

Critical Thinking Core Learning Competency Assessment Report: 2017-2018



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NORTHERN VIRGINIA COMMUNITY COLLEGE Office of Institutional Effectiveness and Student Success

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

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

4001 Wakefield Chapel Road Annandale, Virginia 22003-3796 703–323–3129 www.nvcc.edu/oir

Critical Thinking Core Learning Competency Assessment Report: 2017-2018

Introduction

In 2017-2018, Northern Virginia Community College (NOVA) implemented course embedded assessment of General Education Core Competencies, which NOVA calls "Core Learning Outcomes." Prior to 2017-2018, Virginia Community College System (VCCS) required NOVA to assess General Education Core Competencies using standardized assessments chosen by the VCCS. NOVA decided to implement course embedded assessment, a direct measure using students' actual work or student performance, in 2017-18 based on recommendations from NOVA's Ad Hoc Committee on General Education Assessment established in Spring 2016 and State Council of Higher Education for Virginia (SCHEV) *Policy on Student Learning Assessment and Quality in Undergraduate Education* adopted in July 2017. SCHEV policy requires that every Virginia public institution of higher education assess six general education competencies at least once in a six-year period. Four core competencies are mandated by SCHEV to be assessed by all institutions: Critical Thinking, Written Communication, Quantitative Literacy, and Civic Engagement. Two additional educational competencies, based upon SCHEV's guidelines, were to be selected by the institutions themselves. The VCCS selected Professional Readiness and Scientific Literacy as their two additional core competencies. Therefore, NOVA's curriculum includes six general education core competencies, called Core Learning Outcomes, that students attain throughout their educational program at NOVA.

The Ad Hoc Committee on General Education Assessment recommended NOVA start course embedded assessment by benchmarking how educational programs and disciplines are currently assessing Core Learning Outcomes (CLOs). Two CLOs, Critical Thinking and Quantitative Literacy, were chosen to be assessed across the curriculum based on best practice.³ In Spring 2018, the College requested associate degree programs, standalone certificates, and disciplines without degrees to assess either Critical Thinking or Quantitative Literacy in a course that aligns with the competency chosen using a common assessment method course-wide. The faculty of each program/discipline determined which Core Learning Outcome (CLO) they would assess for 2017-2018, how they would operationalize the CLO, and a common assessment method. At the end of the planning and evaluation cycle, each program/discipline analyzed and documented the results of the assessment activities. Based on the results, programs/disciplines created actions to seek improvements to assessment and student learning for these Core Learning Outcomes.

The assessment process at NOVA is faculty-driven as per best practice. As Tables 1 and 2 make clear, the planning and evaluation process engages a significant number of teaching faculty, academic deans, and provosts. Table 1 details the Pathway Provosts, Deans, and Program Lead Faculty responsible for compiling their program's 2017-2018 Core Learning Competency Assessment Report. Table 2 lists Pathway Provosts, Deans, and Discipline Chairs/CLO Contacts responsible for compiling their discipline's 2017-2018 Core Competency Assessment Report. Such widespread faculty participation is not only in compliance with *SACSCOC Principles of Accreditation*, but is also integral to maintaining a culture of assessment and promoting data-driven decision-making.⁴

¹ State Council of Higher Education for Virginia. Policy on Learning Assessment and Quality in Undergraduate Education. Richmond: SCHEV, 2017. Digital.

² Virginia Community College System. "General Education, Section 5.0.2." *Policy Manual*, 2019. Digital.

³ Eggen, Theo and Bernard Veldkamp. "A General Framework for the Validation of Embedded Formative Assessment." *Journal of Educational Measurement* (2019): 1-18. Digital. Gerretson, Helen and Emily Golson. "Introducing and Evaluating Course-Embedded Assessment in General Education." *Assessment Update* 16.6 (2004): 4-6. Digital. Garfolo, Blaine, et al. "The Use of Course Embedded Signature Assignments and Rubrics in Programmatic Assessment." *Academy of Business Journal* 1.1 (2016): 8-20. Digital. Kumar, Rita, et al. "Purposeful Assessment Design: Aligning Course-Embedded Assessment with Program-Level Learning Goals." *Business Education Innovation Journal* 10.1 (2018). Digital.

⁴ Carpenter, Rowanna and Celine Fitzmaurice. "Assessment and Faculty Support: Fostering Collegial Community to Strengthen Professional Practice." *Journal of General Education*. 67.1-2 (2018): 90-108. Digital. Elliott, Robert and Diane Oliver. "Linking Faculty Development to Community College Student Achievement: A Mixed Methods Approach." *Community College Journal of Research and Practice*. 40.2 (2016). Digital. Nat'l Institute for Learning Outcomes Assessment. "What Faculty Unions Say About Student Learning Outcomes Assessment." 2011. Digital.

This report is a compilation of 45 Critical Thinking course embedded assessment reports completed in 2017-2018. VCCS Policy: General Education (5.0.2) defines Critical Thinking is "the ability to use information, ideas and arguments from relevant perspectives to make sense of complex issues and solve problems. Degree graduates will locate, evaluate, interpret, and combine information, to reach well-reasoned conclusions or solutions." This report presents the varied assessment methods and targets utilized by programs/disciplines, the assessment results and analysis, and the ways in which the results were used to seek improvement as reported in the *Annual Planning and Evaluation Report (APER) for Instructional Programs*. It is one of two Core Learning Competency Assessment Reports completed for the 2017-2018 cycle. The second Core Learning Competency Assessment Report for 2017-2018 is a compilation of the Quantitative Literacy assessments. Each of these documents provides the CLO assessment reports for degree programs and standalone certificates first, followed by disciplines without degrees, and each section is presented alphabetically by program/discipline name.

⁵ Virginia Community College System. "General Education, Section 5.0.2." *Policy Manual*, 2019. Digital.

Critical Thinking

Core Learning Competency Assessment Report: 2017-2018

Submitted by Instructional Programs/ Select Certificates: 2017-2018

Table 1. Program/Certificate Pathway Provost, Deans, and SLO Lead Faculty: 2017-2018 Core Competency Assessed

Pathway Provost & Dean	Program/Certificate	SLO Lead Faculty	Core Comp	
· ·	<u> </u>	,	CT X	QL
Business and Hospitality Management,	Accounting, A.A.S.	Rujuta Panchal, LO	Χ	
Annette Haggray, AL	Business Administration, A.S.	Mohammad (Kabir) Jamal, AL		X
Ivy Beringer, AL	Business Management, A.A.S.	Mohammad (Kabir) Jamal, AL		X
	Contract Management, A.A.S.	Charles Taylor, WO		Χ
	Hospitality Management, A.A.S.	Jill Guindon-Nasir, AN	X	
	Marketing, A.A.S.	Judy McNamee, AN		Χ
Education and Public Service,	Administration of Justice, A.A.S.	Jo Ann Short, AN	X	
Molly Lynch, MA	Drivers Education Career Studies Certificate	Nicole Mancini, MA	Х	
Evette Hyder-Davis, MA	Early Childhood Development, A.A.S.	Susan Johnson, LO	X	
	Paralegal Studies, A.A.S.	Joyce McMillan, AL	X	
	Social Sciences, A.S. Teacher Educ. Specialization	Ashley Wilkins, MA	Х	
	Substance Abuse Rehab. Counselor Certificate	Chandell Miller, AL	Х	
Engineering and Applied Technology,	Air Conditioning & Refrigeration, A.A.S.	Martin Kang, WO		Χ
Sam Hill, WO	Architecture Technology, A.A.S.	Armen Simonian	Х	Х
Abe Eftekhari, AN	Automotive Technology, A.A.S.	Laura Garcia-Moreyra, AL	Х	
	Construction Management Technology, A.A.S.	Siamak Ghorbanian, AL		Х
	Engineering, A.S.	Rudy Napisa, AN		Х
	Welding: Basic Techniques Career Studies Certificate	Matthew Wayman, MA	Х	
General Studies, General Education, Global Studies, AVP Sharon Robertson, AN Barbara Hopkins, AN	General Studies, A.S.		Х	Х
Health Sciences,	Dental Assisting A.A.S.	Lisbeth Shewmaker, ME	X	
Nicole Reaves, ME	Dental Hygiene, A.A.S.	Marina McGraw, ME		Χ
Shelly Powers, ME	Diagnostic Medical Sonography, A.A.S.	Leigh Giles-Brown, ME	Х	
	Emergency Medical Services, A.A.S.	Gary Sargent, ME		Χ
	Health Information Management, A.A.S.	Jacqueline Gibbons, ME	Х	
	Medical Laboratory Technology, A.A.S.	Maria Torres-Pillot, ME	Х	
	Occupational Therapy Assistant, A.A.S.	Megan Cook, ME	Х	
	Personal Training Career Studies Certificate	Dahlia Henry-Tett, MA	Х	
	Phlebotomy Career Studies Certificate	Maria Torres-Pillot, ME	Х	
	Physical Therapist Assistant, A.A.S.	Jody Gundrum, ME	X	
	Radiography, A.A.S.	Jarice Risper, ME	X	
	Respiratory Therapy, A.A.S.	Donna Oliver-Freeman, ME	·	Х
	Veterinary Technology, A.A.S.	Tregel Cockburn, LO	Х	

Pathway Provost & Dean	Program/Certificate	SLO Lead Faculty	Core Competency		
ratilway Flovost & Deall	Flograni/Certificate		CT	QL	
Information and Engineering Technologies,	Cybersecurity, A.A.S.	Margret Leary, AL	X		
Chad Knights, AN	Engineering Technology, A.A.S.	Rudy Napisa, AN		X	
Paula Ford (Interim), WO	Information Technology, A.S.	Moses Niwe, AL		X	
	Information Systems Technology, A.A.S.	Moses Niwe, AL		Х	
Languages, Pamela Hilbert, AN	American Sign Language to Eng. Interpretation	Paula Reece, AN	X		
Jennifer Daniels, AN	Professional Writing Certificate	Jennifer Nardacci, AN	X		
Life Sciences,	Biotechnology, A.A.S.	Xin Zhou, MA	X		
Julie Leidig, LO, Diane Mucci, MA	Horticulture Technology, A.A.S.	Anders Vidstrand, LO	X		
Liberal Arts and Communications, Pamela Hilbert, AN Jimmie McClellan, AL	Liberal Arts, A.A.		X	Х	
Mathematics and Computer Science,	Computer Science, A.S.	Larry Shannon, AN	X		
Sam Hill, WO Alison Thimblin, WO	Science, Mathematics Specialization	Martin Bredeck, AL		Х	
Nursing and Surgical Technologies, Nicole Reaves, ME, Marsha Atkins, ME	Nursing, A.A.S.	Brenda Clark, ME	Х		
Physical Sciences, Julie Leidig, LO, Barbara Canfield, LO	Science, A.S.	Mary Vander Maten, AN		Х	
Social Sciences, Molly Lynch, MA,	Public History & Historic Preservation Career Studies Certificate	Marc Dluger, LO	X		
Katherine Hitchcock, LO	Social Sciences, A.S.		X	X	
	Social Sciences, A.S. Geospatial Specialization	Michael Harman, LO	X		
Visual, Performing and Media Arts,	Fine Arts, A.A., Photography Specialization	Gail Rebhan, WO	X		
Annette Haggray, AL,	Graphic Design, A.A.S.	Dwayne Treadway, LO		Х	
David Epstein, WO	Interior Design, A.A.S.	Kristine Winner, LO		Х	
	Music, A.A., A.A.A. Specialization	Lisa Eckstein, AL	X		
	Music Recording Technology Certificate	Sanjay Mishra, LO	Х		
	Photography and Media, A.A.S.	Aya Takashima, AL	Х		
	Visual Art, A.F.A. (Fine Arts, A.A. in 2017-2018)	Fred Markham, AL	X		

Critical Thinking Core Learning Competency Assessment Report: 2017-2018

Submitted by Disciplines without Degrees or Certificates

Table 2. Discipline Pathway Provosts, Deans, and Department Chairs/CLO Contact: 2017-2018 Report

Pathway Provost & Dean	Discipline	Faculty Department Chair	Core Corr	
Falliway Flovost & Deali	Discipilite	Faculty Department Chair	CT	QL
Life Sciences: Julie Leidig, LO, Diane Mucci, MA	Biology ⁶	Karla Henthorn, AN	×	
Physical Sciences:	Chemistry	Pirabalini Swaminathan (Chair), AN and Katherine Burton, AL: SLO/CLO Contact		Х
Julie Leidig, LO,	Geology	William Bour, LO		Х
Barbara Canfield, LO	Physics	Tatiana Stantcheva (Chair), AL and Francesca Viale, LO: SLOs/CLO Contact	Х	
	Economics	Kiet Quach, AN	Х	
	Geography*	Melinda Alexander, AL	-	
Social Sciences: Molly Lynch, MA, Katherine Hitchcock, LO	History	Tom Rushford, AN	Х	
	Political Science ⁷	Jack Lechelt, AL		
Italienii Titonook, 20	Psychology*	Assessment Committee: Deanna DeGidio, AN, Chair and Karen Livesey, AN; Joan Passino, AN	-	
	Sociology	Virginia D'Antonio, WO and SLOs: Nicole Hindert, AL	Х	
Mathematics and Computer Science: Sam Hill, WO, Alison Thimblin, WO	Mathematics	Martin Bredeck, AL		Х
	English	Chris Kervina, AN	Х	
Languages: Pamela Hilbert, AN	World Languages ⁸ Arabic Chinese		-	
Jennifer Daniels, AN	French German Italian Japanese Korean Latin Russian Spanish	Martha Davis, AL		
Molly Lynch, MA and Ellen Fancher-Ruiz, AN	SDV	Margarita Martinez, AN	Х	

^{*} Report not received.

⁶ Assessed Scientific Literacy, as well as Critical Thinking.

Piloted Civic Engagement assessment.

Assessed Written Communication, instead of Critical Thinking.

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Program and Select Certificates	1
ACCOUNTING, A.A.S.	
ADMINISTRATION OF JUSTICE, A.A.S	2
AMERICAN SIGN LANGUAGE TO ENGLISH INTERPRETATION, A.A.S	4
ARCHITECTURE TECHNOLOGY, A.A.S.	
AUTOMOTIVE TECHNOLOGY, A.A.S. AND EMISSIONS SPECIALIZATION	6
BIOTECHNOLOGY, A.A.S.	8
COMPUTER SCIENCE, A.S.	9
Cybersecurity, A.A.S	10
DENTAL ASSISTING PROGRAM, CERTIFICATE	11
DIAGNOSTIC MEDICAL SONOGRAPHY, A.A.S.	12
DRIVERS EDUCATION CAREER STUDIES CERTIFICATE	13
EARLY CHILDHOOD DEVELOPMENT, A.A.S.	
FINE ARTS, A.A./A.A.A.	15
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GENERAL STUDIES A.S.	17
HEALTH INFORMATION MANAGEMENT, A.A.S	19
HORTICULTURE TECHNOLOGY, A.A.S.	20
HOSPITALITY MANAGEMENT, A.A.S	21
LIBERAL ARTS, A.A	23
MEDICAL LABORATORY TECHNOLOGY, A.A.S.	25
MUSIC, A.A., A.A.A., AND A.A.A. JAZZ/POPULAR MUSIC SPECIALIZATION	27
Music Recording Technology Certificate	28
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OCCUPATIONAL THERAPY ASSISTANT, A.A.S.	
Paralegal Studies, A.A.S.	
Personal Training Career Studies Certificate	
Phlebotomy Career Studies Certificate	
PHOTOGRAPHY AND MEDIA, A.A.S	34
Physical Therapist Assistant, A.A.S.	35
Professional Writing Certificate	37

Public History & Historic Preservation Career Studies Certificate	
Radiography, A.A.S.	
SOCIAL SCIENCES, A.S.	42
GEOGRAPHIC INFORMATION SYSTEMS CAREER STUDIES CERTIFICATE	44
SOCIAL SCIENCE: GEOSPATIAL SPECIALIZATION, A.S	44
SOCIAL SCIENCES: TEACHER EDUCATION SPECIALIZATION, A.S.	4
SUBSTANCE ABUSE REHABILITATION COUNSELOR, CERTIFICATE	46
VETERINARY TECHNOLOGY, A.A.S.	
WELDING: BASIC TECHNIQUES CAREER STUDIES CERTIFICATE	49
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Program and Select Certificates

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Accounting, A.A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed for persons who seek employment in the accounting field or for those presently in accounting who wish to increase their knowledge and update their skills. The occupational objectives include accounting trainee, accounting technician, junior accountant, and accountant.

	rage and apaate their skills	. The occupational objectives include accounting trainee, accounting technician, junior a	bootinant, and accountant.
Core Learning Outcome	Evaluation Methods	Assessment Results	Use of Results
CLO: Critical Thinking: Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Describe and make distinctions between various accounting methods under U.S. GAAP and international financial reporting standards (IFRS). [X]CT	Intermediate Accounting II ACC 222	Semester/year data collected: Spring 2018 Target: 70% for individual questions and 70% for overall SLO assessment. Overall SLO assessment score is 81% this year. Results by In-Class, ELI, Dual Enrollment:	Previous action(s) to improve CLO if applicable: N/A Target Met: [x] Yes Based on recent results, areas needing improvement: Question 2 will be rephrased in the next assessment to improve clarity. The subcomponent (distinctions between IFRS and GAAP) is at the appropriate level of competency. Current actions to improve CLO based on the results: It is extremely important for all the campuses to participate in this CLO assessment when offered and collect data for analysis. At the Spring 2019 meeting, the cluster discussed improving CLO assessments for higher level accounting classes. The cluster will have details in the Fall 2019 meeting. Next assessment of this CLO: Spring 2020

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **Administration of Justice, A.A.S.**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver excellent in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The Administration of Justice program offers academic opportunities to students desiring to enter various phases of the Criminal Justice System and security related fields.

System and security related fields.														
Core Learning Outcomes			Assessment Results					Use of Results						
	Organized (Crime (OC	Semester/yea	Semester/year data collected: Fall 2017						Based on recent results areas				
Thinking (CT)					Number of sec	ctions 2	2							needing improvement:
	In Fall 2017				Campuses: A									Overall, the performance met
	research pa				Enrolled numb	per of S	Studer	nts: 2	29					expectations of the CLO. This was
			thinking skill											a pilot assessment for CLO CT.
	CT. The sub				Current resul					ole:				Research papers were used,
	that address				Not Applicable			belo	W*					however essays might have been
			aper directio		[] Yes [] No	[] Par	tially							easier to assess. The ADJ Faculty
	rubric. Stude													Discipline believes an essay
	the CLO CT				Target: 80% s		s rate	for e	each s	ubse	ction (corre	lated	specific to the CT subsections,
			ovided as At		with each attri	bute								with limited "attributes" used in this
	to this repor													pilot study might have been an
		o CT 2.1, 2.	2, 2.3 and 2.	4 were as	Results: Over									easier, overall assessment of CTs.
- 1	follows:				results correct									Research papers are more
identified for the					graded each a									comprehensive than essays and
			oals seeking	only money	success rates reflect averages across campuses, rather						involve additional areas to assess			
	2.OC is hier		than by individual campus.					the overall grades. An essay can						
	3.OC has lin				Results by SLO Criteria:					be more refined to specific				
	4.OC consti			e					1					learning objectives with that
	5.OC perpet				Attribute	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	particular CLO.
	6.OC exhibit	ts a willingr	ness to use il	legal	Introduction	86	86	86	76	86	86	86	86	Current Actions to improve:
,,	violence				Deduction	86	86	86	76	86	86	86	86	The ADJ Faculty discipline would
	7.OC is mor		11. 11. 1		Analysis	86	86	86	76	86	86	86	86	revise the CT subsections of this
	8.OC is gove	erned by ex	cplicit rules a	na	Inference	86	86	86	76	86	86	86	86	CLO for papers written in the
	regulations				Evaluation	86	86	86	76	86	86	86	86	future, as they would correlate to
2.2 recognize	Commis aim	(Cif.	NI/A sada ana sa	-+ -ff	Total	86	86	86	76	86	86	86	86	different learning objectives for
	Sample Size	e. (Specify	N/A where n	#	Total	00	00	00	70	00	00	00	00	other courses.
assumptions or	Campus/	# Sections	# Sections	# Students	This is the firs	t tima t	ha CI	O w	oo nil	otod o	o tha	ro io	no	This course is not offered through
presuppositions in	Modality	Offered	Assessed	Assessed										an online venue, although several
any given source of information	AL	N/A	N/A	N/A	clear comparison from previous reports that used multiple						proposals were sent to ELI. It has not yet been selected for			
2.3 evaluate the	AN	1	1	13	choice questions. This report will serve as a comparison						incorporation to offer online. Once			
strengths and	MA	1	1	14	when it is reassessed by 2021. Overall, the critical						NOVA Online approves this			
relevance of	ME	N/A	N/A	N/A	thinking subsections correlated to each attribute were successfully measured with the following overall grade							course, a future assessment can		
arguments on a	LO	N/A 1	N/A 0	N/A 0	results measu									be reviewed. This course is not
particular question or	WO	who did not co									offered in DE.			
issue;	DE*	N/A	N/A	N/A	those who mir									Next Assessment of CLO:
2.4 weigh evidence	ELI	N/A 3	N/A	N/A	the essays (se									This CLO will be re-assessed
and decide if	*Dual-enro		2	27	055ays (50	JO TUDIT	0)100	JOI V C	a a D	. 11101	SIGIC	, 1110		again by 2021.

