall 17)	MDL 130 (New Sp. 18)	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	P	I/P	P	P	P	P	P	P	P	P	M	M	M	M
2. Comply with the application of safety and government regulations.	I/P	P	I/P	P		P	P	P	P			M	M	M	M

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	P	I/P	P		P	P	P	P		P	M	M	M	M
4. Perform, discuss, and demonstrate principles and methodologies of diagnostic assays, problem-solving, and troubleshooting techniques.  METHOD OF ASSESSMENT: Rubrics for evaluating: Portfolios of student work,	I/P	P	I/P	P/M	P	P	P	P	P	P	P	M	M	M	M

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	P		P/M		P	P	P	P		P	M	M	M	M
6. Practice and discuss principles of professional conduct and the significance of continuing professional development.	I/P	P		P	P	P	P	P	P	P	P	M	M	M	M



METHOD OF ASSESSMENT: Rubrics for evaluating: Portfolios of student work Exam questions															
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**Northern Virginia  
Community College**

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

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

Student Learning Outcomes	COURSES							
	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	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



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

**Program: Music Recording Technology, Certificate**

Student Learning Outcomes	COURSES					
	MUS 140	MUS 157	MUS 158	MUS 179	MUS 235	MUS 227
1. 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)
4. 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 ( $RT_{60}$ ) with regard to proper musical acoustic support for a traditional recording studio space exhibiting frequency-dependent exponential decay.		I,P,M (COMPREHENSIVE EXAM)			P	P
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)

Student Learning Outcomes	First Year COURSES			
	NUR111 or 115/116	NUR150	NUR180	NUR201
1. Demonstrate quantitative reasoning in the practice of nursing.	I/P: <ul style="list-style-type: none"> <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>	I/P: <ul style="list-style-type: none"> <li>A= Community Assessment: Statistical analysis</li> </ul>	I/P: <ul style="list-style-type: none"> <li>Drug Dosage Calculation (DDC)</li> <li>DDC test (180/201)</li> <li>Questions unit exam and Final</li> <li>ST (HESI)</li> </ul>	I/P: <ul style="list-style-type: none"> <li>Drug Dosage Calculation (DDC)</li> <li>DDC test (180/201)</li> <li>Questions unit exam and Final</li> <li>ST (HESI)</li> </ul>
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.	I/P: <ul style="list-style-type: none"> <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 <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A= Community Assessment</li> <li>A= Disaster Plan</li> </ul>	P/M: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A= Teaching Project</li> <li>Clinical assessment</li> <li>Campus lab</li> <li>ST (HESI)</li> </ul>	P/M: <ul style="list-style-type: none"> <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>
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: <ul style="list-style-type: none"> <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: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A= Community Assessment</li> </ul>	I/P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A = Teaching Project</li> <li>Clinical assessment</li> <li>Campus lab</li> <li>ST (HESI)</li> </ul>	I/P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A = Care Plan</li> <li>Clinical assessment</li> <li>ST (HESI)</li> </ul>