Administration of Justice, A.A.S.

generalizations or	A rubric (Attachment A) identified the	results are not deemed substantively impacted by anyone	
conclusions based on	completeness of answers to each attribute to	below a C grade.	
the given data are	assess a grade of A, B, C, D or F.		
warranted.	Survey Score range assessments:	A= 60%	
	A - Excellent 90-100%	B=26%	
	B - Very Good 80-89%	C=6%	
	C - Average 70-79%	D=4%	
	D - Below Average Below 70%	F=4%	
	F – Failure		

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **American Sign Language to English Interpretation, A.A.S.**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: Designed for students who have limited, if any, previous experience with interpreting for Deaf people, this degree program provides the comprehensive training in theory and practical interpreting skills necessary for employment as an educational or community interpreter. Successful completion of this program prepares the student to pursue either a Virginia Quality Assurance Screening Level, or national certification either through the Registry of Interpreters for the Deaf or the Educational Interpreter's Performance Assessment. These credentials qualify the student to interpret in either educational or community settings.

or the Educational Inte	ipietei s Fei	ioiiiiaiice r	133C33IIICIII.	THESE CIEUCIII	iais quaiily iii	e student to ii	iterpret ii	i citilei cuuca	alional oi	community settings.
Core Learning Outcome		Evaluati	on Methods		Assessment Results					Use of Results
Critical thinking	Interpretin	g in Safe S	Settings INT	237	Semester/year data collected: Spring 2018				Previous action(s) to improve CLO	
Students will	-				Target: 90%	6 of students	will score	80% or high	er	if applicable: This is the first time that
demonstrate the	Direct Mea	sure: In the	e Final Exam	i, students	overall and	on each criter	ion.			this CLO has been assessed.
ability to evaluate	are require	d to write a	reflection pa	per that						Target Met:
evidence carefully	analyzes th	eir final vid	eo as well as	their	Results:					[] Yes [] No [X] Partially
and apply reasoning	progress th	roughout th	ne semester.	In addition,			Spring	g 2018		
to decide what to	students ar	e asked to	create a real	istic plan for			90	-100%-7		Based on recent results, areas
believe and how to	the future a	ıfter gradua	ition. The que	estions and			_	0-89%- 1		needing improvement:
act.	grading Ru	bric are pro	vided.			Final Grades		0-79%- 1		The program only has two years to
								60-69%-0		teach students a skill that in truth is a
Operationalized as:	Sample Size	ze: (Specify	/ N/A where	not offered)	l L		Belov	w 59%- 0		life-long learning process. One of the
Students will	Campus/	Total #	#	# Students] _ , ,	01 0 0 :1 :				important skills that they must learn is
demonstrate the	Modality	Sections	Sections	# Students Assessed		CLO Criteria:				how to look at their work critically, and
ability to analyze	Wiodanty	Offered	Assessed	Assessed	Criteria/		Spring	g 2018		how to predict what challenges they
their own	AN only	1	1	9	Question	Average	Score	% of Stude	ents <u>></u>	may face in order to prepare for them.
interpreting product,	ELI	N/A	N/A	N/A	Topics	Average		Targe		While students were able to critically
identify strengths	DE*	N/A	N/A	N/A	1		96		100	look at their work, they were not as
and at least 2 areas	*Dual-enrolln	nent			2		96		100	competent at applying this knowledge
of improvement that					3		96		100	to new situations.
will have the					5		91 91		89 89	
greatest impact on					Total		94		95.6	Current actions to improve CLO
their product, and					Total		7 T		30.0	based on the results:
determine a plan for practice outside of					This is the f	irst year that t	his CLO I	has been ass	sessed.	In INT 237, the instructor will introduce more role playing opportunities to give
the classroom.					Strengths I	by Criterion/	Question	n/Topic:		students an opportunity to analyze
. v . o								future situations and apply what they		
[X]CT					Students overall were able to critically evaluate their work. This is a skill that is emphasized throughout the					know about their own work to
					program.					determine the best path towards success.
										Next assessment of this CLO: This
					Weaknesse	es by Criterio	n/ Quest	ion/Topic:		CLO will be assessed again in 2018-
					The area th	at was the we	akest rela	ated to the st	udents'	19.
						ply what they				10.
					predict wha	t challenges th	ney may t	face in the wo	orking	
					world and the	neir internship				

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **Architecture Technology, A.A.S.**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The Architecture curriculum is designed to prepare students for employment. The graduates will find employment in the field of architecture, construction, and urban design utilizing their construction knowledge, graphic communication and problem solving skills. Students must see their architecture advisor to satisfy individual goals.

advisor to satisfy individual goals.											
Core Learning Outcome	Evaluation Methods						Asse	ssment Re	Use of Results		
Critical thinking	Architectu	ral Design an	d Graphics	I & II ARC	Se	mester/ye	SLO 7 has not been evaluated in				
Students will	231 and AF		•			Semester/year data collected: Fall 2017 and Spring 2018					2016-17. Score of 3.10 is slightly
demonstrate the	Direct Mea	sure : Measure	ed by evalua	ition of	To	tal of 24 pr	oiects were	e evaluated	in Decemb	er 2017 and	
ability to evaluate		duced in our						, one for ea			(2016) score of 3.02. AN has
evidence carefully		ere evaluated i								Engineers.	shown a higher score than AL
and apply reasoning	on a scale t		i i aroao ioi	04011 020				eam rated t			when breaking down our SLOs
to decide what to		onstrated, 2= r	narginally					7 on a scale			to evaluate specific criteria and
believe and how to		ed, 3=well der		4=very well						nat a Target	gain more detailed evaluation.
act.	demonstrat		nonotratoa,	1 VOIY WOII				each of the			We (Architecture Faculty) can
		ed Capstone C	ourse Evalu	ation		al of 3.0	plable for t	Subir or the	OLOG Willi	arr artimate	now concentrate on the areas
Operationalized as:	forms.	od Odpotorio C	ouroo Evaro	dion	90	ai 0i 0.0					that need the most improvement.
Students will be		lemonstrates t	he students'	ahility to	Re	sults by Ir	-Class Fl	I I Dual En	rollment (Specify N/A	We have taken into
able to describe		building mate				nere not offe		, _ uu		speeny 14/71	consideration the advice of the
how buildings are		lemonstrates t			***	Results		ng 2018	Spring	2016	Architecture Curriculum Advisory
constructed.	,			ability to		by	Эрпп	<u> </u>	Spring		Committee.
[X]CT		assemble building components. c. Project demonstrates the students' ability to				Campus/	Average	Percent	Average	Percent	By measuring the SLOs through
[X]QR		onstruction de		ability to		Modality	Score	Target	Score	<u>></u> Target	evaluation of the capstone
[X] QIV		lemonstrates t		ability to		AL	2.50		2.57	102.8	courses, the evaluation includes
		lly communica				AN	3.71		3.46	138.4	all other relevant courses,
	systems		te construct	1011		Total	3.1		3.0	100.4	thereby making the evaluation
	Systems.				Of	fered only a			0.0		comprehensive and efficient.
	Sample Size (Specify N/A where not offered)				•	ioroa oriiy t	at / tE and /				Target Met:
	Sample Siz	` .		<i>'</i>	Re	sults by Cl	O Criteria				[X]Yes[]No[]Partially
	Campus/	# of Total	#	#	ĵ"	Results		g 2018	Sprin	g 2016	[X] res[]NO[]r artially
	Modality	Sections Offered	Sections Assessed	students assessed		by CLO	Spriii	Ĭ	Spriii	_	Based on the recent results,
		Offered	Assesseu			Criteria/	Average	% of	Average	% of	areas needing improvement:
	AL only	1	1	5		Question	Score	Students	Score	Students	The result is above ultimate goal
	AN only	1	- T	6		Topics a	3.00	50	3.05	50	of 3.0. Though the target has
	ELI	N/A	N/A	N/A		b	3.14	67	2.97	63	been exceeded, we will continue
	DE*	N/A	N/A	N/A		C	3.08	to make the courses more			
	Total	2	2	11		d	3.19	challenging and also marketable			
	*Dual-enrol	lment			Total	3.10	83 68.75	3.19 3.01	83 66.25	as per recommendations of the	
			'						Architecture Curriculum Advisory		
					Cı	ırrent result	s improved	d:			Committee members.
						(]Yes[]N					
					'	.,	[] . a.u.	,			Next assessment of this CLO:
											May 2020.

Critical Thinking Core Learning Competency Assessment Report: 2017-2018

Automotive Technology, A.A.S. and Emissions Specialization

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: This curriculum is designed to prepare students for full-time employment in the automotive field.										
Core Learning Outcomes	Evaluation Methods	Assessment Results	Use of Results							
Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Apply electrical theory using wiring diagrams and schematics to diagnose and repair automotive	Direct Measure: The test questions were updated to include the best understood version of question 5 with an accompanying wiring diagram that highlighted the main components and characteristics of circuits to include: relays, switches, modules, and loads. The questions that targeted fundamental knowledge about circuit voltages and problem-solving abilities were used. Assessment attached. This task was assessed in Electricity 2 where mastery of these skills is expected. Sample size: (Specify N/A where not offered) Campus/ Modality Total # Sections Offered Assessed Assessed	Target: 80% or higher overall score Current results improved: [] Yes [] No [X] Partially In Spring 2018, 27 out of 29 students at Alexandria and 22 out of 22 students at Manassas were assessed in all AUT 242 courses - 2 at Alexandria and 2 at Manassas. The average pass rate was 76% for Alexandria and 97% for Manassas. In the Spring semester, Alexandria did not meet the 80% pass rate, and is above the last cycle's score of 70%. Manassas did meet the 80% pass rate and is slightly below last cycle's score of 98%.	Previous action(s) to improve SLO: Faculty noticed during the Fall 2015 assessment that students had difficulty with questions 5 & 6 which required the highest level of critical thinking skills, the basis of which is the ability to read wiring diagrams to diagnose a problem and resulted in an overall score of 80%. In the following semesters faculty placed more emphasis on circuit operation without faults and relating symptoms on a work order to electrical flow on a diagram in lecture. Faculty have also increased the amount of basic electrical taught in non-electricity courses. In the 2016-17 cycle, performance on this skill improved overall to 87% in fall and 84% in spring, although Alexandria scored lower than the pass rate at 78% in the fall and 70% in the spring.							
electrical circuits. [X]CT	AL only 2 2 2 27 MA only 2 2 2 22 DE* 1 N/A N/A ELI N/A N/A N/A Total 5 4 49 *Dual-enrollment	One dual enrolled high school course performed the SLO, but unfortunately gave it to all students in their course, not just the students who were dual enrolled. Therefore, the data was inaccurate and could not be used. The instructor was made aware of the process and will submit clear data for the next SLO assessment. Previous Data Fall Fall 2016	The target was met at Manassas but not Alexandria during our last assessments in Fall 2016 and Spring 2017. There is room for improvement and collaboration for the next assessment. The following recommendations were agreed upon by faculty during the Fall 2017 cluster. These recommendations will be implemented in all automotive courses by faculty immediately to improve student outcomes in every class and in preparation for the next assessment at the end of Spring 2017: Color code diagram during normal operation Color Code diagrams during abnormal operation on this and multiple other horn circuits. Should also be done in Electricity 1. Electricity 1 should practice color coding normal operation, but also be able to							

Automotive Technology, A.A.S. and Emissions Specialization

Question	Spring	2017
	AL	MA
1 - Voltage Point W	80%	100%
2 – Voltage Point X	80%	100%
3 – Voltage Point Y	72%	100%
4 – Voltage Point Z	80%	96%
5 – Open Circuit	56%	96%
6 – Corrosion	52%	100%

Question	Fall 2017	Spring 2018			
	AL	AL	MA		
	15	27	22		
1 - Voltage Point W	100%	81%	100%		
2 – Voltage Point X	100%	81%	100%		
3 – Voltage Point Y	81%	74%	100%		
4 – Voltage Point Z	100%	78%	100%		
5 – Open Circuit	56%	55%	90%		
6 – Corrosion	75%	89%	95%		
7 - #5 Reworded	56%				
8 - #5 Reworded	69%				

Strengths by Criterion/ Question/Topic:

Students are able to understand what voltages should be present in a normally functioning circuit.

Weaknesses by Criterion/ Question/Topic:

Looking at the data, question 5 still has the lowest score for both campuses, followed by question 6. Given the amount of time spent reviewing the material in class, it is clear students still become confused when visualizing how electricity normally flows through the circuit, then analyzing the symptom the vehicle is experiencing, and finally using those symptoms to conceptualize the possibilities of how the flow of electricity could have been changed.

- "diagnose on paper" with color coding during a fault.
- Question number 5 appears to be confusing to many students, so our next goal is to ask the same question in multiple ways to see if the question is worded properly in Fall 2017.

Target Met:

[] Yes [] No [X] Partially

Based on recent results, areas needing improvement:

Using schematics to diagnose a fault based on symptoms.

Current actions to improve SLO based on the results:

The following recommendations were agreed upon by faculty during the Fall 2018 discipline meeting. These recommendations will be implemented in all Electricity 2 (AUT 242) courses by faculty immediately to improve student outcomes in future courses and for the next assessment at the end of Fall 2018 to collect data for when both campuses are holding courses at the same time.

- Expand our 8 week course offering into a 16 week hybrid course with weekly written assignments on voltage drop, relay and control circuitry.
- Reword question number 5 on the assessment to list the technicians' findings in bullet-point format so students don't miss pertinent information.
- Ensure all sections are practicing and proctoring the assessment the same way.

Next assessment of this SLO: Fall 2021

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 *Biotechnology, A.A.S.*

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: This program is designed to prepare graduates for employment in entry-level positions at biotechnology and pharmaceutical companies, as laboratory, research, or manufacturing technicians. Coursework will develop an understanding of basic scientific principles in biology and chemistry, and will emphasize laboratory techniques and procedures such as solution and media preparation, DNA purification and analysis, electrophoresis, chromatography, maintenance of cells in culture, and quality control techniques.

	ity control techniques.					
Core Learning Outcome	Evaluation Methods	Assessment Results	Use of Results			
Critical thinking	Nucleic Acid Methods BIO 252	Semester/year data collected: Spring 2017	In the last assessment of this SLO (2015-16), program faculty determined that students needed			
Students will		Target: Students were expected to achieve an 80%				
demonstrate	Seventeen students were enrolled in BIO 252	, , , , , , , , , , , , , , , , , , , ,				
the ability to	in one section at the Manassas campus only.		assignments and in preparing scientific manuscripts.			
evaluate	Students were tasked with completing two	Seventeen students were enrolled in BIO 252 in	This was accomplished by improving alignment			
evidence	projects (a molecular cloning project and a	one section at the Manassas Campus. Only fifteen	between the lecture portion of the course and the			
carefully and	DNA sequencing project), documenting the	students completed both scientific paper	lab course.			
apply	experiments in their scientific lab notebook,	assignments. One student submitted no paper at all	Students are now expected to participate in journal			
reasoning to	and reporting the results in a scientific paper	and one student submitted one paper late. These	club activities in which they dissect and present			
decide what to	format.	students were not included in the scientific paper	scientific literature. Students were expected to			
believe and	The five lab watched a common out of the common of the common of the common out of t	data.	achieve an 80% (score of 3 or above) for their			
how to act.	The two lab notebook assignments were worth 30 points each. Scores were normalized to a 0-	Only sixteen students completed both notebook	application of the scientific method. The percentage of students receiving a 3 or better (80%) was only			
Operationalized	4 point scale. Students were expected to	assignments. One student did not submit the DNA	47% (n=15) for the scientific paper. However, this is			
as:	receive an 80% or higher (3 or better) to	sequencing notebook assignment and is therefore	an increase of 29 percentage points as compared to			
Apply the	demonstrate competency.	not included in the lab notebook data.	the 2015-16 assessment (18%) and an increased			
scientific	demonstrate competency.	Lab Notebook Assignments				
method	The two scientific papers were worth 50 points					
including:	each. Scores were normalized to a 0-4 scale.	• The average score (n=14) was 3.4.	(2.9). Student grades not only depend on their application of the scientific method, but also their			
planning an	Students were expected to receive an 80% (3	Scientific Papers	writing skills.			
experiment,	or better) or higher to demonstrate	47% (7/15) of students scored 3 or better.	To compensate for this additional variable, a second			
collecting data,	competency.	The average score (n=11) was 3.1.	paper assignment was added and students could			
analyzing and		Spring 2016	use feedback from the first assignment to modify			
interpreting	Sample size: (Specify N/A where not offered)	Fourteen students were enrolled in BIO 252. Only	their writing skills.			
data.	Campus/ Total # # #	thirteen students completed the scientific paper	2.The percentage of students receiving 3 or better			
	Modality Sections Sections Students	assignment. Two students submitted very similar	(80%) for the lab notebook assignment was 69%			
[X]CT	Offered Assessed Assessed	papers and were docked points as a result. These	(n=16). The average score was 3.4. This is an			
	MA only	students were not included in the scientific paper	increase in both metrics from 2015-16: 64% and 3.3,			
	ELI N/A N/A N/A	data.	respectively.			
	Total 1 1 17	Lab Notebook Assignment	3.Due to the improved alignment of the lecture with			
	*Dual-enrollment	64% (9/14) of students scored 3 or better.	the laboratory, student performance has increased since the last assessment period. In the future, the			
	Dust Singiliaries	• The average score (n=14) was 3.3.				
		Scientific Paper				
		• 18% (2/11) of students scored 3 or better.	skills when assessing their application of the			
		• The average score (n=11) was 2.9.	scientific method.			
		Current results improved if applicable:	Next acceptment of this CLO. Spring 2040			
		[[X]Yes[]No[]Partially	Next assessment of this SLO: Spring 2019.			

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Computer Science, A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed primarily for students who wish to transfer to a four-year college or university to complete the baccalaureate degree in Computer Science. The curriculum emphasizes the study of the science of computing and the use of computing in a scientific setting.

degree in Compa								
Core Learning Outcome			ion Methods		Ass		Use of Results	
Critical thinking Students will	Computer	Science II CS	C 202		Target: 90% of student	Previous action(s) to improve CLO: Not		
demonstrate	Direct Mea	sure: No direc	t data was avail	able.	Results by In-Class, EL	previously assessed.		
the ability to evaluate	Other Meth	od: Used fina	grades from co	ourse as a	where not offered):	Target Met:		
evidence carefully and			chievement. Th		Results by Campus/ Modality		ssment Results ster/year	[] Yes [X] No [] Partially
apply		Science II, CSC	Percent > Target	Based on recent results,				
reasoning to decide what to	Sample Siz	ze (Specify N/A	where not offe	red)	AL AN	N/A N/A	88 79	areas needing improvement:
believe and	Campus/	Total # Sections	# Sections	# Students	MA ME	N/A N/A	71 NA	Due to the lack of collected
how to act.	Modality	Offered	Assessed	Assessed	LO	data, no specific areas of concern regarding students		
Operationalized	AL AN	2 8	<u>2</u> 8	N/A 21	WO ELI	N/A N/A	64 NA	were identified.
as:	MA	5	5	N/A	DE*	N/A N/A	92 75	Current actions to
Demonstrate	ME LO	N/A 4	N/A 4	N/A N/A	Total	N/A	/5	improve CLO based on
critical thinking by applying	WO ELI	1 0	1 0	16 N/A	Results by SLO Criter	ia: No data for in	dividual criteria	the results: New SLO lead selected beginning Spring
appropriate	DE*	2	2	N/A	Current results impro	ved:		2019 to coordinate SLO
data structures and Abstract	*Dual-enrol	22 Iment	22	37	[]Yes[x]No[]Parti	ally N/A		evaluations and methodology.
Data Types (ADTs).	Buai omoi	mone			Strengths by Criterior	/ Question/Topi	c: N/A	Next assessment of this
[X]CT					Weaknesses by Criter	ion/ Question/To	opic: N/A	CLO: Fall 2019

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Cybersecurity, A.A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

A.A.S. in Cybersecurity Program Purpose Statement: This curriculum is designed for those who seek employment in the field of Cybersecurity (information assurance), for those who are presently in IT or a security field and who desire to increase their knowledge and update their skills, and for those who must augment their abilities in other fields with knowledge and skills in information security. The curriculum is mapped to the NSA/DHS Knowledge Units necessary for NOVA's designation as a Center of Academic Excellence.

of Academic Exceller	nce.				
Core Learning	Evaluation Methods	Assessment Results	Use of Results		
Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Describe current threats and explain how to continuously monitor the threats that may be present in the cyber realm (1, 2, 5, 6) CT [X]	Internet/Intranet Firewalls and E-Commerce ITN 263 Cybersecurity faculty coordinated on questions to ask ITN 263 students. These questions not only needed to be consistent with NOVA SLO objectives, but also with NSA CAE2Y designation outcome expectations to describe the differences between symmetric and asymmetric algorithms. Four multiple choice questions were provided. Faculty at all 5 campuses provided these questions at the time the final exam was given. Topics included: # TOPICS FOR QUESTIONS 1 Firewall rule sets 2 Firewall/network device functionality 5 Firewall functionality 6 Threats Questions and answers are attached in file SLO Questions and Answers.docx	Data collected: Fall 2017 Target: Students should answer questions with a 70% accuracy rate. This is consistent with CompTIA exam standards. Data collection: There were 6 sections of ITN 263 offered, including 2 ELI sections via Woodbridge. Of these, 3 sections provided results. Results were received from Alexandria (1 section), Loudoun (1 section), Annandale (0 sections), Manassas (0 sections), and Woodbridge campuses (1 section). ELI courses did not report, it is unknown if they received copies. Manassas did not report as its single section ended before the questions were distributed. Dual enrollment sections were not captured in this report. Of these 3 reporting sections, one section was not submitted in a format conducive to analysis. The remaining two sections, with a total of 40 students were assessed (23 in one class and 17 in another). Results by CLO Criteria: ### TOPICS FOR % CORRECT QUESTIONS 1 Firewall rule sets 27.5 (11/40 students) 2 Firewall/network 62.5 (25/40 students) device functionality 67.5 (27/40 students) 6 Threats 82.5 (33/40 students) Students demonstrated an accuracy rate of .6625 with all of the answers. Firewall functionality questions were answered with more inaccuracies than security basic questions, as the latter topics are covered in multiple courses. This is the first time this topic has been assessed	The results of this assessment revealed significant issues with students being able to configure a firewall. As this was not flagged as a previous issue, no previous remediation was implemented to improve the SLO. This is a topic that is difficult for experienced network administrators to understand. Areas to be improved: Firewall configuration instruction. Actions for improvement: 1. An assessment tool is in development and will be implemented in Fall 2019 which will allow this SLO to be assessed on a semester-by-semester basis in greater detail. 2. Other resources are being sought and may need to be developed in-house. When will the improvements take place: Spring 2018 - The SLO will be reassessed after the development of an automated tool that will enable all of the program outcomes to be		
		in this course and in this program, so no previous data is available to trend performance.	assessed on a semester-by- semester basis. This is estimated to take effect in Fall 2019.		

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Dental Assisting Program, Certificate

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The Dental Assisting Program prepares students to perform chairside assisting skills, dental laboratory and dental practice management procedures, and exposing radiographs. The program prepares students to perform advanced functions as delegated by the Virginia Board of Dentistry.

Core Learning Outcome Evaluation Methods Assessment Results Use of Results Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. 1. Patient protection Semester/year data collected: Fall 2017 Previous action(s) to improve CLO if applie Review test questions provide rationale. Results by Campus/ believe and how to act. # of Total Sections Sections Assessed Assessed # of Students Sections Assessed Assessed Average Score Students Sections Assessed Assessed Target Met: [X] Yes [] No [] Par	
Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Question Topics: 1. Patient protection	
demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. 1. Patient protection 2. Radiographer protection 2. Radiographer protection 4. Patient protection 2. Radiographer protection 4. Patient protection 5. Review test questions provide rationale. 7. Review test questions provide rationale. 8. Review test questions provide rationale. 9. Average Score Students ≥ [Target] ME 85 100 ≥ 75 89 100 ≥ 75 Based on recent results ME ME ME ME ME ME ME M	
ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. 2. Radiographer protection 3. Results by Campus/ Average Modality 4. Verage Score 5. Students ≥ [Target] 6. ME 8. Socre 8. Socre 1. ME 8. Socre 8. Socre 8. Socre 1. ME 8. Socre 8. Socre 8. Socre 1. ME 8. Socre 8. Socre 8. Socre 8. Socre 9. Students ≥ [Target] 1. ME 8. Socre 8. Socre 8. Socre 8. Socre 9. Socre 1. ME 8. Socre 8. Socre 8. Socre 8. Socre 9. Socre 1. ME 8. Socre 8. Socre 8. Socre 8. Socre 9. Socre 1. ME 8. Socre 8. Socre 9. Socre 1. ME 8. Socre 8. Socre 9. Socre 1. ME 8. Socre 9. Socre 1. ME 8. Socre 1. ME 8. Socre 1. ME 8. Socre 8. Socre 9. Socre 1. ME 8. Socre 1. Me	
evidence carefully and apply reasoning to decide what to believe and how to act. Evidence carefully and apply reasoning to decide what to believe and how to act. Fall 2017 Fall 2016 Students by Campus/ Modality Fall 2016 Fall 2016 Students by Campus/ Modality Fall 2016 Students by Campus/ Modalit	ns and
and apply reasoning to decide what to believe and how to act. Average Students Sections Modality Mel Results by Campus Average Students Students Mel Results by Campus Average Students Students Mel New York Students Mel New York Students Mel New York Students Mel New York	
to decide what to believe and how to act. Campus/ Formula F	
believe and how to act. Campus/ Total Sections Sections Sections Accessed ME 85 100 \(\) 75 89 100 \(\) 75 Based on recent results.) ortically
act. Modality Sections Sections Students ME 85 100 ≥ 75 89 100 ≥ 75 Based on recent results Sections Sections Sections Sections Sections Sections Students ME 85 100 ≥ 75 89 100 ≥ 75 Based on recent results Sections	rartially
	eulte
Offered Assessed Assessed Total 85 89 areas needing	ourto,
Operationalized as: ME only 1 1 13 improvement: Even the	n though
Understand and ELI N/A N/A N/A Results by CLO Criteria: the average score was	
demonstrate DE* N/A N/A N/A Results by Fall 2017 Fall 2016 above the target of 75°	
knowledge of Total 1 1 13 CLO Criteria/ Average % of Average % of Average % of Institute a state of the state	
radiation safety *Dual-enrollment Cheffer Average Students Students important for patient are	
measures in order to Topics > [Target] radiographer protection	
produce diagnostic 1 89 100 ≥ 75 88 100 ≥ 75 material will be reviewed and in a specific lead to specific l	
radiographic surveys. $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
CT [X] Student performance of these exam questions	
Current results improved:	
[X] Yes [] No [] Partially in the Fall of 2018.	
[X] Test [Not] randary	
Strengths by Criterion/ Question/Topic: Knowledge is critical Current actions to im	improve
for application in the clinical setting.	
Continue to review and	
Weaknesses by Criterion/ Question/Topic: Student demonstrate radiation	,
performance in this area increased from the previous year but measures in the lecture	ture and
there is room for improvement in the content of patient and laboratory session.	
radiographer protection, and radiation safety issues. Lecture	of this
inaterial and laboratory salety measures will be evaluated in the	,, (1113
Fall of 2018. The SLO will be asses	essed by
the Program Director ii	
Spring of 2019.	