Student Learning Outcomes	First Year COURSES			
	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: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>Clinical assessment (NUR111)</li> <li>ST (HESI)</li> </ul>	I/P/(M): <ul style="list-style-type: none"> <li>Midterm &amp; Final Exam</li> <li>A = Cultural Assessment</li> <li>A = Community Assessment</li> </ul>	I/P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Teaching Plan</li> <li>Clinical assessment</li> <li>ST (HESI)</li> </ul>	I/P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Care Plan</li> <li>Clinical assessment</li> <li>ST (HESI)</li> </ul>
5. Communicate effectively in diverse settings.	I/P: <ul style="list-style-type: none"> <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>	I/P: <ul style="list-style-type: none"> <li>Midterm &amp; Final Exam</li> <li>A = Community Assessment</li> <li>A = Cultural Assessment</li> <li>ST: HESI</li> </ul>	I/P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Teaching Plan</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>	I/P/M: <ul style="list-style-type: none"> <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.	I/P: <ul style="list-style-type: none"> <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: <ul style="list-style-type: none"> <li>Midterm &amp; Final Exam</li> <li>A = Community Assessment</li> <li>ST: HESI</li> </ul>	I/P/M: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Teaching Plan</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>	I/P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A = Care Plan</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>
7. Demonstrate the ability to manage client care.	I/P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A = Care plan assignment (NUR111)</li> <li>Clinical assessment (NUR111)</li> <li>ST: HESI</li> </ul>	I/P: <ul style="list-style-type: none"> <li>Midterm &amp; Final Exam</li> <li>A = Community Assessment</li> <li>ST: HESI</li> </ul>	I/P/M: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Teaching Plan</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>	I/P: <ul style="list-style-type: none"> <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.	I/P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A = Care plan assignment (NUR111)</li> <li>Clinical assessment (NUR111)</li> <li>ST: HESI</li> </ul>	I/P: <ul style="list-style-type: none"> <li>Midterm &amp; Final Exam</li> <li>A = Community Assessment</li> <li>A = Cultural Assessment</li> <li>A = Disaster Plan</li> <li>ST: HESI</li> </ul>	I/P/M: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Teaching Plan</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>	I/P: <ul style="list-style-type: none"> <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 Year Courses			
	NUR221	NUR222	NUR254	NUR255
1. Demonstrate quantitative reasoning in the practice of nursing.	P: <ul style="list-style-type: none"> <li>• Drug Dosage Calculation</li> <li>• DDC test</li> <li>• Questions unit exam and Final</li> </ul>	M: <ul style="list-style-type: none"> <li>• Drug Dosage Calculation</li> <li>• DDC test</li> <li>• Questions unit exam and Final</li> <li>• ST=HESI</li> </ul>	N/A	M: <ul style="list-style-type: none"> <li>• ST=HESI</li> </ul>
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.	I/P: <ul style="list-style-type: none"> <li>• Unit Exams</li> <li>• A = Concept Map</li> <li>• Clinical assessment</li> <li>• Campus lab</li> </ul>	P/M: <ul style="list-style-type: none"> <li>• Unit Exams</li> <li>• A = Concept Map</li> <li>• Clinical assessment</li> <li>• Campus lab</li> <li>• ST=HESI</li> </ul>	N/A	M: <ul style="list-style-type: none"> <li>• Questions midterm and Final</li> <li>• A: EBP project</li> <li>• ST=HESI</li> </ul>
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: <ul style="list-style-type: none"> <li>• Unit Exams</li> <li>• A = Concept Map</li> <li>• Clinical assessment</li> <li>• Campus lab</li> </ul>	P/M: <ul style="list-style-type: none"> <li>• Unit Exams</li> <li>• A = Concept Map</li> <li>• Clinical assessment</li> <li>• Campus lab</li> <li>• ST=HESI</li> </ul>	N/A	M: <ul style="list-style-type: none"> <li>• Questions midterm and Final</li> <li>• A: EBP project</li> <li>• ST=HESI</li> </ul>
4. Provide culturally competent therapeutic nursing care to clients with common, well-defined health needs in community-based settings.	I/P: <ul style="list-style-type: none"> <li>• Unit Exams</li> <li>• A =Concept Map</li> <li>• Clinical assessment</li> </ul>	P/M: <ul style="list-style-type: none"> <li>• Unit Exams</li> <li>• A =Concept Map</li> <li>• Clinical assessment</li> <li>• ST=HESI</li> </ul>	N/A	M: <ul style="list-style-type: none"> <li>• A: EBP project</li> <li>• ST=HESI</li> </ul>
5. Communicate effectively in diverse settings.	P: <ul style="list-style-type: none"> <li>• Unit Exams</li> <li>• A =Concept Map</li> <li>• Clinical assessment</li> </ul>	P/M: <ul style="list-style-type: none"> <li>• Unit Exams</li> <li>• A =Concept Map</li> <li>• Clinical assessment</li> <li>• ST: HESI</li> </ul>	P/M <ul style="list-style-type: none"> <li>• Final Exam</li> </ul>	M: <ul style="list-style-type: none"> <li>• Questions midterm and Final</li> <li>• A: EBP project</li> <li>• ST=HESI</li> </ul>



Student Learning Outcomes	Second Year Courses			
	NUR221	NUR222	NUR254	NUR255
6. Utilize the teaching/learning process in providing nursing care.	P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Concept Map</li> <li>Clinical assessment</li> </ul>	P/M: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Concept Map</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>	N/A	M: <ul style="list-style-type: none"> <li>Questions midterm and Final</li> <li>A: EBP project</li> <li>ST=HESI</li> </ul>
7. Demonstrate the ability to manage client care.	P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Concept Map</li> <li>Clinical assessment</li> </ul>	P/M: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Concept Map</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>	N/A	M: <ul style="list-style-type: none"> <li>Questions midterm and Final</li> <li>A: EBP project</li> <li>ST=HESI</li> </ul>
8. Demonstrate the use of critical thinking throughout the nursing process in the provision of client care.	P: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Concept Map</li> <li>Clinical assessment</li> </ul>	P/M: <ul style="list-style-type: none"> <li>Unit Exams</li> <li>A =Concept Map</li> <li>Clinical assessment</li> <li>ST: HESI</li> </ul>	N/A	M: <ul style="list-style-type: none"> <li>Questions midterm and Final</li> <li>A: EBP project</li> <li>ST=HESI</li> </ul>

**Note: Measured/Assessed**

**ST**=Standardized Test

**A**=Assignment (Specify)



Northern Virginia  
Community College

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

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

Student Learning Outcomes	COURSES (List – Part 1 of 2)								
	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. <i>(Screening and Evaluation/Fieldwork)</i>	I Introduce concepts in lecture; <b>Method of Assessment:</b> Final Exam	I, P Introduce concepts in lecture; practice therapeutic rapport skills on two fieldtrips <b>Method of Assessment:</b> Rubric from the fieldtrip analysis assignment		P Practices establishing therapeutic rapport with children in pediatric labs <b>Method of Assessment:</b> Rubric to demonstrate student exhibits these skills	P Practices establishing therapeutic rapport in Therapeutic Skills labs <b>Method of Assessment:</b> On the rubric for the final lab practical for this course	P Practices on pediatric fieldwork experience with clients, families, teachers, OT practitioners, etc. <b>Method of Assessment:</b> Level I Fieldwork Evaluation		P Practices on psychosocial fieldwork experience with clients, families, OT practitioners, etc. <b>Method of Assessment:</b> 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/Context of Service Delivery)				must complete an evidence-based practice group presentation <b>Method of Assessment:</b> Evidence shown on rubric for group presentation			show competency with implementing evidence-based practice skills by completing a critically appraised topic (CAT). <b>Method of Assessment:</b> Rubric and completion of the CAT paper and presentation		evidence-based practice group presentation <b>Method of Assessment:</b> Evidence shown on rubric for group presentation
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)			I, P Introduced to basics of treatment for individuals with neuro conditions <b>Method of Assessment</b> Four neuro analyses and correspond	P Must demonstrate effective problem-solving skills to meet the needs of pediatric clients in labs. <b>Method of Assessment</b> Final practical and final exam	P Must demonstrate effective problem-solving skills during Therapeutic Skill labs (i.e. treating after taking vital signs, etc.) <b>Method of Assessment</b> Final Lab practical rubric	P Must creatively solve problems and make effective treatment decisions alongside the fieldwork educator in a pediatric setting. <b>Method of Assessment</b>		P Must creatively solve problems and make effective treatment decisions alongside the fieldwork educator in a psychosocial setting. <b>Method of Assessment</b> Level I fieldwork evaluation	P Must demonstrate effective problem-solving skills to meet the needs of psych social clients as shown. <b>Method of Assessment</b> Final exam