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Diagnostic Medical Sonography, A.A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellent, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: Students in the Diagnostic Medical Sonography degree program learn to perform ultrasound of the Abdomen and Small Parts as well as Obstetric and Gynecologic sonography. Upon successful completion of the degree requirements, the student will be eligible to apply to take the American Registry for Diagnostic Medical

		ation(s) leading			red Diagnostic Medical Sonographer (RDMS®).								
Core Learning		Evaluation	Methods			Assess	sment Re	sults		Use of Results			
Outcome													
Critical thinking		onography D		. 5.	Semester/ye					Purpose of Evaluation: To assess student ability to			
Students will		ıre: Week 9 D			_	III Score	: 15/20 in	each rei	evant	complete an ultrasound examination technical report			
demonstrate		Abdominal Ca			criteria					incorporating all relevant patient history and			
the ability to		uring your clini		e sure to	 Percent of 	Students	s Meeting	Target S	core =	ultrasound findings to provide accurate diagnostic			
evaluate		uired element			84.6			_		information.			
evidence		Description:		 Percent of 					Previous Action(s) to Improve SLO: This SLO was				
		quired Elemer			 Average S 					evaluated in 2016-17. During the Spring 2018			
apply . ,		n about patient			Written Org	ganizatio	n and 16.	5/20 in Po	eer	semester, the DMS 212 instructor included a more			
reasoning to		esentation sign			Replies					complete explanation of both high quality and poor			
decide what to		nic description			 Range of S 					quality technical reports in advance of the			
		nation of actua	ıı ulagnosis, ti	Results by S					assignment in order to improve student attention to				
how to act.	prognosis	possible differe	ntiala for noo	r raplica	Results by	Sprir	ng 2018	Sprin	g 2017	detail and use of sonographic descriptions. Target Met:			
Operationalized	Relevant Rul		illiais ioi pee	replies	SLO Criteria/	Average	% of	Averes	% of	[] Yes [] No [X] Partially			
as:	1. Written Org				Question	Average Score	Students	Score	% of Students	Based on Recent Results, Areas Needing			
Integrate		ganization al – Writing is c	raanizad with	a logical	Topics	000.0	<u>></u> 15/20	00010	<u>></u> 15/20	Improvement:			
patient history,		that is easy to			1. Written	40.5	00.0	40.0	400	Because 3 of the students in the 2018 class either did			
current medical		e of comprehe		Organization	18.5	92.3	19.6	100	not complete or partially completed the peer reply				
condition, and		e – Writing is p		a hasic level	2. Peer	16.5	84.6	20	100	portion of the assignment, their critical thinking was			
sonographic		ation that is abl			Replies					limited for this evaluation. Thought their initial posts			
findings to		in a manner th			Total	17.5		19.8	100	were well constructed and proved competence in			
provide	compreher		iat ronocto a r	34010 10 101 01	Current resu					integrating patient data for presentation purposes, the			
accurate		table – Writing	lacks proper	organization	[] Yes [X] N			. .	TI 0040	analysis that was required in analyzing peer			
diagnostic		cult to follow. T			Strengths by			•		scenarios that students did not have the full			
information.		emonstrate co			class overall					background information for was a crucial part of the			
	2. Peer Repli		•	(-)	category. This means students had original topic posts that were well organized and that met					critical thinking element of this assignment. Solutions			
[X]CT		al – All peer rej	olies add insig	ht. (20)						need to be sought so students are unable to simply			
-		e – Some but n			information cr					not complete the assignment fully.			
	add insight		•	•	history and pr			as sono	grapnic	Action Taken by DMS Faculty:			
		es do not add ii	nsight. (0)		descriptions of Weaknesses			tion Ton	ic: The	For the next administration of this course in Spring			
		(Specify N/A v		red):	2018 class di					2020, the DMS 211 faculty will be encouraged to			
	Campus/	# of Total	# of	# Students	students did r					develop examples of discussion replies and peer			
	Modality	Sections	Sections							replies that provide sufficient analysis and detail to			
	_	Offered	Assessed		submitted one peer reply rather than two. Thus, these students missed out on the opportunity to					satisfy the rubric requirements. These examples will			
	ME only ELI	1 N/A	1 N/A		apply their kn					be posted in the online Canvas course and will be			
	DE*	N/A N/A	N/A N/A		pathology to					Next Assessment of this SLO:			
	Total	1	N/A		diagnoses.		- 2000,010						
	. 5.0.									This SLO will be evaluated again in 2018-19.			

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **Drivers Education Career Studies Certificate**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The Driver Education Career Studies Certificate program is designed for students who wish to become licensed teachers of driver

education or maintain qualifications in the state of Virginia.

education or mainta	ain qualificatior	ns in the stat	te of Virginia	١.					
Core Learning Outcome		Evaluation	n Methods			Asse	essment Res	ults	Use of Results
Critical thinking	Instructional	Principles	of Drivers	Education	Sen	nester/year data col	llected:		Previous action(s) to improve
Students will	EDU 214	-				 Summer 2017; 	CLO if applicable: We have		
demonstrate the					Res	ults by In-Class, El	never assessed this before.		
ability to evaluate	Direct Measu	ct Measure: All students will design a proper							
evidence	behind the wheel driving route.					Results by	Target Met:		
carefully and	ŭ					Campus/		its who passed with	[X]Yes[]No[]Partially
apply reasoning	1. Diagrar	ıram				Modality		% or above)	
to decide what to		/area you are				·	Average Score	Percent ≥ Target	Based on recent results, areas
believe and how	, ,	/ Step Direction				AL .	100	100	needing improvement: It does
to act.	Level of Risk Addressed					ИА	100/100/100	100/100/100	not appear that there is any
	5. Approp				<u> </u>	ults by CLO Criteria			need to improve upon this
Operationalized as:	6. Skills being taught					Results by CLO		ssessment Results	assignment.
Students will be able to design a	Sample (Spe	cify N/A whe	ere not offer #	ed) #		Criteria/ Question Topics	Average Score	% of Students <u>></u> Target	Current actions to improve CLO based on the results:
proper behind	Campus/	Sections	Sections	Students		1	100%	100%	None
the wheel driving	Modality	Offered	Assessed	Assessed		2	100%	100%	
route.	A.I.		4	10		3	100%	100%	Next assessment of this CLO:
	AL MA	<u>1</u> 3	3	10 32		4	100%	10%	Fall 2018
[X]CT	ELI	N/A	N/A	N/A		5	100%	100%	
	DE*	N/A	N/A	N/A		6	100%	100%	
	Total	4	4	42		Total	100%	100%	
	*Dual-enrollme	nt				rent results improv		100 /0	
						Yes[]No[]Partia			
					[,]	i es [] No [] i ai lia	ally		
					Stre	enaths by Criterion/	Question/To	pic: This assignment	
								have completed and	
						mandatory part of be			
						ructor. The instructor			
						ws the students the			
					Wea	aknesses by Criteri			
								e students in reference	
								an to work. It may be	
								his case if the person	
					doe	s not know where the	ey plan to worl	k or they are unsure of	
					the	area and roads.			

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 *Early Childhood Development, A.A.S.*

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed for persons who seek employment involving the care and education of young children, or for those persons presently employed in these situations who wish to update and enhance their competencies. Occupational opportunities include, program leaders, supervisors, and/or

directors in child development programs.

directors in child deve	lopment progra	ms.							
Core Learning Outcome		Evaluation	n Methods			Asses	sment Resu	ilts	Use of Results
Critical thinking Students will	Advanced O				Se	mester/year data	collected: S	Previous action(s) to improve CLO if applicable: N/A	
demonstrate the	Larry Official	ood/i iiiiidi	y octanigs c	710 200	Та	rget: 80% of studer	nts will score	ii applicable. 14/7 (
ability to evaluate	Direct Measu					erall on each criterio		Target Met:	
evidence carefully	Students prov			lection on the		aulta huda Class	ELL Dual E	I	[] Yes [] No [] Partially
and apply reasoning to decide what to	Program Cap	sione Projec	i.		Re	sults by In-Class, Results by		ng 2018	Based on recent results, areas
believe and how to	Provided Ru	bric Criteria	or Questio	n Topics:		Campus/	Average	Percent >	needing improvement: Self-
act.	Directions for assignment and grading rubric are					Modality AL	Score 78	Target (2)	reflection on how to improve seemed
Operationalized as:	attached.					MA	67	(13)	to be a hard concept for some. Unclear if it was the identification of
Students provide	Other Metho	d (if used):	Qualitative d	lata and		LO	86	6	challenges or the inability to be self-
self-analysis and	assessment of	collected as	part of the ru	ıbric	Ba	sults by CLO Crite	oria:		critical to obtain positive results.
reflection on the	summary data		by instructo	rs. Used in	Ke	,	Spri	Some concern that basic expressive	
Program Capstone Project.	analysis/com	nents.				Results by CLO Criteria/	1	% of	writing skills may be cause of some inability to capture critical thinking.
	Sample (Spe	cify N/A whe	ere not offere	ed)		Question Topics	Average Score	Students >	masinty to suprairs sinded amining.
[X]CT	Campus/ Total # # #				1	80%	Target 66%	Current actions to improve CLO	
	Modality	Sections Offered	Sections Assessed	Students Assessed		2.	74%	61%	based on the results: Faculty has decided to retain this assignment
	-					3.	60%	50%	across the campuses and review
	AL MA	2	2	30 13		4.	79%	58%	data to see if improvements can be
	LO	1	1	9	Cu	rrent results impr	oved: NA	made.	
	ELI	N/A	N/A	N/A	[]	Yes [] No [] Parti	ially		Next assessment of this CLO: We
	DE Total	N/A 4	N/A 4	N/A 52	St	rengths by Criterio	on/ Question	/Tonic: Students	will collect data from this course and
	*Dual-enrollme	•	7	JZ		re able to identify w			assignment as part of the
					us	ually equated succe	essful with pe	ersonal growth.	Accreditation requirements but plan on assessing other CLO
					10/4	eaknesses by Crite	orion/ Ouosi	ion/Tonic: By	requirements in the near future.
						ore and by instructo			
					str	uggled to analyze th	heir own cha	llenges with the	
						ject and comment			
						e project, which also at was needed to ir			
						tical introspection w			

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 *Fine Arts, A.A./A.A.*

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: (A.A.): The Associate of Arts degree with a major in Fine Arts is designed for students who plan to transfer to a four-year program in a professional school or to a college or university baccalaureate degree program in Fine Arts.

Program Purpose Statement: (A.A.A.): The Associate of Applied Arts degree with a major in Fine Arts is designed for students who seek direct employment in the applied arts field.

Core Learning Outcome		Evaluation	n Methods		Assessme	ent Results	Use of Results			
Critical thinking	Art Apprecia	tion ART	100		Semester/year data	collected: Spring 2018	There was no previous assessment of a Critical			
Students will	Direct Measi			en a formal		score of 3.0 or above	Thinking Core Learning Outcome and no previous			
demonstrate the	writing assigr	nment (topi	ics could var	y as long as	for at least 70% of stu	idents assessed.	actions for improvements to report. This is the first			
ability to evaluate	they were sel	lected from	1 ART 100 co	ourse content	These scores were al	so broken down into	time this VCCS core competency has been assessed.			
evidence carefully	area) and tas	ked with p	roducing a w	ell-organized	category sub-scores v	with a target score of 3.				
and apply	piece of form	al art critici	ism.				Target scores and averages were met during this			
reasoning to decide					This was the first time	ART 100 has been	initial assessment, but areas of improvement were			
what to believe and	Each student				assessed and the first	t assessment of a	identified by the art history discipline group.			
how to act.	outlining the				VCCS core competen	icy. As a result, no				
	describe the				comparison between		3. Analysis and evaluation are critical thinking skills			
Operationalized as:	selected artw				assessment is availab		that are essential to all students – not just art history			
Students were	to analyze ho				Results by CLO Crite		students. ART 100 is a popular General Education			
given a formal	through forma				Criteria/ Question	Average	course, and the art history discipline group needs to			
writing assignment	within its own				Topics	Score	make certain that critical thinking (as well as other			
(topics could vary	outlined the s				1. Organization	3.52	core competences) is an eccential compensation			
as long as they	of 5 subcategories: organization, identification, description, analysis and evaluation.				2. Identification	3.69 3.59				
were selected from					3. Description	3.25	4			
ART 100 course	The range for each sub-category score:				Analysis Evaluation	3.25	1: 7 to each, are art motory alcolphine group will review			
content area) and		ellent – 5			Total	3.46	and revise the Arti 100 course content outlinary			
tasked with		od – 4			All targets were met o		(CCS) to ensure core competencies are addressed.			
producing a well-		eptable – 3	3		average total score w		The art history discipline group will then work with our			
organized piece of		ak – 2			students assessed re		Academic Dean for Liberal Arts to ensure that a			
formal art criticism	Instructors so				3 or better.	ceived a total score of	course taught at one campus meets the same			
L V I CT	submission a				Current results: are	inconclusive	standards as one taught at another.			
[x]CT	scores to obta	ain class s	cores on the	class tally	Strengths by Criterio		5. There are inconsistent standards across the			
	sheet.				Student scores were		college and this impacts student learning. The art			
	The assessm			and tally	Identification with an a		history discipline review of the CCS will take place in			
	sheet examp				points above the targe		Fall 2018 with submission of revisions by Spring			
	Sample Size				points above the targe	stavorago or o.	2018. All campuses, sections and instructors will need			
	Campus/	Total #	# Sections	# Students	Weaknesses by Crite	erion/	to comply with the new CCS course outcomes/VCCS			
	Modality	Sections Offered	Assessed	Assessed	Question/Topic: Stud		core competencies and revised standards by Summer			
	On	27	22	549	weakest in Analysis a		2018.			
	Campus			0,70	average score of 3.25		2010.			
	ELI	N/A	N/A	N/A	This score still reflects		Next assessment: Spring 2018			
	DE*	N/A	N/A	N/A		ove the target average	Tions deceasing in a printing 20 to			
	Total	27	22	549	of 3.	5 0				

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Fine Arts: A A A Photography Specialization

Fine Arts: A.A.A., Photography Specialization

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Fine Arts, A.A.A. – Photography Specialization Program Purpose Statement: The Photography specialization is designed for students who seek employment in the applied arts field. Course work will stress both technical and aesthetic elements, enabling students to solve a wide range of visual problems with imagination and originality

	ourse work w	ill stress bo	th technica	l and aesthe	etic ele	ments, enabling students to solve	a wide range o	f visual problems v	vith imagination and originality				
Core Learning Outcomes		Evaluat	tion Metho	ods		Assessm	Assessment Results						
Students will demonstrate the ability to evaluate	Recogn	sure Writing	Artist Stat ne report) ins the rele t (i.e., cultu	tement (Rub evance ıral/social,		Semester/year data collected: students were assessed. This in section. Total sample was 23 str Target: 70 percent of students we each criterion and 15 points or be Results by degrees	member in 1 3 students). ts or better on	This was the first assessment of this CLO. The areas that need improvement are Recognizes context (i.e.,					
reasoning to	persona 3. Commu (perspe	al experienc nicates per ctive)	e) sonal point	s of view		Results by CLO Criteria	Average Score	7 To points	cultural/social, scientific, technological, political, ethical, personal experience),				
	styles, t	echnical, ar	nd aestheti	ons (i.e., visu c)	ual	Identifies and explains the relevance	AAS = 3.6 points AAA = 4 points	AAA=100%	4. Analyses and Justifies decisions (i.e., visual styles, technical, and aesthetic), and				
	Campus/ # of Total # of # Students cultural/social technological technological cultural/social technological statements with the continuous cultural social technological	2. Recognizes context (i.e., cultural/social, scientific, technological, political, ethical, personal experience)	AAS = 2.9 points AAA = 3.3 points	AAS=66% AAA=66%	5. Uses College-level writing are below target.								
given a formal writing assignment (topics could vary	Modality AL only	Offered 1	Assessed 1	AAA AAS AAA+	3 18 3	3. Communicates personal points of view (perspective)	AAS = 3.3 points AAA = 3.6 points		Current action(s) to improve SLO, based on results: For 2 starting Fall 2018 faculty				
as long as they were selected from ART 100 course content	ELI	N/A	N/A	AAS Non-major Total N/A	5 23 N/	4. Analyses and Justifies decisions (i.e., visual styles, technical, and aesthetic) 5. Uses College-level writing	AAS = 3.4	AAS=77% AAA=100% AAS=61%	will emphasis these aspects of writing an artist's statement in class and provide students with web sites and examples				
area) and tasked with producing an Artist Statement.	DE*	N/A	N/A	N/A	A N/ A		points AAA = 3.6 points	AAA=100%	of well written artist's' statements in Blackboard. For 5 starting Fall 2018 faculty				
[x]CT	Total	1	1	Total	23	Total	AAS = 16.2 points AAA = 18.6 points	AAS=72% AAA=100%	will encourage students to get help from the Writing Center. Next assessment of this				
						Results: The following criteria a 1. Identifies and explains the rel 3. Communicates personal point	evance and		CLO: Spring 2021				
						target. The following criteria are below to a context (i.e., cultustechnological, political, ethical, p. 4. Analyses and Justifies decision and aesthetic), and	ural/social, scier ersonal experie	nce),					

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 General Studies A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: This program is a flexible associate degree. For students who plan to transfer, the degree can parallel the first two years of a four-year bachelor of science program to suit their needs using accumulated credits from a variety of formal and experiential sources.

them to structure a pi	rogram to suit	their needs u	using accum	ulated credit	s from a varie	ety of forr	nal and	experier		-				
Core Learning Outcome		Evaluation			Assessment Results						Use of Results			
Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide	Direct Meas	source Quiz i	ts were quiz s embedded	zed on 5	Semester/year data collected: Spring 2018 Target: 80% of students will answer correctly on the 5 critical thinking questions included on the College Resource and Critical Thinking Quiz. Results:							Previous action(s) to improve CLO: The SDV Curriculum Committee has a yearly mandatory SDV In-Service where we have instructors present on best practices on student engagement and learning (May 2016, May 2017,		
what to believe and how to act.	• Q9: Thi	nking creativ			Campus/ Modality	Q9	Q10	Q15	Q17	Q18	Total	June 2018).		
Operationalized as:		ritical thinking		ool versus	AL AN	97% 95%	93% 88%	31% 24%	11% 11%	83% 80%	63% 60%	The Committee has also considered using a different		
		arrowing the	problem		MA	98%	94%	28%	3%	86%	62%	textbook but our primary goal has		
Identify three to five		ritical thinking			ME	98%	92%	16%	78%	80%	73%	been to keep the textbook		
aspects of critical thinking such as:					LO	99%	93%	23%	13%	84%	62%	affordable by using OER (Open Education Resources). We have		
identifying faulty	Sample:	# -£ T - 4 - 1	ш	щ	WO	100%	96%	100%	100%	100%	99%	considered that since the textbook		
logic, problem-	Campus/	# of Total Sections	# Sections	# Students	Online	96%	68%	13%	76%	90%	69%	is only available online that it		
solving, and asking	Modality	Offered		Assessed	DE	100%	95%	24%	86%	100%	81%	discourages students from reading		
questions/	AL	21	13		Total	000/	000/	000/	470/	000/	740/	it. The committee reviewed		
probing etc.	AN	36	32		Average	Average 98% 90% 32% 47% 88% 71%						textbooks in 2017-2018 and we voted against the different options		
	MA (+1	15	9	161	_							because they could not remain free.		
[x]CT	SDV 101) ME SDV	11	5	49	Current res	sults im	oroved:	N/A - Fi	irst time	e we as	sessed	At this time we have not found a		
	101	11	3	49	this topic.							better free textbook that covers the		
	LO	18	13	250	Strengths	bv Crite	rion/ Qu	estion/	Topic:	Questic	ns 9.	topic we review in this class.		
	WO	22	5		10, and 18							Most of the assignments required		
	Online	24	17	246	could be as							self- assessment and reflection and		
	DE*	10	1	21	singling out							students feel more comfortable with		
	Total	157	95	1744	choice). Th without revi							those assignments than		
	*Dual-enroll	ment			without revi	ewing in	e textbo	ok triey	can be	answei	eu.	assessments and quizzes that		
		vement on d d insistence			Weaknesses by Criterion/ Question/Topic: Questions 15 and 17 had the lowest scores. Question 15 is a question that requires the student to pick several right answers and there is more room for error. Question 17 had the highest wrong answers because it is not worded difference the standard from the residence of the control of the cont									
		Developme								differed on when/where they				

General Studies A.S.

motorial and requires a hit mare aritical thinking to facure	guiz/accament and not attack a
out the best answer.	quiz/assessment and not attached to a college resource quiz but it was its own separate quiz. This allows discussion that putting a critical thinking reading assignment/assessment as its category later on in the class may improve the results. Target Met: [] Yes [] No [x] Partially
	Based on recent results, areas needing improvement: The Critical Thinking CLO is currently located along with College Resources and Communication Skills. Comparing with Online on where they put their assessment, students may do best if Critical Thinking has its own category after Academic and Test-Taking skills.
	Current actions to improve CLO based on the results: Unfortunately Fall 2018 assessment is well underway and too late to make any improvements or changes. Critical Thinking is not going to be assessed for Spring 2019. Comparing Spring 2018 to Fall 2018 would allow for more results to see if there is improvement or if the data stays the same.
	Next assessment of CT: Spring 2020

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Health Information Management, A.A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed to prepare students to work as Health Information Management (HIM) professionals. These individuals play a critical role in maintaining, collecting, and analyzing the data that doctors, nurses, and other healthcare providers rely upon to deliver quality health care. The program emphasizes professionalism and instructional methods in a state-of-the-art computerized laboratory at the Medical Education Campus in Springfield, followed by clinical experience at various affiliated health care organizations. After successful completion of degree requirements, the student will be eligible to take the Registered Health Information Technician (RHIT) examination. This leads to an American Health Information Management Association (AHIMA) certification of a Registered Health Information Technician (RHIT) credential.

Core Learning Outcome	Evaluation Methods	Assessment Results	Use of Results
	Legal Aspects of Health Record Documentation HIM 226 Direct measure: Ensuring students understand how to apply policies and procedures in granted authority to release protected health information. Students will use scenarios to determine if the situation is identity theft, medical identity theft, or neither. Grading Rubric - Scenario questions: 4 questions x 6.25 points = 25 points Sample Size (Write N/A where not offered): Campus/ # of Total # of # Students Assessed Online 1 1 9 DE* N/A N/A N/A N/A Total 1 1 1 1 *Dual-enrollment	Semester/year data collected: Spring 2018 Target: 80% of students will score 75% or better on this assessment. Results by In-Class, Online, Dual Enrollment: Results by Spring 2018 Average Percent ≥ Target Online 19.79 79.17% Results by CLO Criteria: Criteria/ Spring 2018 Question Average Score 7arget 1. 6.25 100 2. 5.56 89 3. 3.47 56 4. 5.22 78 Total 19.79 79.19 Current results improved if applicable: N/A: First assessment Strengths by Criteria/ Question Topic: Students demonstrated an understanding of how to apply policies and procedures for protected health information as it relates to release. Weaknesses by Criteria/ Question Topic: Based on the case scenarios, the results	Previous action(s) to improve CLO if applicable: This CLO was not previously assessed. Target Met: [X] Yes [] No [] Partially Based on recent results, areas needing improvement: The HIM program has added more assignments that focus on access and disclosure of protected health information as outlined in the AHIMA competencies and standards, to be implemented by the HIM faculty member and Program Director in Spring 2019. Current action(s) to improve CLO, based on results: As the students met the overall target, specific areas of protected health information focused on re-disclosure still needs to be reviewed. This will be reviewed in Spring 2019 by the HIM faculty member and Program Director. Next assessment: Spring 2019
		indicated that improvement is needed in identification of medical identity theft.	