			ding rubric			ent Level I 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. <i>(Intervention/Implementation; Professional ethics, values, responsibilities)</i>	I Students are introduced to ethical and legal issues in OT and the supervisory process <b>Method of Assessment</b> OCT 100 final exam	I, P Students are introduced to what it means to provide meaningful therapeutic interventions and the various types through lecture and lab. Students attend 2 fieldtrips, allowing them to practice these skills. <b>Method of Assessment</b> Midterm exam and rubric from the fieldtrip analysis assignmen		I, P Students are introduced to appropriate therapeutic interventions when working with pediatric clientele in both lecture and practice in lab. <b>Methods of Assessment</b> Final practical and final exam	I, P Students are introduced to appropriate therapeutic skills when working with individuals across the lifespan with a variety of conditions in both lecture and practice in lab. <b>Methods of assessment</b> Final exam and rubrics from the midterm and final practical exams	P Students provide interventions to pediatric clientele with close supervision on Level I fieldwork to engage client. <b>Method of Assessment</b> Level I fieldwork evaluation		P Students provide interventions to psychosocial clientele with close supervision on Level I fieldwork to engage client. <b>Method of Assessment</b> Level I fieldwork evaluation	I Students are introduced to appropriate therapeutic interventions when working with psychosocial clientele in lecture <b>Methods of Assessment</b> Final exam

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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. <i>(Assistance with Management of OT Services, Fieldwork)</i>	I Introduced to the significance of effective documentation as a method of communication with others and to ensure reimbursement in OT practice. <b>Method of Assessment</b> OCT 100 final exam			I, P Introduced to important documentation skills as related to pediatric practice. Must incorporate these skills in lab activities and on the final practical exam. <b>Method of Assessment</b> Final practical exam		P Start practicing documentation skills (depending on the fieldwork site) on the job in a pediatric setting. <b>Method of Assessment</b> Level I fieldwork evaluation		P Start practicing documentation skills (depending on the fieldwork site) on the job in a psychosocial setting. <b>Method of Assessment</b> Level I fieldwork evaluation	I, P Introduced to important documentation skills as related to psychosocial practice. Must incorporate these skills in SOAP note writing activities. <b>Method of Assessment</b> SOAP note rubric.
6. Utilize principles of occupational and activity analysis and synthesis used in occupational therapy intervention during laboratory activities and fieldwork opportunities. <i>(Occupational Therapy Theoretical</i>		I, P Students are introduced to the principles of occupational analysis and synthesis during		P Students apply the principles of occupational and activity analysis during lab experiences when working	P Students, while in the field, apply the principles of occupational and activity analysis when working			P Students, while in the field, apply the principles of occupational and activity analysis when working with the psychosocial	P Students apply the principles of occupational and activity analysis during lecture experiences when working with the psychosocial clientele.

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

		<p>evaluate their own learning styles and preferred teaching styles while incorporating these preferences into lab activities.</p> <p><b>Method of Assessment</b> Learning and teaching style lab assignment rubric</p>		<p><b>Assessment</b> Final lab practical</p>	practical	<p>I fieldwork experience.</p> <p><b>Method of Assessment</b> Level I fieldwork evaluation</p>		<p>Level I fieldwork evaluation</p>	
<p>8. Develop lifelong learning capabilities required for enhanced professional development.</p>	<p>I Introduced to lifelong learning and professional development requirements and opportunities in occupational therapy.</p> <p><b>Method of Assessment</b> OCT 100 final</p>						<p>P Practice lifelong learning skills of being able to find evidence-based information to influence OT practice.</p> <p><b>Method of Assessment</b> Discussion Board forum</p>		

	exam					rubric	
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Part 2 of 2

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



	individual paper presentation <b>Method of Assessment:</b> Evidence shown on rubric for individual paper presentation				everyday practice with clients across the lifespan on Level II fieldwork. <b>Method of Assessment:</b> AOTA Level II Fieldwork Evaluation	everyday practice with clients across the lifespan on Level II fieldwork. <b>Method of Assessment:</b> AOTA Level II Fieldwork Evaluation	
3. Effectively and creatively solve problems and make reflective treatment decisions based on the stated needs of the clients who are being served. <i>(Intervention/Implementation)</i>	P Must demonstrate effective problem-solving skills to meet the needs of adult and elderly clients in labs. <b>Method of Assessment</b> 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. <b>Method of Assessment</b> 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. <b>Method of Assessment</b> Level I fieldwork evaluation	M Demonstrate competency with creatively solving problems and making effective treatment decisions. <b>Method of Assessment:</b> AOTA Level II Fieldwork Evaluation	M Demonstrate competency with creatively solving problems and making effective treatment decisions. <b>Method of Assessment:</b> 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. <i>(Intervention/Implementation;</i>	I, P Students are introduced to appropriate therapeutic interventions when working	I Students are introduced to greater depths of understanding of ethical and		P Students provide interventions to adult/elderly clientele with close	M Demonstrate competency with providing meaningful and purposeful therapeutic	M Demonstrate competency with providing meaningful and purposeful therapeutic	

Professional ethics, values, responsibilities)	with adult/elderly clientele in both lecture and practice in lab. <b>Methods of Assessment</b> Final practical exam rubric and midterm exam	legal issues that influence OT practice. <b>Method of Assessment:</b> OCT 208 final exam		supervision on Level I fieldwork to engage client. <b>Method of Assessment</b> Level I fieldwork evaluation	intervention safely, ethically, and legally under the supervision of an OT while on Level II fieldwork. <b>Method of Assessment:</b> AOTA Level II Fieldwork Evaluation	intervention safely, ethically, and legally under the supervision of an OT while on Level II fieldwork. <b>Method of Assessment:</b> 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. <i>(Assistance with Management of OT Services, Fieldwork)</i>	I, P Introduced to important documentation skills as related to adult and elderly practice. Must incorporate these skills in SOAP note writing activities. <b>Method of Assessment</b> SOAP note rubric.	I Introduced to greater depth of understanding of reimbursement standards as related to OT practice. <b>Method of Assessment</b> OCT 208 final exam		P Start practicing documentation skills (depending on the fieldwork site) on the job in an adult/elderly setting. <b>Method of Assessment</b> Level I fieldwork evaluation	M Demonstrate efficiency and effectiveness in electronic medical record documentation in accordance with site and reimbursement standards. <b>Method of Assessment:</b> AOTA Level II Fieldwork Evaluation	M Demonstrate efficiency and effectiveness in electronic medical record documentation in accordance with site and reimbursement standards. <b>Method of Assessment:</b> 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. <i>(Occupational Therapy)</i>	P Students apply the principles of occupational and activity analysis during lab		P Students apply the principles of occupational and activity analysis	P Students, while in the field, apply the principles of occupational and activity	M Demonstrate competency and effectiveness in applying the principles of	M Demonstrate competency and effectiveness in applying the principles of	

<i>Theoretical Perspectives/ Fieldwork)</i>	experiences when working with the adult and elderly clientele. <b>Method of Assessment</b> Final practical exam rubric		during lab experiences when deciding on the appropriate incorporation of assistive technologies. <b>Method of Assessment</b> Final exam in OCT 210	analysis when working with the adult and elderly clientele. <b>Method of Assessment</b> Level I fieldwork evaluation	activity analysis and synthesis during Level II fieldwork experiences. <b>Method of Assessment:</b> AOTA Level II Fieldwork Evaluation	activity analysis and synthesis during Level II fieldwork experiences. <b>Method of Assessment:</b> 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. <b>Method of Assessment</b> 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. <b>Method of Assessment</b> 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. <b>Method of Assessment</b> 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. <b>Method of Assessment</b> AOTA Level II fieldwork evaluation	
8. Develop lifelong learning capabilities required for enhanced professional development.							M Demonstrate mastery and reflective

							<p>analysis of lifelong learning capabilities in preparation for graduation from the NOVA OTA program.</p> <p><b>Method of Assessment</b></p> <p>Rubric of the Self-reflective professional development plan paper</p>
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Student Learning Outcomes	COURSES										
	LGL 110	LGL 125	LGL 126	LGL 115	LGL 117	LGL 215	LGL 217	LGL 218	LGL 225	LGL 230	LGL 235
1. Distinguish between the roles of attorney and paralegal.	I	P	P	P	P	P	P	P/M Hypothetical problem solving	P	P	p
2. Research federal and state laws using manual and computer assisted methods such as Lexis or Westlaw.	I	P/M Research project	P		P	P		P			
3. Locate and prepare standard forms appropriate to specific legal problems.	I		P	P	P		P		P/M Draft estate planning & probate documents	P	P