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Horticulture Technology, A.A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed to prepare the students for full-time employment within the field of commercial horticulture as well as those presently employed who seek further knowledge and advancement. Graduates of the program are prepared for managerial/supervisory level positions in areas which include: landscape design and installation, grounds maintenance, floristry, greenhouse and nursery management, garden center operation, and sales and marketing in related industries.

related industries.	gri and motaliation, grounds maintenance, ne
Core Learning Outcome	Evaluation Methods
Critical thinking	History of Garden Design HRT 120
Students will	Direct Measure: Gardens and culture
demonstrate the	research paper. This project was assigned
ability to evaluate	as a semester long research paper
evidence carefully	allowing students to critically think about
and apply reasoning	the course material and have an
to decide what to	opportunity to research and explore in
believe and how to	depth a garden history topic related to a
act.	specific culture and period in history.
	Students were able to select any site and
Operationalized as:	research and discuss it in the context of
Gardens and culture	its gardens, landscape and the social and
research paper. This	cultural context in which it was built.
project was assigned	<u> </u>
as a semester long	This semester-long research project
research paper	allowed students to critically think about
allowing students to	the course material and have an
critically think about	opportunity to research and explore in
the course material	depth with a garden history topic related
and have an	to a specific culture and period in history.
opportunity to	It was graded to a rubric for a total of 50
research and explore	points.

Provided Rubric Criteria or Question Topics: Research Paper Rubric is included.

Sample Size

in depth a garden

period in history.

[x]CT

history topic related to

a specific culture and

Campus/ Modality	# of Total Sections Offered	# Students Assessed	# Sections Assessed		
LO only	1	21	1		
ELI	N/A	N/A	N/A		
DE*	N/A	N/A	N/A		
Total	1	21	1		
*Dual-enrollment					

Semester/year data collected: Spring 2018

Target: A target success rate was the 75% of the class achieving a 90% or better on the research paper. **Results by CLO Criteria:** Grades (# of students):

	90-100+%	80-89%	70-79%	60-69%	0-59%
2018	18	3	0	0	0

Assessment Results

Sub-scores: The percentage of students who received reduced points based on the rubric, received point reductions by percentage in the following categories:

- Spelling and grammar: 33.3%Research and references: 0%
- Structure and quality of content: 28.6%
- Also: No points reduced: 38.1%

All of the students completed the project; 85.7%% achieved the target score or better.

14.3% of the students that took the exam did not meet the target.

Spelling and grammar was the largest source of point reduction in the research paper. The research and references requirement were the lowest source of point reduction. Use of references and citation are an important part of critical thinking, and these sub scores indicate an aptitude in this CLO. The structure and quality of content resulted in the largest source of point reductions due to a critical thinking related subcategory. This would be an appropriate area to focus on to improve students critical thinking CLO. Finally, the 38.1% of students who had no reduced points also indicate aptitude in the critical thinking CLO.

Current results improved: N/A- new assignment with no comparable direct measure.

Strengths by Criterion/ Question/Topic: Use of research, citation, and proper use of references.

Weaknesses by Criterion/ Question/Topic: Structure and quality of content remain the weakest area relevant to this CLO.

Previous action(s) to improve CLO if applicable: This is the first time that this specific class and assignment was used to assess this CLO. There is not a comparable previous measure.

Use of Results

Target Met: [X]Yes[]No[]Partially

Based on recent results, areas needing improvement: The subscores indicate that the best area to improve the critical thinking CLO for this assessment would be to emphasize quality of content and using structure for the representation of ideas in a research paper form.

Current actions to improve CLO based on the results: The rubric will be revised with more details elaborating on the quality of content and structural requirements of the paper to better articulate the CLO critical thinking aspects of this assignment. To be implemented Spring 2019.

Next assessment of this CLO: This course is offered every semester and this assignment will be given each time the course is offered. The results can be saved from each class and assessed on a 2-year cycle, but which includes every semester's course results. A 2- year cycle would place the assignment as a CLO assessment for 2020-21. The course is taught by and will be assessed by the program head.

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **Hospitality Management, A.A.S.**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

HRI Program Purpose Statement: The curriculum is designed to enable the student to enter management and management training positions in the hospitality industry and for those presently employed who desire updating in the field.

Core Learning Outcome	Evaluation Methods	Assessment Results	Use of Results
Core Learning	Evaluation Methods Principles and Applications of Catering HRI 256 Direct Measure: Students will be observed planning, organizing, leading and controlling a catered lunch function. Each student assumed the role of a manager, which included adequate planning, organizing, leading and controlling the preparation, execution and post evaluation of a catered lunch for 36-75 guests on campus. A written project checklist will be tallied as functions are completed. Sample: HRI 256 had 1 faculty, 21 students. Only taught on the Annandale campus.	Assessment Results Semester/year data collected: Spring 2018	Faculty wanted to see if our graduates were prepared with the skills for success in the workplace. We assessed an upper level capstone course, HRI 256 Principles and Applications of Catering, which is the last course students take prior to graduation. Faculty worked directly with students to apply all the functions of management in the execution of an actual catered lunch. The assessment was more than theory – students assumed a management role. Faculty felt this was a more accurate way to evaluate the learning outcome. Previously, students simply answered test questions and listed the 4 functions of management. Evaluating performance is far more difficult, but a Rubric was used. See Attachment A. Results will be used to improve this assessment method by designing a well-defined grading rubric and dividing the management tasks into the four function areas. This should direct the students to specific management actions needed for success.
		1. Students scored an average of 21.04 points out of 25 on their leadership skill and performance. The range of scores was 17-24. 28% of the class scored below the achievement target. 2. However, for final grades, only one student performed below average. 3. This is the second time the HRI 256 catering class was used as the platform for this SLO assessment. Previously students' management skills had a greater success rate which would have been 84% compared to our current success rate of 73%. This discrepancy may be due to a	Results also indicated that we need to look at the 27% who fell short of the goal. Faculty will brainstorm on how we can better prepare students for management roles over the course of the upcoming spring 2019 semester. Faculty will screen ALL enrolled students to ensure they have the pre-requisites for this course. Students taking the course, without completing all other HRI requirements, most likely are lacking the skilled management skills they need to succeed in this class. Changes to be implemented in Spring 2019. Student screening will be implemented in Spring 2019. We will monitor students who do not have all the pre-requisites.

Hospitality Management, A.A.S.

new instructor teaching a course, when a different perspective on grading is used. Current data was from a small sample size of 21 students. We need to apply the new matrix using
another HRI 256 catering class when the SLO is
4. HRI 256 is a capstone course that encompasses reassessed in 2019.
Management, from food costing to human resource management to cooking to marketing.
menu planning, etc. Next Assessment: Will reassess in Spring 2019 to compare results using the new rubric.
5. Compared to the previous assessment in 2017, the results of this catering course revealed a lower
level of competency in the actual practice of management functions. There was an 73%
success rate.
Our success rate in DEMONSTRATING management functions fell from the previous
assessment, but a different instructor may be the
reason

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Liberal Arts, A.A.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

r university for a Bachelor of Arts or a Bachelor of Science in

Core Learning Outcome	Evaluation Methods					A	ssessn	ent Re	sults
Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to	Student Development Orientation SDV 100 Direct Measure: Students were quizzed on 5 critical thinking questions embedded in a College Resource Quiz in SDV 100. Question Topics Q9: Thinking creatively			Target: 80 critical thin Resource a	% of stuking quant Crit	udents vestions ical Thi	will answ included nking Qu ine, Du	ver cord on the uiz.	
believe and how		Solving probl	•		Modality	Q9	Q10	Q15	Q17
to act.	• Q15:	Critical thinki	ng in high s	school versus	AL	97%	93%	31%	11%
	colleg	е	0 0		AN	95%	88%	24%	11%
Operationalized	• Q17:					98%	94%	28%	3%
as:	• Q18:	Critical thinki	ng		ME	98%	92%	16%	78%
SDV 100:					LO	99%	93%	23%	139
Identify three to	Sample Size (Specify N/A where not offered)				WO	100%	96%	100%	100%
five aspects of	Camp	# of Total		#	Online	96%	68%	13%	76%
critical thinking such as:	Moda	Sactions	Sections Assessed	Students Assessed	DE	100%	95%	24%	86%
identifying faulty logic, problem-	AL AN	21	13	230	Total Average	98%	90%	32%	47%
solving, and asking questions/	MA (+	15			Current re	sults ir	nprove	d: N/A -	First t
probing etc.	g etc. ME SDV 11 5 49			this topic.					
[.] .	LO	18	13	250	Strengths	by Crit	erion/ (Questio	n/Top
	WO	22			9, 10, and				
	Online	24			they could				
	DE*	10			and singlin				
	Total	157	95	1744	(multiple ch				
	*Dual-enrol	ment			even witho answered.				

Spring 2018

swer correctly on the 5 ed on the College Quiz.

ual Enrollment:

Campus/ Modality	Q9	Q10	Q15	Q17	Q18	Total
AL	97%	93%	31%	11%	83%	63%
AN	95%	88%	24%	11%	80%	60%
MA	98%	94%	28%	3%	86%	62%
ME	98%	92%	16%	78%	80%	73%
LO	99%	93%	23%	13%	84%	62%
WO	100%	96%	100%	100%	100%	99%
Online	96%	68%	13%	76%	90%	69%
DE	100%	95%	24%	86%	100%	81%
Total Average	98%	90%	32%	47%	88%	71%

- First time we assess

on/Topic: Questions es due to the fact that g good test taking skills hat are not the best are broad enough that ook they can be

Weaknesses by Criterion/ Question/Topic:

Questions 15 and 17 had the lowest scores. Question 15 is a question that requires the student to pick several right answers and there is more room for error. Question 17 had the highest wrong answers because it is not worded directly from the text but it's inferred

Previous action(s) to improve CLO:

Use of Results

The SDV Curriculum Committee has a yearly mandatory SDV In-Service where we have instructors present on best practices on student engagement and learning (May 2016, May 2017, June 2018).

The Committee has also considered using a different textbook but our primary goal has been to keep the textbook affordable by using OER (Open Education Resources). We have considered that since the textbook is only available online that it discourages students from reading it. The committee reviewed textbooks in 2017-2018 and we voted against the different options because they could not remain free. At this time we have not found a better free textbook that covers the topic we review in this class.

Most of the assignments required selfassessment and reflection and students feel more comfortable with those assignments than assessments and guizzes that required them to review the textbook available online. NOVA Online, formerly Online, differed on when/where they assessed the critical thinking questions. It was not in the first quiz/assessment and not attached to a college resource quiz but it was its own separate quiz. This allows discussion that putting a critical thinking reading assignment/assessment as its category later on in the class may improve the results.

Liberal Arts, A.A.

	n the reading material and requires a bit more cal thinking to figure out the best answer.	Target Met: [] Yes [] No [x] Partially Based on recent results, areas needing improvement: The Critical Thinking CLO is currently located along with College Resources and
		Communication Skills. Comparing with Online on where they put their assessment, students may do best if Critical Thinking has its own category after Academic and Test-Taking skills.
		Current actions to improve CLO based on the results: Unfortunately, the Fall 2018 assessment is well underway and too late to make any improvements or changes. Critical Thinking is not going to be assessed for Spring 2019. Comparing Spring 2018 to
		Fall 2018 would allow for more results to see if there is improvement or if the data stays the same. Next assessment of CT: Spring 2020

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Medical Laboratory Technology, A.A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed to prepare students to perform essential laboratory testing on blood and body fluids that is critical to the detection, diagnosis, and treatment of disease. In a medical laboratory, the MLT is part of a team of highly skilled pathologists, technologists, and phlebotomists working together to determine the presence, extent or absence of disease, and helping to evaluate effectiveness of treatment. This program emphasizes "hands-on" practice of laboratory methods in a state-of-the-art laboratory at the Medical Education Campus in Springfield, followed by clinical experience at various affiliating health care organizations. Upon completion of the program graduates will be eligible to take the American Society for Clinical Pathology (ASCP) Board of Certification examination, and other national certification examinations offered at the technician level.

and other national certification examinations offered at the technician level.					
Core Learning Outcome	Evaluation Methods	Assessment Results	Use of Results		
Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Cell identification and disease correlations [X]CT Sai Critical thinking Dir ide em pra CL Top Sai Critical thinking Students will ide em pra Scal Critical thinking ide em pra CL Scal Critical thinking ide em pra CL	rect Measure: Questions for cell entification and disease correlations abedded on MDL 225 final lab actical. 20 1 2018 Attachments 1.1 Hematology II Final Lab Practical exam, Spring 2018 Prics: Question #1: Identify abnormal red cell morphology present in blood smear image. Question #4: Recognize presence of hyper-segmented neutrophils in blood smear. Question #6: Recognize immature white blood cells (blasts) on blood smear and their prominent nucleoli. Question #11: Identify abnormal white blood cells (Hairy cells) by comparing blood smears stained with regular stains and special stains. Question #13: Distinguish nuclear fragments from white blood cells on blood smear images. Imple for Core Learning Outcome: itical Thinking Assessment - one urse, one section. All first year MLT udents in MDL 225; N=19.	Target: At least 80% of MLT students will correctly identify normal blood cells and will be able to correlate changes in blood cells associated to diseases. Results: Percentage of students answering correctly in Spring 2018: Question #1: 19/19 (100%) Question #4: 18/19 (95%) Question #6: 16/19 (85%) Question #13: 19/19 (100%) Question #13: 19/19 (100%) Target was met as shown by results obtained from selected questions embedded in final Lab Practical exam that required the use of critical thinking skills to identify correctly cells and correlate findings with disease states. Survey for Clinical Preceptors after Clinical rotation in Hematology, MDL 276 Clinical Hematology Techniques helped to validate the effectiveness of utilization of the multi head teaching microscope as a valuable resource to accomplish program goals in the area of Hematology. A question on clinical training evaluation form asks the affiliate if they feel the students' ability to identify and classify blood cells has improved, remained the same, or has declined when compared to the previous year's students. Out of 16 clinical affiliates, 15 felt students' ability for cell recognition improved.	Correct classification of white blood cells is a microscopy skill that is required to correctly perform the blood smear differential count. MLT students are expected to demonstrate proficiency in correct identification and classification of normal and abnormal white blood cells. Classification of blood cells has been determined as an area of difficulty for our first year students. This area of weakness was noted by clinical preceptors receiving students for hematology sections during 2016 -17 evaluations. Evaluations from clinical training included remarks about the difficulty that some students had to differentiate lymphocytes from monocytes and to distinguish immature blood cells using microscopy. Different efforts were introduced since Fall 2017, like more hands-on laboratory sessions dedicated to evaluating blood smear were incorporated into the curriculum with the objective to improve blood cells recognition. The acquisition of a multi head teaching microscope in Spring 2018 provided the opportunity to enhance the learning process of this course by synchronizing the description and observation of cell characteristics that are critical to classification of blood cells. Cell recognition improved as students participated in sessions that utilized the multi head teaching microscope. Receiving immediate feedback about white blood cell characteristics while using the multi heads microscope helped to compare cells in the		

Medic	l Laboratory Technology, A.A.S.
	same field of view, recognize differences, and apply classification criteria to their observations. The assessment performed on cell identification improved dramatically and was able to be transferred from real images seen through the microscope on slides to printed images or computer images.
	After the guided practice of cell identification using the multi head microscope, students expressed that they are more confident when assessing cell morphology of normal and abnormal cells as well as correlating findings with hematological conditions like leukemia.
	The target was met for this CLO assessing critical thinking skills and the positive results have been associated to the systematic approach applied to distinguishing characteristics of blood cells and the utilization of the multi head microscope.
	The use of this equipment will be incorporated during Fall 2018 in other courses that have a microscopy component like MDL 140, Microscopic Analysis of Body Fluids
	During Fall 2018, assessment of improvement in microscopic analysis in MDL 140 due to incorporation of multi headed microscope will be performed.

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Music, A.A., A.A., and A.A.A. Jazz/Popular Music Specialization

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

A.A. Program Purpose Statement: The Associate of Arts degree curriculum in Music offers an emphasis in fine arts. The Associate of Arts degree curriculum may be used by students who wish to transfer to a four-year college or university to complete a Bachelor of Arts degree in Music.

A.A.A. Program Purpose Statement: The Associate of Applied Arts degree curricula in Music and Jazz/Popular Music is designed for students who seek employment in performing music.

performing music.						
Core Learning Outcome	Evaluation Methods	Assessment Results	Use of Results			
CLO:	This assessment was given to music	Semester/year data collected: Fall 2017 (MUS 111) and	Achievement target met in all areas			
Critical thinking Students	majors in MUS 111 in Fall 2017 and	Spring 2018 (MUS 112)	except one: "Writing Style"			
will demonstrate the	to music majors in MUS 112 in	T	Donations Donatha This is the first time			
ability to evaluate	Spring 2018.	Target Score: 37.5 (75%)	Previous Results: This is the first time			
evidence carefully and	Direct Measure: It is a writing	Assessment Results:	we have assessed SLO #6 in more than 10 years so we have no previous results			
apply reasoning to decide what to believe	assignment. Students were asked to	Total Average score: 40.53/50 (81.1%)	to compare.			
and how to act.	write a concert report where they go	Maximum score: 50	to compare.			
and now to dot.	to a classical concert and write a 2-3	Waximum score. 30	Previous Actions Implemented by			
Operationalized as:	page review of the concert. The	Breakdown of scores:	Discipline Group: This SLO has not			
Students will be able to	concert report is not a research	"Summary" category average score: 17.33/20 (86.7%)	been assessed in over 10 years. We			
effectively research and	paper but a critical thinking paper.	"Integration of Course Work" average score: 17/20	decided to assess it and we will continue			
write on topics in the		(85%)	to assess it on a more regular basis.			
area of music / jazz and	Scoring: There are three criteria for	"Writing Style" category average score: 6.2/10 (62%)				
popular music.	grading:		Current Action: We assessed MUS 111			
	1. Summary (worth 20 points)	This is the first time we have assessed SLO #6 in more	music majors in Fall 2017 and MUS 112			
[X]CT	2. Integration of Course Work	than 10 years so we have no previous results to compare.	music majors in Spring of 2018. To			
	(worth 20 points)		improve the "Writing Style" scores,			
	3. Writing Style (worth 10 points)	Strengths by Criteria/ Question Topic: We met our	faculty will be encouraged in Spring 2019 to give good, clear feedback on			
	See the attached Music SLO	achievement target overall and in 2 categories: "Summary"	students' writing assignments and also			
	method of assessment and grading	and "Integration of Course Work."	to have their students submit their			
	rubric.	Weeknesses by Criterial Question Tonic. The regults in	papers to the Academic Success Center			
	1.02.101	Weaknesses by Criterial Question Topic: The results in the category of "Writing Style" (62%) are far under our 75%	for feedback before submitting their			
	Sample:	achievement target. It would benefit our students if we	paper for a grade.			
	Number of students: 18	could help them with their writing style more. Perhaps	-			
	Number of sections: 3	good, clear feedback on written assignments would help	Next Assessment: Spring 2019			
	(1 at LO and 2 at AL)	our students with future writing assignments. Also, maybe				
		we could make it a requirement to have students submit				
	Breakdown of Students by Campus:	their papers to the Academic Success Center for feedback				
	• 5 at LO from Fall 2017 MUS 111	before they turn them in for a grade. The program will ask				
	• 5 at AL from Fall 2017 MUS 111	faculty to implement these suggestions. We are assessing				
	8 at AL from Spring 2018 MUS	this SLO #6 again in Spring 2019 so we can see if this				
	112	helps our students improve their "Writing Style" scores.				

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Music Recording Technology Certificate

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The Music Recording Technology curriculum is designed for persons who desire to set up their own studio or seek employment as music recording technicians. Occupational objectives include development for positions as assistants and aides in recording studios, broadcast studios, myriad other recording enterprises, and countless private studios in the recording industry. Training in digital audio is emphasized using industry standard software

	enterprises, and countless private studios in the recording industry. Training in digital audio is emphasized using industry standard software.					
Core Learning Outcome	Evaluation Methods	Assessment Results	Use of Results			
CLO: Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Explain issues in copyright law. For this class, issues that arise with regard to infringement by sampling OR music piracy, problems and possible solutions. [X]CT	Direct Measure: Essay, 2500 words minimum. Areas addressed: 1.What constitutes sampling violation? What constitutes piracy? 2. The context in which sampling happens-music is not isolated but a continuous thread. When is it infringement? In piracy, what is considered to be pirated, for instance recording a live show, is sharing that recording illegal? 3. Various perspectives and affected parties had to be considered: Artist, secondary artists, producer, record label, marketer, radio, internet, copyright enforcement, sales, live concerts. 4. Assumptions were in sampling: when buying a recording who do you expect to hear, the artist? Who gets what percentage of the money you spent, what does the musician earn and is it sustainable and for whom. In piracy who is affected when a person steals music and what are the consequences for all parties, including the writer, producer, the store, download links, concerts and more. 5. students provided evidence of piracy and sampling using examples of music, high profile litigations including current. The evidence of piracy is obvious and was identified by every student who chose the topic 6. The implications of piracy and sampling are vast and range from the creation or even before to the end which is payment to all parties involved. This was perhaps the most elusive aspect since the data is continually changing, for an artist not in the main stream and even within that the rate of success is very low. Getting paid is becoming almost impossible and income is shifting toward live music and production as a solution to lost wages. Music is becoming a "service industry" Sample: One section of an 8- week session, Loudoun Campus, 11 students.	Target: 50% of students will score 80% or higher overall and each criterion Results: 5 earned an "A" 1 earned a "C" 1 earned a "D" Results by CLO Criteria: Criteria High P Proficient Some P No P 1	Target Met: [X] Yes [] No [] Partially This was the first time this was used as a CLO topic. Faculty expectation was 50% success for the CLO. More emphasis will be placed on weak areas with quizzes and instruction. The class meets 4 times in the semester so it is incumbent upon the student to research what has been discussed in class. Further emphasis will be placed on this beginning in Spring 2019 to improve results. Current actions to improve CLO based on the results, starting Spring 2019: Add more study guides and discussion groups, emphasizing the importance of research between meeting times of 2 weeks. Add multimedia presentations to enhance engagement. Improve assessment methods by accurately tabulating criteria and scores. Provide more videos and study guides for use outside of meeting times starting in Spring 2019. New adjunct faculty will be teaching this course in Spring 2019 and providing the CLO. Next assessment: Spring 2019			

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Nursing, A.A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose: The Nursing Program is designed to prepare students to participate as contributing members of the healthcare team, rendering direct care to patients in a variety of health care facilities and agencies. Upon satisfactory completion of the program, students will be eligible to take the National Council Licensure Examination (NCLEX) leading to state licensure as Registered Nurse (RN) and are qualified to assume registered nurse positions in hospitals, nursing homes, clinics, physician's efficient HMOs, and other community based settings.

physician's offices,	physician's offices, HMOs, and other community based settings.				
Core Learning	Evaluation Methods	Assessment Results	Use of Results		
Outcome					
CLO:	Second Level Nursing	Semester/year data collected: Spring 2018	Previous actions to improve SLO: In		
Critical thinking	Principles and Concepts		addition, PrepU which is an adaptive quizzing		
Students will	II NUR 222	NUR 222- Traditional track and Online track	to mimic the NCLEX-RN which was used for		
demonstrate the		Traditional track: N= 120; Sections= 3. Two faculty members were	assignments. No change was made to the		
ability to evaluate	Method A: RN Exit Exam.	assigned to the traditional track. The Traditional track is a	Pediatric textbook. The PrepU quizzing allows		
evidence	Health Education System	combination of traditional students and students from the LPN to RN	students to answer questions until they reach		
carefully and	Inc. (HESI) Standardized	track.	mastery levels from 1 through 8. Mastery level		
apply reasoning	HESI- Exit RN Exam	Online track: N=36; Sections: 2. One faculty member was assigned to	of 4 was used for minimum requirements for		
to decide what to	extrapolated scores for	the online track.	the assignments.		
believe and how	Critical Thinking.	Combined Traditional and Online: N=156 total number of students;			
to act.		No students withdrew before the end of the semester. 155 students	Most Recent Results: The benchmark for		
	Method B: Final Exam:	passed the course. One student received an incomplete.	HESI standardized testing of 850 was not met		
Operationalized	The NUR 222 final exam is		for SLO #8; however, the benchmark was met		
as:	a 100 item multiple choice	Target: The benchmark for the HESI Standardized Nursing Exams is	for the method.		
Program SLO #8:	exam, used to measure	850.			
Demonstrate the	SLO #8 "Critical Thinking."		Current actions to improve SLO: Based on		
use of critical	The cognitive level of each	Results: SLO # 8: Total number of students taking the HESI Exit	the current analysis, the current actions to		
thinking	item on the final was	Standardized Exam was 152. The Traditional was further broken	improve the SLO #8 include: Teaching faculty		
throughout the	application or higher. A	down into 34 LPN to RN Traditional Students and 86 Traditional	will provide immediate remediation including		
nursing process	total score of 78% is	Students for the purpose of HESI Testing in NUR 222. The HESI Exit	referrals to student success center for all		
in the provision	required for passing. Item	scores were as follows: LPN-RN Traditional: 776; Traditional: 789.;	students who score below 80% on the first		
of client care	analysis (IA) consisting of	Online: 867 This means the target was met for the online students,	unit exam or have other at-risk issues. Total		
	the percentage of correct	but not for the Traditional LPN-RN or Traditional students.	faculty approved a new pediatric textbook,		
	responses (P), and the	Mathad D. Ondon 20040 NUD 2002 Of the 4FC annulled attendants	Kyle, that is leveled for associate degree		
	point biserial correlation	Method B: Spring 2018 NUR 222: Of the 156 enrolled students,	nursing students and will be used by the next		
	(PBC) for all items was	153 students tested on Blackboard. The 3 remaining took the test on	academic cohort (graduating class of 2018).		
	carried out. The KR (20)	paper. 144 of 153 achieved > 78% (94%). The KR (20)/Cronbach	Finally, a suggested increase of the mastery		
	was also reported for the	Alpha = 0.6. However, this exam does not break down the results to	level of PrepU assignments to 6 out of 8.		
	final exam of 0.602.	the level of how many students met the benchmark for each SLO	NUID 000 will be absented out in May 2010 N		
	Nursing 222 is only offered	category at this time.	NUR 222 will be phased out in May 2019. No		
	at the MEC.		further action will be taken.		