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



**Northern Virginia  
Community College**

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

**Program: Personal Training, C.S.C.**

Student Learning Outcomes	COURSES								Assessment
	PED 116	PED 111	PED 100, 103, 109	PED 220	PED 168	HLT 206	HLT 105	DIT 121	
1. Graduates will explain the principles of fitness and demonstrate proper techniques for flexibility, muscular strength, muscular endurance, and cardiovascular exercises.	I	P	P	M	M				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	P	P		M	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.	I	I	I	I/P	P				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	P	P	M	M	P			Local tests Assignments Demonstrations Final Paper Certificate exam
6. Graduates will instruct individual and group exercise sessions.	I	I	I/P	M	P/M				Demonstrate Performance Video taping
7. Graduates will administer physical assessments on muscular strength, muscular endurance, cardiovascular endurance, flexibility, and body composition.	I	P	P	M	M				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	P	M			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				P	M			Lecture  Local Tests  Written Assignments



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

Student Learning Outcomes	COURSES									
	PHT101	PHT103	PHT110	PHT102	PHT104	PHT270	PHT130	PHT201	PHT202	PHT227
1. Control the image capture process	IP	IP		PM	PM	I	IP	PM	M	
2. Control the image output process	IP	IP		PM	PM	IP	IP	PM	M	
3. Manage image/media assets and workflow	I	IP		P	PM	IP	IP	PM	M	
4. Solve technical and aesthetic problems independently and creatively	IP	IP		P	P	IP	IP	PM	M	
5. Produce and present a coherent body of work in a chosen genre	I	I		P	P	I	I	PM	M	I
6. Discuss work in the medium with correct and appropriate vocabulary	IP	IP	IPM	P	P	IP	IP	PM	M	
7. Discuss images in terms of the history and theory of the medium	I	I	IPM	P	P	I	I	P	M	I
8. Identify career options in the field	I	I	I	I	I	I	I	I	I	IPM

9. Make effective editing and postproduction decisions	I	I		P	P	IP	IP	PM	M	
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**Northern Virginia  
Community College**

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

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

Student Learning Outcomes	COURSES											
	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 evaluation	I	I/P/M Exam questions, check-outs, lab practical	I/P	P	I/P/M Exam questions, check-outs and lab practical exams	P/M Clinical evaluation and portfolio development		I		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	P	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	P	I/P/M Exam questions, check-outs and lab practical exams	P/M Clinical evaluation and portfolio development	P	I	P	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		P	P	P	P/M Exam questions, check-outs and lab practical exams	P/M Clinical evaluation, portfolio development and case study presentation	P/M exam questions	P	P/M Quizzes, oral presentation	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		P	P	P	P	P/M Clinical evaluation, portfolio development and case study presentation		I	P	P/M Clinical evaluation
6. Develop lifelong learning habits that reflect professional development.	P	I	I	I/P	P	P	P	P/M Clinical evaluation and portfolio development	P	P	P/M Oral presentation and capstone project	P/M Clinical evaluation

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

Student Learning Outcomes	Courses				
	HIS 180	HIS 181	HIS 183	HIS 187	HIS 190
1. 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
2. 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	I 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	





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

**Program: Radiography, A.A.S.**

Student Learning Outcomes	COURSES														
	RAD 105	RAD 121	RAD 125	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.	I	P	P	P	P	P	M Exam Prof Eval	P	P	P	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
2. Communicate effectively to serve needs of community and other health care providers.	I	P	P		P	P	P	P	P	P	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
3. Provide patient care essentials to radiologic sciences.	I	P	P	P	P	P	P	P	P	P	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

4. Apply knowledge of anatomy, positioning, and radiographic techniques to accurately image anatomical structures.	I	P	P	P	P	P	P	P	P	P	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
5. Evaluate images for diagnostic information.	I	P	P	P	P	P	P	P	P	P	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
6. Determine proper exposure factors to achieve optimum images of anatomical structures.	I	P	P	P	P	P	P	P	P	P	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
7. Work in an ethical, legal, safe and effective manner in diagnostic imaging.	I	P	P	P	P	P	P	P	P	P	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

8. Develop lifelong learning habits that reflect professional development.	I	P	P	P	P	P	P	P	P	P	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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**Northern Virginia  
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**Student Learning Outcomes – Curriculum Maps for Degree Awarding Programs and Certificates**