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Occupational Therapy Assistant, A.A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The NOVA Occupational Therapy Assistant (OTA) curriculum is designed to prepare students to assist occupational therapists in providing occupational therapy treatments and procedures. Graduates may, in accordance with state laws, assist in the development of occupational therapy treatment plans, carry-out routine functions, direct activity programs, and document the progress of treatments. Upon the completion of the program requirements the students are able to sit for the National Board for Certification in Occupational Therapy certification exam for OTAs.

Core Learning Outcome Evaluation Methods CLO: Therapeutic Skills OCT 207 Semester/year data collected: Spring 2018 Critical thinking Control of CTA at a death will control on the control of CTA at a deat	Use of Results
Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Apply reflective problem-solving skills and decision-making skills while providing OT intervention in a safe manner. [X] CT Direct Measure: CCT 207 Final Practical Exam Rubric Item. Grading Rubric (as attached): Target: 90% of OTA students will apply reflective prosens attached): The representation of the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 4/5 or the two problem-solving areas on the OCT 207 final practical by receiving a 5/5 or 4/5: 90.75 82.50% 4/5 11.7% 3/5 9.5 8.250% 4/5 12.76 0% 1/5 10.76 0%	applicable: This is the first time that this specific core learning objective has been assessed. Target Met: [x] Yes [] No [] Partially Based on recent results, areas needing improvement: Continued practice on applying problem-solving and decision-making skills in the OCT 207 lab sessions is recommended to continue to improve success on this CLO. Students 5/5 or a 4/5 in egories on the nal practical with onstrated excellent his case-based in in the clinic. Endent failed the nese two criteria in these 3/5 in the cry in transferring transfer process. Target Met: [x] Yes [] No [] Partially Based on recent results, areas needing improvement: Continued practice on applying problem-solving and decision-making skills in the OCT 207 lab in the simulation center so that students have to more consistently apply their problem-solving skills and decision-making skills during Spring 2019. Next assessment of this CLO: This CLO will be applied to the problem solving skills and decision-making skills during Spring 2019.

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **Paralegal Studies, A.A.S.**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed to provide an individual with a sufficient level of knowledge, understanding, and proficiency to perform the tasks associated with meeting a client's needs. These tasks can be performed by a trained, non-lawyer assistant working under the direction and supervision of a lawyer. A paralegal or legal assistant will have a basic understanding of the general processes of American law, along with the knowledge and proficiency required to perform specific tasks under the supervision of a lawyer in the fields of civil and criminal law. Occupational objectives include employment in corporate law firms, government agencies, and any of the varied law related fields. Legal Specialty courses are only offered at the Alexandria Campus and through NOVA Online. This program is approved by the American Bar Association (ABA).

by the American Bar Association (ABA).				· · · · · · · · · · · · · · · · · · ·	
Core Learning Outcome	ı	Evaluation Methods		Assessment Results	Use of Results
CLO: Critical thinking Students will	Legal Writin	ng LGL 126	d from a	Semester/year data collected: Spring 2018	The last time this SLO was assessed (Spring 2017) the target was not met. The program decided to use a different method
demonstrate the ability to evaluate evidence carefully and	legal memor Speaker) to solved issue	randum assignment (Si determine how well stu s using legal citation for The following Critical	isie dents rm and	Target : 80 percent of students will successfully use proper legal citation form and writing style when they draft a legal memorandum and earn a grade of 70 percent or higher.	of assessment to improve student learning. In Spring 2018, the program decided to use this SLO to evaluate critical thinking.
apply reasoning to decide what to believe and how	rubric was u Criteria On Time	sed: Explanation Turned in on or	Points 3	Results: The target was met: 93 percent of students earned a grade of 70 percent or higher; 70 percent of students earned an "A" grade. These students followed	In an effort to improve student learning, the faculty used a different method of assessment for this CLO. The
to act. Operationalized	Followed Format	before due date Explained in class and posted on Blackboard	5	the prescribed format, used all of the legal sources (case law, First Amendment, federal statute), used proper legal citation, and correct spelling and grammar. Seven	Memorandum of Law assignment proved to be a better method for students to use critical thinking to resolve legal issues
as: Draft legal documents including but not limited to	Discussion Section	Used critical thinking to research and analyze relevant case law and statutes to reach a conclusion.	25	percent of students earned a "B" grade. These students did not follow the correct format or use all of the legal sources. Fifteen percent of students earned a "C" grade. These students did not use all of the legal sources and did not use proper legal citation. The 7 percent of	while using proper legal citation because this assignment required them to use more resources than the Trial Court Brief. For example, students used case law, the First Amendment, and a federal statute to
pleadings, contracts, wills, and deeds.	Proper Legal Citation	Use italics or underline parties' names, identify correct reporter, court	5	students who did not earn 70 percent or higher did not turn in the assignment.	analyze the discussion section of the Memorandum of Law.
[Х]СТ	Spolling/	name, and year case decided.	2	Comparison to previous assessment: Spring 2017: A different memorandum of law assignment was used for this assessment (Victoria V); however, the	Plan for improving Critical Thinking based on results: During Spring 2018 faculty and Advisory Committee meetings,
	Spelling/ Grammar Total	No typographical errors	40	grading rubric was similar. At that time, two sections of the course were evaluated (21 students) and the target	the program will discuss methods in which to improve students' ability to use legal
	Sample: Number of S	Sections: 2		was not met—only 71 percent of students earned a grade of 70 percent or higher.	research to locate, evaluate, and interpret case law and statutes to reach appropriate conclusions.
	Number of S Alexandria C			Spring 2016: A different method of assessment was used during this period (Trial Court Brief); therefore, a comparison to the present results cannot be made.	Next Assessment: Spring 2020

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Personal Training Career Studies Certificate

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: This program is based on the standards of the American Council on Exercise (ACE) and prepares you to become a knowledgeable fitness professional in health clubs, recreation departments, and fitness facilities in private, commercial, corporate or government settings. The program will prepare you to sit for a

	ationally recognized certification exam in Personal Training.						
Core Learning Outcome		aluation Metho			ssessment Resul		Use of Results
CLO: Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Students will identify modifiable risk factors contributing to Cardiovascular	Direct Method: PED/HLT Cluste in two ways: (1) a True/False 116 and HL factors asso Cardiovascu include this courses (see (2) The Comple Cardiovascu Assessment	rect Method: In January 2018, the ED/HLT Cluster chose to evaluate this SLO		Target: 80% of s correctly. Results - CVD R Campus Annandale Alexandria Loudoun Manassas Total	isk Factors Ques # Students with correct answers 185 of 207 155 of 180 158 of 172 225 of 233 Total 723 of 792	the question tion: Percentage Correct 89% 86% 92% 96% Cum % 91.2%	This is the first time this SLO was assessed. Cardiovascular disease is the leading cause of death in the United States. The ability to recognize these risk factors in college years is a proactive step toward decreasing this major health concern in later years. Target Met: [X] Yes [] No [] Partially Actions for Improvement: 1) Comparison data 2) No full-time faculty representation at the Woodbridge Campus (i.e. no assessment completed).
disease.	courses. The completed a homework a	# of Total Sections	can be o or as a e Appendix B	Campus Annandale Alexandria Loudoun Manassas Total	# Students Completing Risk Assessment 229 of 247 162 of 180 151 of 169 233 of 233 Total	Percentage Correct 93% 90% 89% 100% Cum %	As part of the action plan: (1) for comparison we are assessing the SLO in Fall 2018. (2) A dialogue on how the Woodbridge Campus would disseminate and collect data without representation of a full-time PED/HLT faculty. In Fall 2018, as requested by our previous dean, these
	AN MA AL LO WO NOVA Online DE* Total *Dual Enrollment **See SLO 1	0ffered 10 8 8 9 4 ** N/A 39	10 8 6 8 0 ** N/A 32		775 of 829	93.4%	concerns were shared with our discipline Dean. Next Assessment: Fall 2018

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **Phlebotomy Career Studies Certificate**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The Career Studies Certificate in Phlebotomy is designed to prepare personnel who collect and process blood and other samples for medical laboratory analysis. Phlebotomists work in hospitals, medical clinics, commercial laboratories, and in other settings where blood is collected from patients. The curriculum includes learning experiences in both on-campus laboratories and affiliated clinical laboratories. Graduates are eligible to sit for the national examinations to become certified as a Phlebotomy Technician.

Core Learning Outcome	Evaluation Methods	Assessment Results	Use of Results
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CLO: Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Exam section on Laboratory Operations requires the utilization of Critical Thinking skills to evaluate laboratory data to determine accuracy of generated data and for detection of systematic error in laboratory instruments. Other questions include situations to determine course of action needed to reduce risks for infections, accidental needle sticks and practices needed to maintain the safety in laboratory environment. [X]CT	Direct Measure: External examination: Phlebotomy ASCP BOC Exam Statistics. This is a computer adaptive test, and results provided in the report are not broken down by topics. CLO 1.1 BOC Program Performance Report 2018. CLO 1.2 PBT (ASCP) Examination content outline. The Laboratory Operations section of Phlebotomy technician PBT(ASCP) Certification Test includes the topics on: - Quality Control - Quality Improvement - Regulatory Applications to maintain Safety and Infection Control Sample: All PBT Graduates sitting as first time examinees for this PBT(ASCP) Certification Test: N=14	Semester/year data collected: Spring 2018 Target: 90% of graduates sitting as first time examinees in this term cohort will get a passing score equal to 400 or better in the Laboratory operations sub-content area. Results: The program mean for Laboratory Operations was 566 and was higher than the overall mean scaled score of 561. Program examinees scores in Laboratory Operations: • 800-999 N= 1/14 • 700-799 N= 2/14 • 600-699 N= 2/14 • 500-599 N= 4/14 • 400-499 N= 4/14 • Less than 399 N=1/14 The required passing score for each area of this test is a minimum of 400, and only 1 student did not achieve this minimum score. This student did not pass the certification test on this first attempt. All the others (13/14) achieved passing scores ranging from mid-400s to mid-800s. Target was met as 93% of graduates sitting as first time examinees scored more than 400 in this section.	Critical thinking has not been measured previously in a cohort sitting at the certification test. This cohort includes graduates from Fall 2017 and Spring 2018. The section of Laboratory Operations requires the utilization of Critical Thinking skills to evaluate laboratory data to determine accuracy of generated data and for detection of systematic error in laboratory instruments. Other questions include situations to determine course of action needed to reduce risks for infections, accidental needle sticks and practices needed to maintain the safety in laboratory environment. The target was met showing that graduates have the ability to weigh evidence to select appropriate course of action in laboratory operations or to procedures and processes that provide safety, reliability, and accuracy. Actions to maintain the target and provide opportunity to improve the student's performance in the certification test in the area of Laboratory Operations include to keep the hands-on activities related to QC, QA and safety regulatory compliance. These activities encourage the development of critical thinking skills. The case studies and Laboratory scenarios play an important step in assessing well-developed critical thinking skills, and the group discussions clarify the process of analysis to guide students that still have not achieved the expected outcome. Next Assessment: Assessment of this CLO
			should be monitored annually.

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 *Photography and Media, A.A.S.*

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Photography and Media, A.A.S. Program Purpose Statement: The program is designed for students for diverse career options within the field of photography, digital imaging, and

media. Course work will stress both technical and aesthetic elements, enabling students to solve a wide range of visual problems with imagination and originality.

	ik wiii suess doin ie	ecimical and aes	uneuc elemen	its, enabiling students	s to solve a wide range of vis	uai problems with im	agination and o	inginality.
Core Learning Outcome	Evaluation Methods			Assessment Results			Use of Results	
CLO:	Advanced Photog	graphy I + II			Semester/year data collec	ted: Spring 2018		This was the first assessment
Critical thinking	PHT 201+ 202							of this CLO.
Students will	Direct Measure: \				Target: 70 percent of stude			
demonstrate the	end of the report).				each criterion and 15 points	or better on the ove	rall score.	The areas that need
ability to evaluate	student's work thro	oughout the sem	nester. Writing	g a statement should				improvement are 2.
evidence carefully	clarify the concept	ual intent of the	student's wor	k and help them	Results by degrees:			Recognizes context (i.e.,
and apply	identify and be aw					Spring 20	018	cultural/social, scientific,
reasoning to	_	will be demons	trated by an	artist's statement	Results by CLO Criteria		% of	technological, political,
decide what to	that:				Results by CLO Citteria	Average Score	Students >	ethical, personal experience),
believe and how to		explains the rele	vance: Overv	iew of the project;			3 / 15 points	and 5. Uses College-level
act.	Main idea				Identifies and explains	AAS = 3.6 points	AAS=94%	writing, which are below
				ntific, technological,	the relevance	AAA = 4 points	AAA=100%	target.
Operationalized as:				ct matter; Styles;	2. Recognizes context (i.e., cultural/social,	AAS = 2.9 points AAA = 3.3 points	AAS=66% AAA=66%	
Writing an Artist		relates to the w			scientific, technological,	AAA – 3.3 points	AAA-00%	Current action(s) to
Statement Writing	3. Communicates				political, ethical,			improve SLO, based on
a statement should				nvey through work	personal experience)			results: For #2, faculty will
clarify the	4. Analyses and J				3. Communicates personal	AAS = 3.3 points	AAS=94%	emphasize these aspects of
conceptual intent of				s; Does the project	points of view	AAA = 3.6 points	AAA=100%	writing an artist's statement in
the student's work				n does it involve? Is	(perspective)		110 =====	class and provide students
and help them		ficance for your	project that yo	ou are using a	4. Analyses and Justifies	AAS = 3.4 points AAA = 4 points	AAS=77% AAA=100%	with websites and examples
identify and be	specific media?				decisions (i.e., visual styles, technical, and	AAA – 4 points	AAA-100%	of well-written artists'
aware of their	5.Uses College-le	ever writing			aesthetic)			statements in Blackboard
creative process.	Sample:		# of		5. Uses College-level	AAS = 2.8 points	AAS=61%	starting in Fall 2018. For #5, faculty will encourage
[X]CT	Campus/	# of Sections	Sections	# Students	writing	AAA = 3.6 points	AAA=100%	students to get help from the
[V]CI	Modality	Offered	Assessed	assessed	Total	AAS = 16.2 points	AAS=72%	Writing Center starting in Fall
	AL	1	1	AAA 3		AAA = 18.6 points	AAA=100%	2018.
				AAS 18				2010.
				AAA+AAS 3	Above Target: 1. Identifies			Next Assessment: Spring
				Non-major 5	Communicates personal po	ints of view (perspec	tive) are above	2021
		21/2		Total 23	target.			
	ELI DE*	N/A	N/A	N/A N/A				
	Total	N/A	N/A	N/A N/A Total 23	Below Target: 2. Recogniz			
	All PHT201+202 s	tudente were se	sessed This		scientific, technological, pol			
	member in 1 section				4. Analyses and Justifies de			
	students).	on. Total sample	, was 20 stuu	CIII.3 (AAO-10	and aesthetic), and 5. Uses	College-level writing	are below	
	otadonto).				target.			

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **Physical Therapist Assistant, A.A.S.**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The PTA Program is designed to prepare students to utilize exercise, specialty equipment and other treatment procedures to prevent, identify, correct and alleviate movement dysfunction. The program design provides students with the philosophical, theoretical, and clinical knowledge necessary to deliver high-quality patient care. Ultimately, students are prepared as skilled technical health care providers who work under the direction and supervision of a physical therapist to provide selected components of physical therapy treatments. Upon successful completion of the program, students must take and pass a licensing examination to begin their career as a physical therapist assistant (PTA). Students are prepared for employment in a variety of health-care settings including acute care hospitals, outpatient clinics, extended care facilities, rehabilitation centers, contract agencies and schools.

clinics, extended care f	clinics, extended care facilities, rehabilitation centers, contract agencies and schools.						
Core Learning Outcome	Evaluation Methods	Assessment Results	Use of Results				
CLO: Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Present sound rationales for clinical problem solving within the plan of care established by the physical therapist. [X]CT	Direct Measure: The summative evaluation method is performance on Criterion #7 Clinical Problem Solving on the PTA Clinical Performance Instrument (CPI) in PTH 232 Clinical Experience III in the Spring semester of the second year. Per the CPI, criteria which must be met in order for a student to achieve "entry level performance" are: Is capable of completing tasks, clinical problem solving, and interventions/data collection for patients with simple or complex conditions under general supervision of the physical therapist. Is consistently proficient and skilled in simple and complex tasks, clinical problem solving, and interventions/data collection. Is capable of maintaining 100% of a full-time PTA's patient care workload in a cost effective manner with direction and supervision from the physical therapist.	Semester/year data collected: Fall 2017/Spring 2018, Cohort Class of 2019 Target: 100% of students will score "Entry Level" or PTH 232 CPI criterion #7 Summative Results by In-Class Enrollment: Results Spring 2019 Spring 2018 by AVG Students Score Students Score > 100% ME N/A N/A 100% The formative achievement targets are: 1. 100% of students will correctly answer question #22 on the Unit II Goniometry exam in PTH 121 Therapeutic Procedures I. 2. 100% of students will correctly answer Question on the PTH 115 Kinesiology for the PTA Unit III written exam. 3. 100% of students will correctly answer Question #3b on the PTH 115 Unit IV Posture and Gait	Fall 2017 resulted in a sharp increase in students able to demonstrate their problem solving ability. Target Met: [] Yes [] No [X] Partially Based on recent results, areas needing improvement: Retention of concepts from Fall semester to Spring semester. Opportunity to coordinate learning in PTH 115 Kinesiology for the PTA with PTH 122 Therapeutic Procedures II. Current actions to improve CLO				
	"Entry level" is a single point highest level terminal benchmark without gradations. Students achieving this benchmark are deemed ready to	practical exam. Results by CLO Criteria:	based on the results: PTH 115 faculty will reinforce passive insufficiency concepts				
	practice as physical therapist assistants. There	Results by CLO Fall 2017 Fall 2016	presented in lecture through				
	are no strengths or weaknesses defined or identified for individual criterions on this national performance assessment tool.	Criteria/ Question Topics AVG Score % of Students ≥ 100% AVG Score % of Students 100% 1. 71.9% <28.1% 40% <6	Faculty will triangulate PTH 115				
	Provided Rubric Criteria or Question Topics: Performance on written and practical exam questions across the first year that required students to problem solve increasingly complex	2. 69% <31% 68.75% <31.2 3. 89.7% <10.3% 90.3% <9. Current results improved: [X] Yes [] No	PTH 122 Therapeutic Procedures				
	clinical applications of the concept of passive	[] Partially	using the passive insufficiency				

Physical Therapist Assistant, A.A.S.

insufficiency of muscles was examined. The formative evaluation methods included:

- In PTH 121 Therapeutic Procedures I in the first semester in Fall 2017 for the Class of 2019, on the Unit II Goniometry exam question #22 students were asked to apply the concept of passive insufficiency to arrive at the correct positioning for a goniometric joint measurement.
- In PTH 115 Kinesiology for the PTA in Spring 2018, the Class of 2019 was asked Unit III Lower Extremity Unit exam question #6 requiring problem solving for the higher level task of assessing muscle length applying the passive insufficiency concept to hip flexors.
- 3. In PTH 115 Kinesiology for the PTA in Spring 2018, the Class of 2019 was asked on the Unit 4 Gait and Posture practical exam to problem solve at the highest level, applying the passive insufficiency concept to construct a stretching exercise for a tight muscle.

Sample:

oap.o.			
Campus/ Modality	# of Total Sections Offered	# Sections Assessed	# Students Assessed
ME only	1	1	29
ELI	N/A	N/A	N/A
DE*	N/A	N/A	N/A

*Dual Enrollment

Strengths by Criterion/ Question/Topic:

- 1. The question was worded differently in Fall 2016: "When measuring hip extension ROM" stem with 4 answer choices beginning with the knee is (flexed or extended) to minimize tightness in the (muscle group name)." Although the point biserial discrimination was .37, indicating a strong correlation between students who scored high on the exam and students who answered the question correctly, the instructor reworded the question to improve clarity in Fall 2017, resulting in a 31.9% increase in the number of students who were able to problem solve applying the concept.
- 2. Students were able to problem solve by applying the passive insufficiency concept at a higher level than in the previous semester with very little attenuation in the percentage of students answering the question correctly. There was little change between the two cohorts despite a change in instructors to a first time adjunct in Spring 2018.
- In each cohort, the same pattern is observed across the course with an increasing percentage of students able to problem solve across the continuum of difficulty suggesting that sequential learning has taken place.

Weaknesses by Criterion/ Question/Topic:

- 1. N/A
- Although there was only a small drop (2.9%) in the
 percentage of students correctly answering this
 question compared to the earlier lower level
 question, it is still not a gain suggesting that
 students may need more lab activities in this area
 to help cement this skill.
- Faculty did not triangulate data from the PTH 122
 Therapeutic Procedures II Therapeutic Exercise practical exam 6 weeks prior to the PTH 115 Unit 4 practical exam to identify students still struggling to problem solve by applying the concept who could have received remediation.

concept in order to offer additional remediation activities to improve the final PTH 115 practical exam performance in this area in Spring 2019.

Next Assessment: Spring 2019

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **Professional Writing Certificate**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The Professional Writing Certificate program prepares candidates to compose documents and manage professional communications for a variety of contemporary professions, including business, military, medicine, government, science, and industry. Writers will gain expertise in composing, designing, and editing electronic texts, as well as a comprehensive foundation in grammar and punctuation. Students may tailor their preparation for particular writing environments by selecting from a variety of elective courses in journalism, technical report writing, graphic design, writing for publication, writing for the Web, social media, and communications. Students may also incorporate a professional internship into the Certificate program.

Core Learning					
Outcome	Evaluation Methods	Assessment Results	Use of Results		
Core Learning	Evaluation Methods Writing for Business ENG 116 Direct Measure: This outcome was analyzed during this evaluation cycle using data from the Eng. 116 Writing for Business courses. The research reports studied for this assessment were composed collaboratively in small groups. The assessment analyzed the achievement of the resulting reports with respect to the following categories: Attribute 1: Explanation of issues Attribute 2: Evidence Attribute 3: Influence of context and assumptions Attribute 4: Students' perspective or thesis Attribute 5: Conclusions For each of these elements, students were given a score of 1 (unsatisfactory), 2 (generally satisfactory), or 3 (effectively). Sample: During the Spring 2018 there were two sections of	Semester/year data collected: Spring 2018 Target: 2.5 Assessment results for the most recent cycle: There were 24 students enrolled between the two sections of the course; 22 students received credit for the course. Of the 24 enrolled students, 23 participated in the group report assignment. A total of 6 collaborative reports were assessed. Group report: The assessment did not meet the target (2.5) for a majority of the categories. Five of the six submitted reports scored satisfactorily or effectively in almost all categories. However, skewing the results is the failure of one group to complete the assignment as directed. The average scores of the group report for each category, with or without the missing reports, were as follows: Mean (15 completed reports)	Use of Results Previous actions to improve SLO: Not applicable; this outcome has not previously been studied. Most recent results: The main area of weakness is Attribute 3 wherein students discuss alternative positions and evaluate those positions. Attributes 4 and 5, which also score low, require students to account for the complexities of alternative positions and draw conclusions. Since these three attributes are linked, it would make sense that there is some consistency in the low scores. Current actions to improve SLO: This is the first time studying this outcome; therefore, the first action in response to this SLO will be to communicate this finding with faculty who teach English 116 regularly. Faculty with disciplinary expertise in this area, and who teach the course regularly, will be asked to consider how they might develop activities to support incorporation and evaluation of alternative viewpoints. These actions will be completed in the Fall 2018 semester.		
[Х]СТ	satisfactory), or 3 (effectively). Sample: During the Spring	category meeting the target (2.5). When the data for these reports is considered without the outlier report included, the target is met for Attributes 1 and 2. Attributes 4 and 5 score lowest regardless of	and evaluation of alternative viewpoints. These actions will be completed in the Fall		

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Public History & Historic Preservation Career Studies Certificate

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: This curriculum is designed for persons seeking to develop research, analytical, and field skills in historic preservation, archaeology, and museum studies sufficient for the student to continue or to participate in local community-based projects.

Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Students will earn the use and utility of diverse archive document types and their purpose. Students will earn the use and utility of diverse archive document types and their purpose. Students will earn the use and tutility of diverse archive document types and their purpose. Students will attempt to use information from these sources to investigate historic topics IX ↑ CT X ↑ CT T ↑ CT T ↑ CT Direct Measure: Historic Documents Research Paper Report. Historic Documents Research Paper Report. Historic Archaeology is dependent on archives and archive research. Students will attempt to use information from these sources to investigate historic topics X ↑ CT	nuseum studies sufficient for the student to continue or to participate in local community-based projects.					
Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Students will learn the use and utility of diverse archive document types and their purpose. Students will attempt to use information from these sources to investigate historic topics IX ↑ CT IX ↑ CT To CT CT CT CT CT CT CT		Assessment Results				
the first time we assessed a CLO, we have no measurements from past results. This particular assignment, along with the entire HIS 180 – Historical Archaeology course, is being reworked by Target Met: [] Yes [] No [X] Partially Based on recent results, areas needing	Evaluation Methods Historical Archaeology HIS 180 Direct Measure: Historic Documents Research Project – Research Paper Report. Historic Archaeology is dependent on archives and archive research. Students will learn the use and utility of diverse archive document types and their purpose. Students will attempt to use information from these sources to investigate historic topics designed by the adjunct instructor for this class, from Loudoun County. This requires some out of class work at the Balch Library, County Municipal Records office, and elsewhere. Students will write a professional-style Preliminary Research Report of all archives consulted and their possible usefulness related to their topic. The goal of the assignment is the process of historical archaeological research and not necessarily the end results. Students needed to demonstrate their competency in understanding how archives and research libraries operated and the material those repositories held. This particular assignment, along with the entire HIS 180 – Historical Archaeology course, is being reworked by a new adjunct	Assessment Results Semester/year data collected: Spring 2018 Target: A student who has received a grade of "C" or better on this assignment has successfully completed this objective. 90% of students should receive a C or better. Results: Results by	Previous action(s) to improve CLO: The program was revised before the Fall 2015 semester as a way to help streamline the learning process and produce more graduates. Since then, we have hired a full-time faculty member with a public history and historic preservation background to teach these classes (hired in August 2015), revised our SLOs (March 2017), improved the curriculum map (March 2017), updated course content summaries (July 2016 and August 2018), and stabilized the program. We have used the SLOs as a way to measure the program's strengths and weaknesses, always looking for ways to improve, especially in regard to course content delivery (on campus, hybrid, and online). A challenge we have had is trying to recognize an appropriate sample size for the SLO assessment, using multiple years as a way to indicate whether the data collected is solid or not. We are also embarking on a guided pathway for transferability with the University of Mary Washington and their Historic Preservation program (agreement signed June 2018); however, a definitive timeline for that process has not been determined yet. Target Met: [] Yes [] No [X] Partially Based on recent results, areas needing			
		Evaluation Methods Historical Archaeology HIS 180 Direct Measure: Historic Documents Research Project – Research Paper Report. Historic Archaeology is dependent on archives and archive research. Students will learn the use and utility of diverse archive document types and their purpose. Students will attempt to use information from these sources to investigate historic topics designed by the adjunct instructor for this class, from Loudoun County. This requires some out of class work at the Balch Library, County Municipal Records office, and elsewhere. Students will write a professional-style Preliminary Research Report of all archives consulted and their possible usefulness related to their topic. The goal of the assignment is the process of historical archaeological research and not necessarily the end results. Students needed to demonstrate their competency in understanding how archives and research libraries operated and the material those repositories held. This particular assignment, along with the entire HIS 180 – Historical Archaeology course, is being reworked by a new adjunct	Historical Archaeology HIS 180 Direct Measure: Historic Documents Research Project – Research Paper Report. Historic Archaeology is dependent on archives and archive research. Students will learn the use and utility of diverse archive document types and their purpose. Students will attempt to use information from these sources to investigate historic topics designed by the adjunct instructor for this class, from Loudoun County. This requires some out of class work at the Balch Library, County Municipal Records office, and elsewhere. Students will write a professional-style Preliminary Research Report of all archives consulted and their possible usefulness related to their topic. The goal of the assignment is the process of historical archaeological research and not necessarily the end results. Students needed to demonstrate their competency in understanding how archives and research libraries operated and the material those repositories held. This particular assignment, along with the entire HIS 180 – Historical Archaeology course, is being reworked by a new adjunct instructor for the Fall 2018 semester. Semester/year data collected: Spring 2018 Target: A student who has received a grade of "C" or better on this assignment has successfully or better on this assignment has posiceite or better. Target: A student who has received			

Public History & Historic Preservation Career Studies Certificate

Sample:

Campus/ Modality	# of Total Sections Offered	# Sections Assessed	# Students Assessed
LO only	1	1	13
ELI	N/A	N/A	N/A
DE*	N/A	N/A	N/A

^{*}Dual-enrollment

Data was collected from one section of HIS 180 on the Loudoun Campus, which was the only section of the class offered this academic year.

able to successfully complete this objective, demonstrating their critical thinking skills with the research paper, as well as through the other assignments in the course. This particular course is being redesigned and a new adjunct instructor is schedule to teach it going forward (Fall 2018). All of that will help improve our target goal of 90% because the redesigned course can factor in this Core Learning Outcome in the development process for better assessment going forward.

Next Assessment: This Core Learning Outcome could be assessed during the 2018-19 academic year, when we will break down the results from our data collected for analysis, as well as select a different course for evaluation.

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 *Radiography, A.A.S.*

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed to prepare students to produce diagnostic images of the human body through safe application of x-radiation. The radiographer is a central member of the health care team and assists the radiologist; a physician specialized in body image interpretation. This program emphasizes "hands-on" practice of instructional methods in a state-of the-art laboratory at the Medical Education Campus in Springfield followed by clinical experience at various affiliating health care organizations. Upon successful completion of degree requirements, the student will be eligible to take the American Registry of Radiologic Technology examination leading to certification as a Registered Technologist in Radiography: A.R.R.T. (R).

Core Learning	on leading to certification as a Registe I	l comologist in			` '		
Outcome	Evaluation Methods		Assessme	nt Results	Use of Results		
Critical thinking	On Site Training RAD 196	Semester/year da	a collected	: Cohort st	Previous actions to improve SLO:		
Students will		Target: 80% of stu	dents score	90% or hig	Implemented in 2016-17: In Spring 2017,		
demonstrate the	Direct Measure: Specific						Image Analysis was incorporated into RAD
ability to evaluate	assessment related to SLO:	Results: Blackboa	d Grade Ce	nter does	not provide	an an	221 Radiographic Procedures II, a non-
evidence carefully	Radiographic Image Analysis. See	analysis of random					clinical course. Lab assignments to include
and apply reasoning	attachments: Image Analysis Tool.	Students presented	l images the	y acquired	l in clinical	rotations.	image analysis were created for each
to decide what to		Some students pre					anatomy and positioning lecture topic.
believe and how to	GRADING SCALE	projections, 3 proje					Faculty confirmed that students
act.	A- 94.50 - 100.00	creates a random b				nter:	demonstrated increased knowledge of
	B- 89.50 - 94.499	Student	Average	Student	Average		anatomy and image quality through this
Operationalized as:	C - 84.50 - 89.499	1	100	11	100		assignment. Clinical instructors also noticed
Apply Knowledge of	D - 74.50 - 84.499	2	100	12	100		improved knowledge of anatomy and image
anatomy and	F - Below - 74.499	3	100	13	94.40		quality during Summer 2017 clinical
positioning, and		4	100	14	85.71		rotations.
radiographic	American Registry of Radiologic	5	100	15	93.33		
techniques to	Technologist (ARRT) National	6	95	16	90.48		Most recent results: Image Analysis tool
accurately image	certification examination.	7	100 100	17 18	86.66 100		was updated to reflect changes from
anatomical		8 9	95	19	97.92		Computed Radiography to Digital or Direct
structures	Category: Imaging Procedures	10	90	20	93.33		Radiography Imagining X-ray machines. This
		_ 10	1 00	20	00.00	J	update was initiated by faculty and approved
[X]CT	See Attachments:	Student	Average	Student	Average	1	by the Radiography Advisory Board in Fall
	ARRT Program Summary-	21	93.34	31	100		2014.
	ARRT National Comparison-	22	90.48	32	93.33		Current regulte improved: [V] Vec [] No [
	Sample: 39 first years in RAD 196	23	100	33	93.33		Current results improved: [X] Yes [] No [
	(4 sections) - total enrollment	24	96.67	34	100] Partially
	(4 sections) - total enfoliment	25	92.31	35	96.67		Future action: Current scores indicate a
		26	92.31	36	95.24		drop in student understanding of
		27	97.43	37	95.23		radiographic anatomy and image quality.
		28 29	96.67 100	38 39	86.67 100	-	Faculty will meet in Spring 2019 to re-
		30	100	39	100	1	evaluate the assessment tool to ensure that
			1 100	ı	1	ı	it is keeping up with the current changes in
		Result:					Digital Radiography. These changes will be
		• Fall 2018 RAD	196- Image	Analysis Δ	92	reviewed at the next Radiography Advisory	
		• Fall 2016 RAD					meeting in May 2019.
		- Tall Zolo IVAD	100- iiilage	, waiyolo A	voluge. 31	.07	J,
	l .	l .	40				L

Radiography, A.A.S.

nadiography, A.A.S.	
 Fall 2015 RAD 196- Image Analysis Average: 97.19 Fall 2013 RAD 196-Image Analysis Average- 95.99 	ARRT results indicate the program has dropped one point from the prior year. We exceeded the national average in this
Previous Target : 80% of students score 90% or higher on assessment was met.	category. This goal will be monitored again next year. Future Target-9.0 or higher for all students.
Future Target : 95% of students score 97% or higher on assessment	Next Assessment: 2018-19
ARRT Results: 2017-18-8.3 NOVA/ 8.3 national results (33 students) 2016-17-8.4 NOVA/ 8.4 national results (40 students) 2015-16-8.4 NOVA/ 8.5 national results (37 students) 2013-14-8.4 NOVA/ 8.5 national results (38 students) 2011-12-8.6/ 8.5 national results (34 students) 2010-11-8.6 NOVA / 8.5 national results (50 students) 2009-10-8.2 NOVA/ 8.5 national results (45 students) ARRT results dropped by one point for 2016-17. Results included scores from two previous students from 2015-16 that retook the certification exam. Strengths: Students are able to correctly identify topographic anatomy of the skeletal system, cranial bones, facial bones, urinary system and gastrointestinal system. Weaknesses: More image analysis is needed.	

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 *Social Sciences, A.S.*

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: This program is designed for students who plan to transfer to a college or university for a Bachelor of Arts or a Bachelor of Science in English, Creative Writing or Writing and/or Rhetoric as an entry-level professional writer.

Core Learning	The state of the s		n Methods									
Outcome			Α	ssessn	nent Re	esults			Use of Results			
Critical thinking	Student D	evelopmen	t Orientatio	1 SDV 100	Semester	/year da	ta colle	ected: S	Previous action(s) to improve CLO:			
Students will									The SDV Curriculum Committee has a			
demonstrate the			re: Students were quizzed on 5 g questions embedded in a			% of stu			yearly mandatory SDV In-Service where			
ability to evaluate					critical thin					College	Э	we have instructors present on best
evidence carefully	College Re	source Quiz	z in SDV 100		Resource	and Crit	ical Thii	nking Q	practices on student engagement and			
and apply								_				learning (May 2016, May 2017, June
reasoning to	Question 7	•			Results by	y In-Cla	ss, Onl	ine, Du	al Enro	Ilment:		2018).
decide what to		ninking creat			Campus/ Modality	Q9	Q10	Q15	Q17	Q18	Total	
believe and how		Solving prob			AL	97%	93%	31%	11%	83%	63%	The Committee has also considered
to act.	• Q15: 0	Critical thinki	ing in high so	chool								using a different textbook but our
Operationalized		college			AN	95%	88%	24%	11%	80%	60%	primary goal has been to keep the
as: SDV 100: Identify		Narrowing th			MA	98%	94%	28%		86%	62%	textbook affordable by using OER (Open Education Resources). We have
three to five	• Q18: 0	Critical thinki	ing		ME	98%	92%	16%	78%	80%	73%	considered that since the textbook is
aspects of critical					LO	99%	93%	23%	13%	84%	62%	only available online that it discourages
thinking such as:	Sample Si	ze (Specify	N/A where n	ot offered)	WO	100%	96%	100%	100%	100%	99%	students from reading it. The committee
identifying faulty	Campus/	# of Total	#	#	Online	96%	68%	13%	76%	90%	69%	reviewed textbooks in 2017-2018 and
logic, problem-	Modality	Sections	Sections	Students Assessed	DE	100%	95%	24%	86%	100%	81%	we voted against the different options
solving, and	_	Offered	Assessed		Total							because they could not remain free.
asking	AL	21	13	230	AVG	98%	90%	32%	47%	88%	71%	because they could not remain nee.
questions/probing	AN	36 15	32	678								At this time we have not found a better
etc.	MA (+1 SDV 101)	15	9	161	Current re	sults ir	nprove	d: N/A -	- First ti	ne we a	ssess	free textbook that covers the topic we
[x]CT	ME SDV	11	5	49	this topic.							review in this class.
	101			10	'							
	LO	18	13	250	Strengths	by Crit	erion/ (Questio	n/Topi	: Ques	tions 9,	Most of the assignments required self-
	WO	22	5	109	10, and 18	had the	best so	cores di	ue to the	e fact th	at they	assessment and reflection and students
	Online	24	17	246	could be a	ssessec	by usir	ng good	l test tal	king skil	ls and	feel more comfortable with those
	DE*	10	1	21	singling ou	it other a	answers	that ar	e not th	e best		assignments than assessments and
	Total	157	95	1744	(multiple choice). The questions are broad enough that						quizzes that required them to review the	
	*Dual-enroll	ment			even without reviewing the textbook they can be							textbook available online.
					answered.							NOVA Online, formerly Online, differed
					Weaknesses by Criterion/ Question/Topic:							on when/where they assessed the
												critical thinking questions.
					Questions							
					15 is a question that requires the student to pick several							It was not in the first quiz/assessment
					right answers and there is more room for error.							and not attached to a college resource
					Question 1							quiz but it was its own separate quiz.
					is not word	ded dire	ctly fron	the tex	kt but it'	s inferre	d from	This allows discussion that putting a
												critical thinking reading

Social Sciences, A.S.

	the reading material and requires a bit more critical	assignment/assessment as its category
	thinking to figure out the best answer.	later on in the class may improve the results.
		Target Met: [] Yes [] No [x] Partially
		Based on recent results, areas needing improvement: The Critical Thinking CLO is currently located along with College Resources and Communication Skills. Comparing with Online on where they put their assessment, students may do best if Critical Thinking has its own category after Academic and Test-Taking skills.
		Current actions to improve CLO based on the results: Unfortunately, the Fall 2018 assessment is well underway and too late to make any improvements or changes. Critical Thinking is not going to be assessed for Spring 2019. Comparing Spring 2018 to Fall 2018 would allow for more results to see if there is improvement or if the data stays the same.
		Next assessment of CT: Spring 2020

Critical Thinking Core Learning Competency Assessment Report: 2017-2018

Geographic Information Systems Career Studies Certificate Social Science: Geospatial Specialization, A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: This program is designed to prepare students to transfer into baccalaureate programs in the geospatial or social sciences at a four-year institution. Students will develop both the theoretical knowledge and a practical facility with geospatial systems.

Geographic Information Systems Career Studies Certificate: This program is designed to help students develop both the theoretical knowledge and a practical facility with GIS. Students who already hold a baccalaureate or master's degrees will acquire the requisite skills and knowledge to switch careers, or to apply spatial analysis in their present workplaces. Students will be positioned to pursue additional coursework toward an associate degree and/or transfer to a four-year institution for further study in the geospatial, environmental or physical sciences; in civil engineering; in information technology; or in business/marketing at a four-year institution.

in the geospatial, enviror	imeniai oi p	Jilysical scie	rices, iii civii	Crigineering	j, III III	offiation technology	y, Oi iii i	Jusiness/inc	irkeling at a lo	ur-year montunon.
Core Learning Outcome		Evaluation	n Methods			Assess	sment F	Results		Use of Results
CLO: Critical thinking Students will	Geographic Information Systems II (GIS) GIS 201					ester/year data col et: 70% of students ults:				Previous action(s) to improve CLO if applicable: This was the first semester where
demonstrate the ability to evaluate evidence carefully and apply	Direct Measure: Measure student ability to articulate a complex problem and associated steps to solve based on assessment of				Results by Campus/ Modality Spring 2018 Average Percent ≥ Score [Target]			CLOs were evaluated. Target Met: [X] Yes [] No [] Partially		
reasoning to decide		oposal (rubri				LO only		4.4	77%	Based on recent results, areas
what to believe and		s are encour			Resu	ılts by CLO Criteria	a:			needing improvement: A closer
how to act.		nstructional d			_	_ , , , , , , , , , ,		Sprir	ng 2018	look at score of individual
Operationalized as: Students will articulate		res, and sug ation to be c		ovements	'	Results by CLO Crite Question Topics	rıa/	Average Score	% of Students <u>></u> Target	to work more on expressing how their analytical output (maps, charts,
a complex problem	Sample:				1. Ex	plicitly Ask a GIS Que	stion	4.3	77	graphs) will or can be used and be
and associated steps to solve based on assessment of project	Campus/ Modality	# of Total Sections Offered	# Sections Assessed	# Students Assessed	you p	Explain in a general sense how you propose to answer that question,			100	able to explain that in some detail. Current actions to improve CLO based on the results: For the most
proposal.	LO only	1	1	9		early identify the actua used	ıl data	5	100	part, no changes are planned at this
	ELI	N/A	N/A	N/A	4. De	escribe the maps, table		5	100	time. However, as we traditionally,
	DE*	N/A	N/A	N/A	oriar	s, or graphs you will m	nake			provide additional class time to
[X]CT	*Dual-enro	Ilment				lize the graph / table		3.6	67	understanding how to utilize products
						ticulate a plausible sol	olution 3.6 77 /ed: N/A – This was the first			of analytical procedures, later in the
						ent results improve ester that this CLO w			the ilist	class, after the proposals are due,
						ngths by Criterion/			Prades	we plan to implement an additional question related to how well the
						ents on multiple dire		•		students articulate the use of
						v instructions, devel				explanatory elements in the reports
						n a stepwise design,	•		•	associated with their class projects.
						mes and uses.	and an	norpato man	p.o	decodated with their class projects.
					Wea	knesses by Criterio	on/ Que	stion/Topic	:: Some	Next assessment of this CLO: The
										next CLO to be assessed will be
										Civic Engagement in GIS 201 in
										Spring 2019
					job, o	did it as required.				
					Weaknesses by Criterion/ Question/Topic: Some topics are problematic when trying to assign a variable score (see rubric – some only have options of 1, 2 and 5) as the possible grad outcomes are did noting, did a bad job, did it as required.				next CLO to be assessed will be Civic Engagement in GIS 201 in	

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Social Sciences: Teacher Education Specialization, A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: This curriculum prepares students to transfer to a 4-year college or university teacher preparation program. It is specifically designed for students who plan to seek endorsement and licensure as teachers in PK-3, PK-6, or special education.

students who plan to	Seek endors	sement and	icensure as	teachers in P	N-3, PN-0,	or special educ	auon.				
Core Learning Outcome	Evaluation Methods				As	Use of Results					
Critical Thinking – Philosophy of Education	Introduction to Teaching as a Profession EDU 200 Semester/year data collected: Spring 2018			Target: 8 each crite Results:		Previous action(s) to improve SLO: Data on this CLO has not been collected					
		ásure: To as						Spring 2	2018		in the past.
CLO:		EDU 200, st				Results by	Studen				I and passed
Critical thinking		sophy of edu				Campus/	Met Cor		Percent	>	Target Met:
Students will				information		Modality	Assign	•	Target		[X]Yes[]No[]Partially
demonstrate the		, the instruct					85% or		. 3		[][][]
ability to evaluate		experiences.		,		AN	(16/1	7) 94%	+9	9%	Based on recent results,
evidence carefully											areas needing
and apply	Rubric:					MA	(14/15)	93.3%	+8.3	3%	improvement: How
reasoning to decide		Students Lea	ırn (20%)			LO	(11/14)	78.6%	-6.4	1%	Students Should Be Taught
what to believe and	2. What	Students Sh	ould Be Tau	aht (20%)		ELI	(29/32)	90.6%	+5.6	8%	What Students Should Be
how to act.		Students Sho			Results I	by SLO Criteria	1:				Taught
		onditions Ur							Spring 20	18	The Conditions Under Which
Operationalized as:	Learn	the Best (20)%)		Res	sults by SLO Crit			nts Who	% of	Students Learn The Best
students compose		ies That Ŵal		d Teacher		Question Topic	3		riteria at	Students	
a 2-3 page	(20%)		·		4 11	<u> </u>			r Better	> Target	Current actions to improve
philosophy of	, ,					Students Learn	D -		78 84.6%	4%	CLO based on the results:
education. In their	Sample:				Taught	Students Should	ве	68/7	78 87.1%	+2.1%	Instructors will work with
philosophies, they	Campus/	# of Total	#	#		Students Should	3e	68/7	78 87.1%	+2.1%	students on describing
must synthesize	Modality	Sections	Sections	Students	Taught		50	00/1	0 07.170	. 2.170	instructional strategies and
information from	-	Offered	Assessed	Assessed		Conditions Under	Which	68/7	78 87.1%	+2.1%	curriculums. Instructors will
class, the	AN MA	1	1	17 15	Student	s Learn The Best					be more explicit in pointing
instructional	LO	1	1	14		ities That Make U	A Good	70/7	78 89.7%	+4.7%	out instructional techniques
materials, and their	ELI	2	2	32	Teache	r					and components of a quality
field experiences	DE*	N/A	N/A	N/A	Current	results improve	ed: N/A: 1	his SLO	has not pi	reviously	classroom environment
[X]CT	Total	5	5	78	been ass	•			•	•	beginning Fall 2018.
	*Dual-enroll	ment									
					Strength	s by Criterion/	Question	n/Topic:	Students of	do a good job	Next Assessment: Fall 2019
					describin	g the qualities th	nat make	a good to	eacher. Ins	structors	
						ot of class time					
						ons of teacher s					
					enough b	ackground know	vledge to	be succ	essful on th	nis section.	
					Macles :	and his Oults of	.m/ O	₩ a -a / T = -	in Otal	ta maad	
						sses by Criterio					
						p describing ins					
						ent. In addition,					
					defining s	skills and curricu	ilum that s	snould b	e covered	at school.	1

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Substance Abuse Rehabilitation Counselor, Certificate

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: This curriculum is designed to fulfill the Virginia state educational requirements for the certification of substance abuse counseling assistants. To meet substance abuse counselor assistant certification requirements, the applicant is expected to meet specific education requirements including didactic and experiential learning with a supervised internship required. Individuals desiring skills and knowledge in this career field, but not seeking State Certification may also enroll. Students in this curriculum will participate in at least 3 semester hours of Cooperative Education unless they already have equivalent experience.

enroll. Students in	this curriculum will partic	pate in at leas	si 3 semesier n	ours c	i Cooperative Educ	ation unless	s they already ha	ave e	equivalent experience.
Core Learning Outcome	Evaluat	ion Methods			Assess	ment Resu	ults		Use of Results
CLO: Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: Students will be able to scientific facts of disease and the effects of psychoactive drugs on the central nervous system.	Effects of Psychoacti Direct Measure: Writte Provided Rubric Crite The exam covered how homeostasis (before all brain operates while ur substances (drugs, alc how the brain operates use. Sample Size (Specify Campus/ # of Total Sections Offered AL only 1 ELI N/A DE* N/A Total 1 *Dual-enrollment	ve Drugs HM en Exam eria or Questi v the brain open ny substance nder the influe bhol, nicotine, and functions	on Topics: erates at use), how the nce of etc.), and s post drug	Res R	ester/year data co	Av	Fall 2017	81	Previous action(s) to improve SLO: Provide a rubric for an assignment or a more detailed preview and summary of exam. Target Met: [] Yes [] No [x] Partially No previous standard was set. Based on recent results, areas needing improvement: The next SLO needs to include a comprehensive exam with multiple choice, fill-in-the-blank, T/F, and short essay. Current actions to improve SLO based on the results: Creating the comprehensive exam along with short quizzes leading up to the exam as well as videos on topics and in-class discussion. All methods will be geared to preparing for the comprehensive exam in Fall 2019.
									Next Assessment: Fall 2019

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Veterinary Technology, A.A.S.