**Program: Respiratory Therapy, A.A.S.**

Student Learning Outcomes	COURSES																	
	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 225	RTH 227	RTH254
1. Perform psychomotor and cognitive skills in all areas of non-critical care.	I/P	I	I/P	I	I	I/P	I	P/M Professional Practice experience Practice Site Evaluation	I/P	P/M Professional Practice experience Practice Site Evaluation		I		M Professional Practice experience Practice Site Evaluation	I/P	I/P	M	P/M Professional Practice experience Practice Site Evaluation
2. Perform the psychomotor and demonstrate the cognitive skills in all areas of adult critical care.	I	I				I/P	I	I/P	I/P	P/M Professional Practice experience Practice Site Evaluation		I	I/P	P/M Professional Practice experience Practice Site Evaluation	I/P		M	P/M Professional Practice experience Practice Site Evaluation

3. Perform the psychomotor and demonstrate the cognitive skills in all areas of neonatal/pediatric critical care.																I/P	M	P/M Professional Practice experience Practice Site Evaluation
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.				I	I		I	P	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	I	I	I/P	I	P	I/P	P/M Professional Practice experience Practice Site Evaluation	I/P	I/P	I/P	P/M Professional Practice experience Practice Site Evaluation	P/M	I/P	M	P/M Professional Practice experience Practice Site Evaluation

6. Demonstrate ethical and professional conduct in the classroom, laboratory and clinical settings.	I	P	I/P	P	P	I/P	P	P/M Professional Practice experience Practice Site Evaluation	P	I/P Professional Practice experience Practice Site Evaluation	P	P	P	P/M Professional Practice experience Practice Site Evaluation	P/M	P/M	P/M	P/M Professional Practice experience Practice Site Evaluation
7. Communicate effectively with respiratory care and other healthcare professionals.	I		I/P			I/P		I/P Professional Practice experience Practice Site Evaluation	I/P	I/P Professional Practice experience Practice Site Evaluation			I/P	P/M Professional Practice experience Practice Site Evaluation		I/P		P/M Professional Practice experience Practice Site Evaluation

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

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





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

**Program: Social Sciences, A.S.**

Student Learning Outcomes	Courses						
	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.							IP

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#### 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.



**Northern Virginia  
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**Student Learning Outcomes - Curriculum Maps for Degree Awarding Programs and Certificates**

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

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

Student Learning Outcomes	COURSES			
	SDV 101 Orientation to Education	EDU 200 Intro to Teaching as a Profession	Assessment Method SDV 101	Assessment Method EDU 200
1. 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 inter-relationship 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



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

**Program: Substance Abuse Rehab. Counselor, Certificate**

Student Learning Outcomes	COURSES								
	HMS 121	HMS 141	HMS 142	HMS 251	HMS 252	HMS 145	HMS 258	HMS 290	HMS 266
1. Conduct a client screening assessment including a medical, legal, and family history.	I	P	P				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			
3. Design a comprehensive substance abuse treatment program appropriate for use with a client that meets state standards.				I	P		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.	I	P		P	Presentation M				
7. Summarize journal articles related to various theoretical orientations and participate in small groups comparing the application of the approaches.		I	P						Journal Review M



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

**Program: Veterinary Technology, A.A.S.**

Student Learning Outcomes	COURSES (List – Part 1 of 2)								
	VET 105	VET 111	VET 116	VET 121	VET 122	VET 131	VET 132	VET 133	VET 135
1. Safely and accurately prepare, dispense, administer, and explain use of prescribed medications.	I/P								I/P
2. Perform surgical assistance.				I/P Proctored laboratory skills practical exam for both On campus and Online cohorts					P
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	P

								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		P						





**Northern Virginia  
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**Student Learning Outcomes - Curriculum Maps for Degree Awarding Programs and Certificates**

**Program: Visual Art, A.F.A.**

Student Learning Outcomes	COURSES			
	ART 121	ART 131	ART 122	ART 132
1. 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
2. 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
3. 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



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

**Program: Welding Basic Techniques, C.S.C.**

Student Learning Outcomes	COURSES					
	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	M	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	P	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 biotechnology programs, and prioritize future programs to support regional economic development goals

**NOVA**

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