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum will prepare the student for a career as a veterinary technician. Satisfactory completion of the curriculum will make the student eligible to take the Veterinary Technician National Examination for certification as a veterinary technician. The curriculum is broad based and includes both practical and theoretical course work which prepares the student for employment in various areas of animal health care, including veterinary hospitals and research and diagnostic laboratories.

Core Learning										
Outcome		Evaluation	on Methods			Ass	essme	ent Result	ts	Use of Results
CLO:	Intro to Ve	terinary Te	chnology VI	ET 105	Semester/year data collected: Fall 2017					This CLO has not been previously
Critical thinking										assessed.
Students will			pletion of wri			arget: 100% of st			70% or higher	
demonstrate the	veterinary medical case-based patient scenarios including various decision-making				0	n each scenario to	opic que	estion		Target Met - OC Cohort:
ability to evaluate					_	saulta hu Faralli		00	Ol Cabarta.	[X]Yes[]No[]Partially
evidence carefully and apply reasoning			assessment (Intro to Vet	and nursing	K	esults by Enrollr Results by	nent –	Fall 2		Target Met - OL Cohort:
to decide what to	Technology		(IIIIO IO VEI	ennary		Campus/	Ave	erage	Percent >	[] Yes [] No [X] Partially
believe and how to			O - VET 105	(Intro to		Modality		core	Target	[] Tes[] No [X] Landally
act.) assessmen			LO	_	3.81 of 4	100% > target	Based on recent results, areas
Operationalized as:		37	,					ts (95%)	1000/	needing improvement: For OC
Explain animal patient	Sample:					ELI		1.5 of 50 ts (83%)	100% > target	students, they need to differentiate
assessment, nursing		# of Total	#	#		Total	point	89%	100%	between clinical signs and treatment
procedures, and the	Campus/	Sections	Sections	Students		Total		00 /0	10070	protocols for varying classes of
implantation of	Modality	Offered	Assessed	Assessed	R	esults by CLO C	riteria -	- OL Coh	ort:	rodenticides. For OL students, they
prescribed	LO	1(OC)**	1	25		•			I 2017	need the most improvement with
diagnostics and	ELI	1 (OL)**	1	20		Results by Toxici		Average	% of	calculating toxicity level of Xylitol and
treatments, including basic animal care or	DE*	N/A	N/A	N/A		Question Topics		Score	Students >	Chocolate along with anticipated diagnostic tests, treatments and
husbandry.	Total	2	2	45	-	Q#1 - Plants		16.5 of 20	Target 58% > target	nursing interventions to prepare for
naobanary.	*Dual-enro		Technology I	Program		Q#1 - Plants			based on evidence-based protocols of	
[X]CT	Cohorts:	veterinary	recritiology i	Togram		(82.5%)				care. They also need to improve upon
		n-Campus (full-time) = C	iC.		Q#2 -Chocolate		7 of 9	81% > target	describing specific client triage advice
		nline (part-ti						points		prior to and after client/owner arrival to
		illino (part a	, 02		 	Q#3 – Xylitol		(77.7%) 6 of 9	44% > target	veterinary medical facility. Both OC and
						Q#0 — Ayıltol		points	1470 r target	OL students need to apply knowledge
								(66.7%)		regarding species anatomy based on
						Q#4 – Rodenticide		12 of 12	100% > target	physical exam palpation and veterinary
								points (100%)		nursing assessment.
					1	Total		81.7%	70.75%	Current actions to improve CLO
					"			J 111 70	7 3.7 3 70	based on the results: Additional
						urrent results im	proved	d: N/A: Th	is CLO has not	written assignment or quizzing
					previously been assessed.					specifically regarding the varying
					1	-				classes of rodenticides and practice
					S	trengths by Que	stion T	opics:		toxicity calculation problem sets.

Veterinary Technology, A.A.S.

• Triage of small animal patients including

- telephone (pre-arrival to facility)

 Case-based with patient history taking component to simulate real-world client interactions and communications. Calculating toxic dosages and applying to particular patients to determine if they have ingested a lifethreatening amount of toxic material

 Use of credible Internet resources provided to
- Use of credible Internet resources provided to students

Weaknesses by Question Topics:

- Plant Toxicity Questions missing explanation of abnormal physical assessment findings as relates to applied anatomy
- Chocolate Toxicity Questions lacking explanation of patient monitoring parameters basic animal care
- Xylitol Toxicity Questions lacking order of priority nursing care and treatment explanation
- Rodenticide Questions emphasizes memorization vs. application of rodenticide information

Beginning in Fall 2018, review veterinary anatomy in-class for OC cohort and during campus lab visits for OL cohort with class exercises on how this applies to patient illness and disease as well as proper animal patient restraint, handling and implementation of nursing procedures based on patient priority needs.

Next Assessment: Fall 2018 and Fall 2019 when both courses are next offered, with biennial reporting in 2020.

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Welding: Basic Techniques Career Studies Certificate

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community college is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed primarily for students who wish to find employment in various industries as entry-level welders. The curriculum

emphasizes the study of equipment, reading of blueprint designs, and the various welding processes utilized in today's industry.

emphasizes the study	oi equipmer	it, reading of	biueprint des	igns, an	a the vario	us welaing pro	cesses un	ilizea in to	day's indus	sıry.	
Core Learning Outcome	Evaluation Methods						Asses	sment Re	Use of Results		
CLO: Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act.	Arc Weldir Direct Mea classroom a Perform differen Examin welds State co	Target: 80' 80% or high Results: Results by Campus/ Modality	% of stude	nts passin	g with a so		Target Met: [X] Yes [] No [] Partially The score was identical to the previous assessment. To improve even more, the Welding faculty is going work with the students using the American Welding Society standards for visual inspection. Also, the peer				
Operationalization: Apply basic machine and technique	See attache					MA only	90	90	86	85	inspections which started last year seem to help the students because they are learning from each other.
adjustments to solve typical welding problems.	Campus/ Modality	# of Total Sections Offered	# of Students Sections Assessed Assessed # %								Next Assessment: Fall 2018
[X]CT	MA only	1 N/A	1 N/A	15 N/A	100 N/A						
	DE*	N/A	N/A	N/A	N/A						
	Total	1	1	15	100						
	*Dual-enrolln	nent									

Disciplines

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **Biology**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community college is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed for persons who are interested in a professional or scientific program and who plan to transfer to a four-year college or university to complete a baccalaureate degree program with a major in one of the following fields: agriculture, biology, chemistry, pre-dentistry, forestry,

geology, home economics, nursing, oceanography, pharmacy, physics, physical therapy, pre-medicine, science education, or mathematics.

	nomics, nursing, oceanograpny, pharmacy, physics, p	onysicai inerapy, pre-	medicine, scien	ce education, or ma	antemanos.
Core Learning Outcome	Evaluation Methods	Ass	essment Resul	Its	Use of Results
Outcome Critical Thinking: Students will locate, evaluate, interpret, and combine information to reach well- reasoned conclusions or solutions. Operationalized using:	General Biology I BIO 101 Direct Measure/Criteria: A quiz on the Scientific Method was available on Blackboard to all BIO 101 students in the college (students from all campuses including online and DE) towards the end of the Fall 2017 semester. The quiz consisted of 10 multiple choice questions that assessed steps in the Scientific Method. The topics were as follows: Item #1: observation Item #2: order of steps Item #3: define of hypothesis Item #4: validity of hypotheses	Targets: For the wl achieving 70% on the For each item, 70% that item. Results by In-Class (Specify N/A where Results by Campus/ Modality In-class Online	all 2017 nole quiz, 70% on the quiz. of students coro	of students rectly answering	Previous Actions to improve CLO: Instructors and students of BIO 101 are becoming more used to assessment by Blackboard. During the Fall 2018 Cluster meeting, faculty members requested results of the previous year's data. These data were sent to the Biology discipline chair for dissemination. Based on Results, areas needing improvement: The low achievement results on Items 1 and 9 are important to the biology faculty, because they show that students
SLO #2: Students will understand the scientific method and identify methods of inquiry that lead to scientific knowledge.	Item #5: importance of control Item #6: definition of data Item #7: example of hypothesis Item #8: definition of variable Item #9: definition of theory Item #10: defining data collecting This assessment is the same as the assessment used the previous year. The assessment tool was deployed on Blackboard to all 572 students taking	Total Average *Dual-enrollment Average/Mean Scor Online, Dual Enrolln offered) Results by Campus/ Modality	N/A 84.2 e for Science M	N/A 88.5	do not understand that curiosity is the first step of solving a scientific problem through the scientific method. Also, the term "theory" in science continues to confuse students. Students' wrong answers indicate that they do not realize "theory" in science is not a hypothesis, but a well-substantiated explanation of the natural world. It is valuable for instructors to have this feedback.
	BIO 101 on all campuses (AL, AN, LO, MA, WO), online and dual enrolled students. The exact total	In-class Online	N/A N/A	N/A N/A	Current Actions to improve CLO based on the results:
	number of students in BIO 101 during Fall 2017 is	DE*	N/A	N/A	The discipline chair recently elected in
	not available, but it is around 1600. This approximate number allows us to determine that about a third of all students responded to the Blackboard notice and took the quiz. Dual enrollment students were included, and 101 DE students (17.6% of the total) took the assessment. In the case of NOVA Online 128	*Dual-enrollment	83.3	87.8	the Biology discipline in Fall 2018 has already seen this data. She wants to work with faculty on the concepts of the two low-scoring questions for the 2019-20 academic year. We need to find out if students are not understanding the concepts or if there is a problem with the question itself.

Biology

NOVA Online students (22.3% of the total) took the assessment.

The number of students from each campus and from online were not tallied. However, the student ID numbers are in the raw data, and specific information can be gleaned from the data.

Like the previous year, students identified themselves by major. This allowed us to compare results from students' program placed in General Studies (219), Social Science (195) and Science (279). Note that these numbers add to 693; some of the students listed double majors.

Sample: (Specify N/A where not offered):

Campus/ Modality	Total # Sections Offered	# Sections Assessed	# Students Assessed
AL	N/A	N/A	N/A
AN	N/A	N/A	N/A
MA	N/A	N/A	N/A
ME	N/A	N/A	N/A
LO	N/A	N/A	N/A
WO	N/A	N//A	N/A
ONLINE	N/A	N/A	N/A
DE*	N/A	NA/	N/A
Total			572

^{*} Dual-enrollment

Results by SLO/CLO Criteria:

Results by SLO Criteria/ Question Topics	A.S. Assessment Results Spring 2018	All Student Results Spring 2018
Торісэ	Average Score/%	Average Score/%
Item 1	57.8	64
Item 2	95.3	94
Item 3	90.6	92.4
Item 4	90.6	88.9
Item 5	78.1	81.1
Item 6	93.9	93.8
Item 7	84.5	85.4
Item 8	87.8	87.4
Item 9	63.4	65.7
Item 10	88.1	89.6
Total	87.8	83.3

Results indicate that for both student groups, average scores are well above 70%, and most (8 out of 10) individual items meet achievement goals. Scores were very similar to those of last year. The lowest scores were in items 1 and 9. Item 1 asked about the first step in the Scientific Method. The other low score was Item 9 which asked the definition of the word "theory."

Current results improved:

[] Yes [] No [X] Partially

Scores from students program placed in Science, Social Science and General Studies are very similar.

In the 2015-16 academic year, students scored below 70% in questions 1, 2 and 9 (42%, 47.5%, and 57.4%). In 2016-17, students scored below 70% in questions 1 and 9 (65.4% and 66.6%). This cycle, students also scored below 70% in questions 1 and 9 (64% and 65.7%). This shows a marked improvement in identifying the steps of the Scientific Method (question 2) over the years assessed, and an improvement in general knowledge of Scientific Method.

This is the second year that A.S. Science students were identified in the assessment. Although most A.S. Science majors take BIO 101, many students in General Studies and Social Sciences and other majors also take BIO 101. Faculty assessing Social Science and General Studies asked if we could identify their students, since those programs also wish to use this Scientific Method assessment for students in their majors. For the 2018-19 assessment year, we plan to add A.S. Liberal Arts.

It is interesting that the results again show very similar results for students, regardless of major. BIO 101 is a class taken by science students early in their academic career, and results show that science students at this early stage did not outperform students in other majors.

In this assessment, we were able to demonstrate for the first time that students from all campuses, NOVA Online and Dual Enrollment took part. In the current Blackboard setup, each question is posed as an independent, little exam, and that it takes more time for students. The two more questions about NOVA Online and DE that two more questions did not discourage students. Nearly 18% of student responders were DE, and 22% were NOVA Online students.

The next assessment for this CLO: Spring 2019.

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 *Economics*

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Discipline Purpose Statement: Economics provides an objective interpretation of human behavior. Rational and predictable economic behavior allows for the quantification and logical analysis of many social problems. Also, an understanding of how the national and international economy functions is critical to success in today's business environment. At the macro-level, how national governments influences the economy and how that affects industry are pertinent to students entering the business world. At the micro-level, explorations of consumer theory, theory of the firm, market structures, and resource markets contribute to students' understanding of the underpinnings of capitalism.

The two principles courses, ECO 201 Principles of Macroeconomics and ECO 202 Principles of Microeconomics, prepare transfer students pursuing degrees in business, sciences, or the arts with the knowledge and abilities to master more advanced economics courses in four-year colleges and universities. The courses also endow applied degree students in career-technical programs with an economic background for professional and personal endeavors requiring economic skills and awareness.

Results by In-Class, Online Dual Enrolled: Ist Topics Covered on Examination Macroeconomics	degree students in career-technical programs with an economic background for professional and personal endeavors requiring economic skills and awareness.										
Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe anh how to act. Operationalization: Respond to multiple choice exams on micro and macroeconomics. I X] CT Tryounded Rubric Criteria or Question Topics: List Topics Covered on Examination Macroeconomics • The Economic Problem • Supply and Demand • Measure of Total Production and Income • Jobs and Unemployment • Consumer Price Index and Cost of Living • Aggregate Expenditure Multiplier • Finance, Saving and Investment • Monetary Policy Microeconomics • Definition of Economic • Demand and Supply • Price Elasticity of Demand • Government Actions in Markets • Production and Cost • Perfect Competition • Oligopoly Annopolistic Competition • Oligopoly Operationalization: Results by In-Class, Online Dual Enrolled: (Specifix N/A where not offered) Results Target: 85% of students will score 85% of higher. Target: 85% of students will score 85% of higher. Target: 85% of students will score 85% of higher. Target: 85% of students will score 85% of higher. Target: 85% of students will score 85% of higher. Target: 85% of students will score 85% of higher. Results by In-Class, Online Dual Enrolled: (Specifix N/A where not offered) Results by In-Class, Online Dual Enrolled: (Specifix N/A where not offered) Results by In-Class, Online Dual Enrolled: (Specifix N/A where not offered) Results who Individual Enrolled: (Specifix N/A where not offered) Results by In-Class, Online Dual Enrolled: (Specifix N/A where not offered) Results who Individual Enrolled: (Specifix N/A where not offered) Results who Individual Enrolled: (Specifix N/A where not offered) Results who Individual Enrolled: (Specifix N/A where not offered) Results who Individual Enrolled: (Specifix N/A where not offered) Results who Individual Enrolled: (Specifix N/A where not offered) Results who Individual Enrolled: (Specifix N/A warge Percont Neasure Previous Assessment Results In Devorage Percont Neasure Previ		Evaluation Methods	Assessment Results	Use of Results							
• Oligopoly which could not have been used to generate meaningful results to serve as a good is committed to making the necessary effort avoid some of the problems that resulted in	CLO: Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalization: Respond to multiple choice exams on micro and macroeconomics.	Direct Measure: Examination Provided Rubric Criteria or Question Topics: List Topics Covered on Examination Macroeconomics • The Economic Problem • Supply and Demand • Measure of Total Production and Income • Jobs and Unemployment • Consumer Price Index and Cost of Living • Fiscal Policy • Aggregate Demand and Aggregate Supply • Aggregate Expenditure Multiplier • Finance, Saving and Investment • Monetary Policy Microeconomics • Definition of Economics • The Economic Problem • Demand and Supply • Price Elasticity of Demand • Government Actions in Markets • Production and Cost • Perfect Competition	Target: 85% of students will score 85% of higher. Results by In-Class, Online Dual Enrolled: (Specify N/A where not offered) Results by Assessment Results Campus/ Average Percent Average Score AL AN MA ME LO WO ELI DE* Total *Dual-enrollment Target Met: [] Yes [x] No [] Partially Based on recent results, areas needing improvement: The poor participation of campuses in this	Discipline Group (previously known as the Economics Cluster) designated a group of instructors to formulate questions. Each campus was required to administer the tests and compile the results to be submitted to two instructors who were assigned the task of analyzing and summarizing the results. The Cluster was unable to perform this assessment because most of the campuses failed to submit their test results by the due date. Many reasons can be attributed to the poor response rate but most prominent among them were disagreements over the type of questions on the test, the topics covered on the test and the deadline for administering the test. These problems were exacerbated by the lack of accountability that characterized the previous administrative structure of the college. Current actions to improve CLO based on							
· · · · · · · · · · · · · · · · · · ·		Monopolistic Competition	which could not have been used to generate meaningful results to serve as a good	and closely supervised by a Pathway Dean - is committed to making the necessary effort to							
Outer interior (il useu).		Other Method (if used):	source of reference.	'							

Economics

Sample Size (S	Specify N/A	where r	not offered
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Campus/ Modality	Total # Sections Offered	# Sections Assessed	Students Assessed			
	Offered	Assesseu	#	%		
AL	17	0	0	0		
AN	30	0	0	0		
MA	17	0	0	0		
ME	0	N/A	N/A	0		
LO	23	0	0	0		
WO	15	0	0	0		
ONLINE	24	0	0	0		
DE*	N/A	N/A	N/A	N/A		
Total	126	0	0	0		

^{**}Dual-enrollment

Results by CLO Criteria: (Specify N/A where not offered)

**Dual-enrollment

Current results improved:

[] Yes [] No [] Partially Strengths by Criterion/ Question/Topic: Weaknesses by Criterion/ Question/Topic: the low level of participation and poor quality of data collected in the previous period.

With each campus represented on the Committee, the level of consultation with members has greatly improved and the Steering Committee, in turn is making an effort to solicit the views of colleagues on their respective campuses so that the Committee's decisions are broad-based and representative of the views of the Discipline Group. Steering Committee members are also making an effort to have a thorough understanding of the data collection, analysis and the reporting process, so that they can provide a clear guidance to Discipline Group members on their respective campuses to help improve the quality of data collected.

I am hopeful that the improvement in the level of participation and the more cooperative atmosphere that prevails among members of the Discipline Group will ultimately result not only in a better quality data, but also a timely submission of data needed to prepare reports. These actions will be implemented in Spring 2018

Next assessment of this CLO: Spring 2019

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 *English*

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: This program is designed for students who plan to transfer to a college or university for a Bachelor of Arts or a Bachelor of Science in English. Creative Writing or Writing and/or Rhetoric as an entry-level professional writer.

English, Creative W	riting or Writing and/or Rhetoric as an entry-level p	professional writer.		
Core Learning Outcome	Evaluation Methods	Assessment Result	ts	Use of Results
CLO: Critical thinking Students will demonstrate the ability to evaluate evidence carefully and apply reasoning to decide what to believe and how to act. Operationalized as: the ENG Discipline Group selected 1 of our existing Student Learning Outcomes (SLO): Student analyzes written, oral, and	Direct Measure: Student essays from ENG 241. Rubric attached. To assess critical thinking, the ENG Discipline Group selected 1 of our existing Student Learning Outcomes (SLO): Student analyzes written, oral, and visual texts. In Spring 2018, a subcommittee of 7 full-time disciplinary faculty designed a 2-criteria rubric to measure student learning for SLO 2 and for SLO 4, Student integrates evidence and competing primary and/or secondary claims effectively into argument-based writing (or other) assignments. The CLO assessment did not use SLO 4. The assessment of this SLO will be discussed in the 2017-18 Annual Planning and Evaluation Report. The faculty subcommittee tested the two SLO rubrics used by norming them against samples from Fall 2017 semester ENG 241 students.		Enrollment: n, oral, and ructure, and under ing 2018 age Score 2.43 2.25 1.42 2.33 2.23 Enrollment: n, oral, and	Previous action(s) to improve CLO: None - This is the discipline's first attempt to assess CLOs; therefore, past results are unavailable. Target Met: [] Yes [] No [X] Partially Based on recent results, areas needing improvement: Assignment design: The ENG Discipline needs to further investigate the alignment of assignments to student learning outcomes (SLOs). The data comparing on campus and online versions of the course demonstrate that student success varied between these two delivery modes, which may be related to the type of assignments given in each setting. Faculty development that focuses on assignment design would help ensure that assignments incorporate student learning outcomes without mandating particular pedagogical approaches that would limit academic freedom.
visual texts.	The samples were provided by 2 of the faculty on the committee. This assessment relied upon random sampling of students. Samples were generated by the Office of Student Success Initiatives (OSSI). For each section, a sample of 5 students and 3 alternates was generated. Additionally, OSSI generated a list of all students in ENG 241 who were enrolled in the Liberal Arts-English Specialization degree program. Faculty who taught sections of ENG 241 were requested to provide a written assignment and responses written by 5 of those randomly selected students and all English Specialization		English cannot be on/Topic: lyze texts	Additionally, the assignments submitted as part of this assessment could be used as a starting point for discussing the variety of ways SLOs can be incorporated. Incorporation of critical or literary terminology in analysis papers and acknowledging competing, or at least alternative, claims are consistent area of concern. This may suggest that assignments do not explicitly require that students apply the terminology taught in the classes and/or that the assignments assessed do not require students to incorporate other points of view into their papers. Current actions to improve CLO based on the results:

students identified by OSSI. Only 4

with competency, as demonstrated by the

overall average score of 2.23 on SLO 2a:

Revision of Course Content Summaries: The ENG

Discipline Group has formed a committee to

English

Specialization students were enrolled in ENG 241, and all are represented in the data set.

Spring 2018 data were scored by 5 disciplinary faculty in September 2018; 2 of these disciplinary faculty had been part of the rubric generation. Each student essay was scored by 2 faculty readers. During the scoring session, faculty had the opportunity to discuss divergent scores and used these discussions to refine application of the scoring rubrics.

Sample Size (Specify N/A where not offered)

Campus/ Modality	# of Total Sections Offered	# Sections Assessed	# Students Assessed
AN	3	3	14
MA	1	1	6
WO	1	1	6
ELI	4	4	21
DE*	N/A	N/A	N/A
Total	9	9	47

^{*}Dual-enrollment

Identifies content, structure, and rhetorical features of the text(s) under consideration in the paper.

Weaknesses by Criterion/ Question/Topic: Not all students used literary terminology or other critical terminology in their analyses (SLO 2b: Appropriately employs critical terminology in written work).

Limitations of the analysis: Though ENG 241 is the most frequently offered 200-level literature course in the discipline, it was not offered on all campuses, nor were many sections offered on each campus. Average scores, especially on the Woodbridge campus, skewed lower due to performance of one student in the small 6-student sample. The next time this SLO is assessed, we will determine whether variation between campuses is a trend that needs to be addressed in either the Discipline Group or the Language Pathways Council.

We have discovered that capturing data from our specialization students is extremely challenging. The Discipline Group committee that developed this assessment did not feel that it would be appropriate to capture data from specialization students in ENG 111, 112, or 125 as these are the foundational courses and would not truly allow us to differentiate between our specialization students' learning and that of other students.

review the 200-level literature Course Content Summaries (CCS). This committee will recommend changes to the CCS for ENG 241 and other literature courses to ensure that the SLOs for the discipline and specialization are better reflected in the CCS (Spring 2019).

Initiation of a standing subcommittee for assessment: The ENG Discipline Group will initiate a standing subcommittee for assessment. This subcommittee should develop assessment plans, including developing rubrics to assess the SLOs for both the Discipline and English Specialization as well as for the Core Leaning Outcomes (Spring 2019).

Professional Development—Rubric and assessment development: The committee tasked with developing assessments and creating rubrics should receive some training to assist with these tasks (Spring-Fall 2019).

Professional Development—Assignment Design: The ENG Discipline Group will investigate resources for assignment design professional development (Spring-Fall 2019).

Professional Development—Scoring Opportunities: The initial group of 5 faculty scorers appreciated the opportunity to score and have conversations about these essays. The discussions about divergent scores and the assignments that prompted student work assessed were valuable opportunities to better understand teaching and learning. In the future, the ENG Discipline Group would like to broaden this opportunity to include other full-time disciplinary faculty. Adjunct faculty, too, would find this activity valuable; however, the Discipline Group recognizes that there should ideally be some sort of stipend or additional compensation provided as this is a labor-intensive assessment method (seek funding for 2019-20 Academic Year).

Next assessment: Spring 2020

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 *History*

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: History is the study of the past, in an attempt to understand the human condition as it changes and remains the same over time. At its core, the Discipline aims at satisfying and stimulating intellectual curiosity by encouraging questioning and developing knowledge. Finally, the Discipline is actively engaged in translating the skills acquired in the classroom to a wide-range of professional settings that require effective communication, critical thinking and information literacy such as law, education, journalism, policy analysis, and archives.

⊏va	luation Meth	ods		Asse	essment Resul	ts	Use of Results				
		Western	Targ	et: 80% of students			Previous action(s) to improve SLO: 1. Attended one meeting on the overview of SLO				
P rovided Ru		or Question		Results by Campus/Modality	Average Score	Percent ≥ Target	testing. Attended another meeting concerning the rewrite of the SLOs 2. Rewrote SLOs and had them approved.				
Other Metho Sample Size		A where not		AN MA	919 849	92% 88%	Discussed at multiple Discipline meetings the nature and goals of the SLOs Created a series of online polls to find out which topics the professors would like to use in				
Campus/ Modality	Total # Sections	# Sections Assessed		WO ONLINE DE*	83% 79%	85% 81%	the SLO questions. 5. Implemented History SLOs for the first time. Target Met:				
ΔΙ		1			1:		[X] Yes [] No [] Partially				
AN MA	39	12		Results by SLO	F	lesults	Based on recent results, areas needing improvement:				
ME LO	N/A 23	N/A 8		1. Grammar	Score 81%	≥ Target 83%	Communication: The professors need to be communicated with to a much greater extent. They need to have input on what the questions				
ONLINE	15 17	12 3		3. Comprehension of		77% 88%	are and how they are to be tested. 2. It is necessary that the whole process begins				
Total	119 ment	43		Analysis of Primar Source	-	87%	earlier. For example: NOVA Online questions should be developed before July.				
				5. Logical Thinking 6. Understanding of Historical Context	85% 85%	3. Dual enrollment students need to be tested. Current actions to improve SLO based on the results:					
			[]Y	es [] No [] Partially	/	1. We have created a series of online pools to allow the professors to decide which areas they think it would be best to test. 2. Have dual reached out to both NOVA Online					
			Think Wea l There	king and Understand knesses by Criterion e two greatest weak	ling of Historica on/ Question/T nesses are both	and Dual Enrollment for their assistance. 3. Increase our goal from 80% of the students meeting the goal to 90%. Next assessment of this SLO: Fall 2019					
	Civilization In Direct Meas Provided Ru Topics Other Methol Sample Size offered) Campus/ Modality AL AN MA ME LO WO ONLINE DE* Total	Civilization HIS 101 Direct Measure: Essay Provided Rubric Criteria of Topics Other Method (if used): Sample Size (Specify N/soffered) Campus/ Modality Total # Sections Offered AL 12 AN 39 MA 13 ME N/A LO 23 WO 15 ONLINE 17 DE*	Direct Measure: Essay Provided Rubric Criteria or Question Topics Other Method (if used): Sample Size (Specify N/A where not offered) Campus/ Modality Total # Sections Offered AL 12 4 AN 39 12 MA 13 4 ME N/A N/A LO 23 8 WO 15 12 ONLINE 17 3 DE* Total 119 43	Civilization HIS 101 Direct Measure: Essay Provided Rubric Criteria or Question Topics Other Method (if used): Sample Size (Specify N/A where not offered) Campus/ Modality Total # Sections Assessed AL 12 4 AN 39 12 MA 13 4 ME N/A N/A LO 23 8 WO 15 12 ONLINE 17 3 DE* Total 119 43 *Dual-enrollment Targ Result Result Total # Sections Assessed Curr [] Y Street The first Think Wea There	Direct Measure: Essay Provided Rubric Criteria or Question Topics Other Method (if used): Sample Size (Specify N/A where not offered) Campus/ Modality	Civilization HIS 101 Direct Measure: Essay Provided Rubric Criteria or Question Topics Other Method (if used): Sample Size (Specify N/A where not offered) Campus/ Sections Offered AL 12 4 AN 39 12 MA 13 4 ME N/A N/A N/A LO 23 8 WO 15 12 ONLINE 17 3 DE* Total 119 43 *Dual-enrollment Target: 80% of students will achieve a s Results by Current Assessed Results by Compus/Modality Average Score	Direct Measure: Essay Provided Rubric Criteria or Question Topics Other Method (if used): Sample Size (Specify N/A where not offered) Campus/ Sections Modality Total # Sections Offered				

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 **Physics**

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Program Purpose Statement: The curriculum is designed for persons who are interested in a professional or scientific program and who plan to transfer to a four-year college or university to complete a baccalaureate degree program with a major in one of the following fields: agriculture, biology, chemistry, pre-dentistry, forestry, geology, home economics, nursing, oceanography, pharmacy, physical therapy, pre-medicine, science education, or mathematics.

	omics, nursing, oceanograpny, pnarmacy, pnysics, pn	ysicai inerapy, pre-medicine	IIUS.		
Core Learning Outcome	Evaluation Methods	Assessi		Use of Results	
CLO: Critical thinking	General College Physics I PHY 201	Semester/year data colle	Previous action(s) to improve CLO:		
Students will think	Direct Measure: A problem on a thermodynamics	Target: Achievement targe	at is considered a	ot 70% success	The physics faculty stressed over
critically in	topic was proposed to all the students in the	rate with a score of 2 on all			the importance of showing all the
evaluating	sections participating to the assessment. The	Tate War a cools of 2 on an	020 000	oomone ontona.	steps to solve a problem. It is
information, solving	topic is generally discussed in the last weeks of	Results by In-Class, Online	e, Dual Enrollme	nt: (Specify	important to follow the train of
problems and	the semester, and hence the problem was	N/A where not offered)	,	(1)	thoughts leading to the solution
making decisions.	presented in the student's final exams.	,			and most important is to write it
		The number of students in			down on paper.
Operationalization:	The problem involved calculating the specific heat	students (with an average			
Specifically for the	of an alloy heated at a high temperature and	statistical significance to di		sults from	Target Met:
physics learning	subsequently dropped in a cup of water. From the	campus to campus, class to	o class.		[x]Yes[]No[]Partially
outcome, students	temperature drop interval, and the masses values,	Average/Mean Score by I	n Class Online	Dual	Board on recent recults areas
will be able to use mathematical	one should be able to determine the unknown quantity. To solve the problem, students need to	Enrollment: (Specify N/A w			Based on recent results, areas needing improvement:
reasoning to draw	use their critical thinking skills to correctly picture	Enrollment. (Specify N/A w	Current	Previous	As always the case, the major
logical conclusions	the situation. For example, in the text it is written	Results by Campus/	Results	Results	area needing improvement is the
and make well-	that the alloy cools by 50 degrees, students must	Modality	[Semester/	[Semester/	understanding of the connection
reasoned	realize that this information translates into the use	oudey	year]	year]	between the math equations and
decisions.	of a negative temperature gauge in their solutions.	In-class	, , ,	•	the related physics equations
	A common rubric was used for scoring.	Online			simply written with different
[x]CT		DE*			symbols. This sometimes
	Three evaluating criteria were established	Total Average			disorients students with not
	associated with correctly answering the assigned	*Dual-enrollment		_	strong math preparation.
	problem according to three steps:				Current actions to improve
	1) Identifying the correct formula, 2) Utilizing the correct information and the	Results by CLO Criteria:			Current actions to improve CLO based on the results:
	parameters given	The score of "2" is the high			Have more sections comply with
	3) Using the correct algebra to solve the problem.	criteria. Students with a sco			the request to perform the SLO.
	Each criteria was scored from 0 to 2.	critically in evaluating the in			Several general reminder emails
	This method was also used in the previous SLO	the right decisions, and in some correct reasoning.	solving the proble	em with a	were sent over the semester, but
	assessment for the Fall 2016.	Correct reasoning.			not all sections adhered.
	A total of 112 students participated to the SLO, 78				Possibly more personal emails
	of them were A.S. Science program placed. In				will be sent, in the hope that we
	Spring 2018, Dual Enrollment classes were not				will reach a higher participation
	taking PHY 201.				rate.
	The Online course did not send any results.				Next assessment of this CLO:
					Fall 2018

Physics

All campuses took part of the assessment, but unfortunately not all sections joined the project.

Sample Size (Specify N/A where not offered) Note: The second number marked (between parentheses) represents the data only for the students in A. S. Science.

Campus/ Modality	Total # Sections Offered	# Sections Assessed	Students Assessed			
		7.000000	#	%		
AL	2	1	10	9 (9)		
			(7)			
AN	4	1	16	14		
			(13)	(17)		
MA	2	1	21	18		
			(19)	(24)		
ME	N/A	N/A	N/A	N/A		
LO	2	2	36	32		
			(17)	(22)		
WO	2	2	29	26		
			(19)	(28)		
ONLINE	1	0	Ó	Ó		
DE*	N/A	N/A	N/A	N/A		
Total	13	7	112			
			(78)			

^{*}Dual-enrollment

Reported in the table below are the results for all sections.

Results by	Asses	Current sment Results oring 2018	Previous Assessment Results Fall 2016			
CLO Criteria	Score	% of Students <u>></u> Target	Score	% of Students <u>></u> Target		
1. Identify the correct formula	2	76% (78%) 6% (8%) > target	2	81% (81%) 11% (11%) > target		
2. Correctly insert the given into the context of the problem	2	76% (78%) 6% (8%) > target	2	73% (71%) 3% (1%) > target		
3. Solve the problem with accurate use of algebra	2	75% (76%) 5% (6%) > target	2	73% (74%) 3% (4%) > target		

To be noted is the difference between the 2016 and the 2018 percentage of students who were able to identify the correct physics formula necessary for the solution: 81% respect to 76%. It seems like more students better understood the connection between the problem and the physics. But on a deeper analysis, in the 2018 overall results the same group was able to move forward and complete effectively the problem using critical thinking skill, while in 2016, 8 % of the students was lost and not covered all the correct set of steps.

With some small deviations, in 2018, 76% of the population started, and successfully ended the assessment.

The target of 70% was achieved and passed by 5%.

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Sociology

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Core Learning Outcome		Evaluation	on Method	ls		Assessment Results		sults	Use of Results			
CLO: CT is the	Coursels): SOC 200	Principles	of Soc	iology	Semester/Year Data Collected: Spring			Previous action(s) to improve CLO if applicable):			
ability to use	000.00(0	,. 000 200	1 morphoo	0, 000	lology			ottou. opinig	Our first attempt at an assessment in Fall 2017 did not address the			
information, ideas	Direct Me	asure desc	cribed:			201	0		SLOs and were instead too narrowly focused on one specific			
and arguments		easured us		tiple ch	oice	Tar	get: 70%		concept.			
from relevant	questions		ing romai	upio oi	0.00		90		Spring 2018 data collection			
perspectives to	40.000.01.01	•				Ove	erall Results by In-Cla	ss. Online.	We chose a specific SLO for the discipline (understanding cultural			
make sense of	(Method a	ttached to	email or re	port.)			al Enrollment: (Specify		knowledge) and a general education SLO (critical thinking). This was			
complex issues	(, ,			ered.)		already a vast improvement over our attempt in Fall 2017 where our			
and solve	Rubric Cr	iteria/Ques	stion Topi	cs:				Average	evaluation was based on a specific concept rather than an SLO.			
problems.	Critical Th					F	Results by Modality	Score	For the critical thinking SCLO we asked students to read a short			
		ocial group	s influence	teens.		In-	-class	78%	article and then answer 10 multiple choice questions about the			
Operationalization:							nline	N/A	article.			
for the critical		and social				DE		N/A	Overall results showed that all 5 campuses achieved our target score			
thinking CLO we		d social pre				_	- otal	14// (of 70% and above.			
asked students to		d family str					ial-enrollment		Target Met: 70%			
read a short article		nd minor so		ocializa	ition		sults by CLO Criteria:	(Specify NA	[x]Yes[]No[]Partially			
and then answer	7. peer pro	essure					ere not offered.)	(Opcony IV)	Areas needing improvement, based on recent results:			
10 multiple choice	8. Identific	ation of evi	dence.			VVII			Data sets will be broken down by teaching modality, class, campus,			
questions about	9. connec	ting claims	and evider	nce			Results by	VG Score	and adjunct/full-time instructor.			
the article.	10. outlinii	ng main poi	ints of an e	ssay			Criteria/ A	10 00010	All faculty will administer the evals on Blackboard to minimize the			
							1.	51%	effects of different testing on results. These changes will be			
	Sample S	ize (Specify	y NA where	e not of	fered.)		2.	53%	implemented in Fall 2018.			
	Campus/	# of	# of	Stud			3.	89%	Current actions to improve SLO based on the results:			
	Modality	Sections	Sections				4.	78%	We have already taken a number of steps to improve future SLO			
	_	Offered	Assessed		%		5.	81%	evals. We were the first discipline group to agree on one textbook for			
	AL AN	22	5 11	•	75 75		6.	38%	all intro courses across campuses. This decision was made in the			
	MA	22	3	66	85		7.		spring of 2017 and implemented across all campuses in Fall 2017.			
	ME	4	n/a	00	00			93%	We will also be discussing the following issues in the upcoming			
	LO	8		84	63		8.	79%	discipline meetings to improve our evaluations:			
	WO	10		147	- 00		9.	87%	The inclusion of ELI data			
	ELI		0				10.	75%	Constructing an excel spreadsheet to break down data into more			
	DE*		n/a				Total	72%	specific categories for analysis (for example, to look at individual			
	Total			613			engths/Weaknesses:		students)			
	*Dual-enro	ollment					our benchmarks of 70%	√ passing for	Setting the benchmark higher			
							h SLO's.		Addressing areas of the Spring 2018 where students seemed			
							weakness in our resu		weakest			
							not break out data by i	individual	Next assessment of this CLO (semester/year):			
							dents.	., .	The next assessments will be administered in Fall 2018 and Spring			
								assessment(s)	2019. They will both evaluate the CLO of Civic Engagement.			
						(If a	pplicable):n/a					

Critical Thinking Core Learning Competency Assessment Report: 2017-2018 Student Development

NOVA Mission Statement: With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class in-person and online post-secondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and globally competitive workforce.

Discipline Purpose Statement: Student Development Success provides students with skills in time management, note taking and test preparation, academic planning, career

decision making, financial literacy and critical thinking. Students also learn about NOVA policies, procedures and resources.

Core Learning	l	in incracy and	i cilicai illili	King. Student	s also le	aiii aboul	NOVA policies, procedures and resources.						
Outcome				on Methods				essmen				Use of Results	
CLO: Critical	Stu	dent Develo	pment SD\	/100			Semester/y	ear data	collect	ed: Spr	ing 201	8	Previous action(s) to improve CLO:
thinking												The SDV Curriculum Committee has a	
Students will think		ect Measure	-										yearly mandatory SDV In-Service
critically in				critical thinki			critical thinki					College	where we have instructors present on
evaluating	eml	oedded in a (College Res	ource Quiz in	SDV 10	00.	Resource ar	nd Critica	al Thinki	ng Quiz			best practices on student engagement
information, solving													and learning (May 2016, May 2017,
problems and		estion Topic					Results by I				nrollme	ent:	June 2018)
making decisions.				ty; developm			(Specify N/A						
				problem critic	cally; wh	ıat is	Campus/	Q9	Q10	Q15	Q17	Q18 (%)	The Committee has also considered
Operationalization:	criti	cal thinking?					Modality	(%)	(%)	(%)	(%)		using a different textbook but our
SDV 100: Identify							AL	97	93	31	11	83	primary goal has been to keep the
three to five aspects	Sar	nple Size (S		vhere not offe			AN	95	88	24	11	80	textbook affordable by using OER
of critical thinking		Campus/	Total #	# Sections	Stud		MA	98	94	28	3	86	(Open Education Resources). We
such as: identifying faulty logic,		Modality	Sections Offered	Assessed	Asses		ME	98	92	16	78	80	have considered that since the textbook is only available online that it
problem-solving,		AL	21	13	# 230	% 47	LO	99	93	23	13	84	discourages students from reading it.
and asking		AN	36	32	678	69	WO	100	96	100	100	100	The committee reviewed textbooks in
questions/probing		MA (+1	15	9	161	41	ONLINE	96	68	13	76	90	2017-18 and we voted against the
etc.		SDV 101)					DE	100	95	24	86	100	different options because they could
		ME SDV	11	5*3	49	23	Total	98	90	32	47	88	not remain free. At this time we have
		101					Average	30	30	32	71	00	not found a better free textbook that
		LO	18	13	250	50	*Dual-enrollr	nent					covers the topic we review in this
		WO	22	5*2	109	20							class.
		ONLINE	24	17	246	59	Current res	ults imp	roved:				
		DE*	10 157	1*1 95	21 1744	19 42	[] Yes [] N	o [] Pai	rtially [x] N/A F	irst tim	e we	Most of the assignments required self-
	*D	al-enrollmen		95	1/44	42	assess this t		, .	-			assessment and reflection and
	Du	ai-enroilmen	ι					-					students feel more comfortable with
	14	sections subj	mitted SLO	data but only	one Du	al	Strengths b						those assignments than assessments
				nitted data wa			Questions 9	, 10, and	l 18 had	the bes	t score	s due to	and quizzes that required them to
				ted data did n			the fact that						review the textbook available online.
				nrollment offe			test taking s						NOVA Online, formerly ELI differed on
		plate of SDV	are not the b						when/where they assessed the critical				
		e is still a ro			, ,	broad enough that even without reviewing the					thinking questions. It was not in the		
		Itextbook they can be answered										first quiz/assessment and not	
				continues to n			s		4		/ T		attached to a college resource quiz
	to s	ubmit assign	ments. Insti	ructors are co	ntacted	4 times	Weaknesse						but it was its own separate quiz. This
	thro	oughout the s	emester an	d twice after t	he sem	ester	Questions 1						allows discussion that putting a critical
	rem	inding them	to submit th	e data, instru	ctional \	ideos,	15 is a ques						thinking reading assignment/
							several right	answers	s and th	ere is m	ore roc	om tor	

Student Development

step by step handouts with pictures are included and the Co-Chairs information is included for instructors to receive help. This year Associate Deans were provided a list of the instructors who did not submit data by the end of the semester twice. Woodbridge lost some data from a class whose instructor's data had differently worded questions. Instructors are reminded to not change the curriculum at the In-Service and via monthly e-mail reminders.

³ This is the first time that the MEC Campus SDV 101: Orientation to Healthcare is included in the assessment data. A Counselor at the MEC Campus ensured that all the all-campus courses had the same quiz with the questions assessed. Collection of data was difficult with instructors not responding to requests nor following through with their Dean of Student's stern deadlines to submit their data. Another Counselor was able to access a few section's data by requesting the Blackboard administrator access.

Major improvement on data overall is due to the support and insistence of Associate Deans of Student Development on each campus.

error. Question 17 had the highest wrong answers because it is not worded directly from the text but it is inferred from the reading material and requires a bit more critical thinking to figure out the best answer.

assessment as its category later on in the class may improve the results.

Target Met:

[] Yes [] No [x] Partially

Based on recent results, areas needing improvement:

The Critical Thinking CLO is currently located along with College Resources and Communication Skills. Comparing with NOVA online on where they put their assessment, students may do best if Critical Thinking has its own category after Academic and Test-Taking skills.

Current actions to improve CLO based on the results:

Unfortunately Fall 2018 assessment is well underway and too late to make any improvements or changes. Critical Thinking is not going to be assessed for Spring 2019. Comparing Spring 2018 to Fall 2018 would allow for more results to see if there is improvement or if the data stays the same.

Next assessment of CT:

Spring 2020

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

THE NOVA COMMITMENT

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

THE STRATEGIC PLAN GOALS AND OBJECTIVES

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

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

GOAL 1: Every Student Succeeds

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

GOAL 2: Every Program Achieves

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

GOAL 3: Every Community Prospers

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

Northern Virginia Community College

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