

# Thomas Nelson Community College/Old Dominion University

2018-2019 Catalog

## ARTICULATION AGREEMENT

Associate of Science, Math Education to Bachelor of Science Physics,  
Virginia Teacher Licensure with Monarch Teach Courses

Thomas Nelson Community College Associate of Science in Math Education				Old Dominion University Equivalency			
ENG	111	College Composition I*	3	ENGL	110C	English Composition	3
SDV	100	Orientation	1	UNIV	100	University Orientation	1
MTH	161	Precalculus I*	3	MATH	162M	PreCalculus I	3
CSC	201	Computer Science I* (Substitute 3 credit computer science course for this 4-credit programming course)	4	CS	150	Intro to Programmin In C++	4
Wellness Elective		Elective	2	---	ELE	Elective	2
ENG	112	College Composition II*	3	ENGL	211C	English Composition	3
MTH	162	Precalculus II*	3	MATH	163	PreCalculus II	3
MTH	263	Calculus I*	4	MATH	211	Calculus I	4
MTH	264	Calculus II*	4	MATH	212	Calculus II	4
MTH	267	Differential Equations*(used for free elective)	3	MATH	307/280	Ord. Differential Equations	3
CST	100	Principles of Public Speaking	3	COMM	101R	Public Speaking	3
History Electives		History Electives	6	To meet Lower-Division General Education Package			6
EDU	200	Intro to Teaching and Profession*	3	Monarch Teach Courses: TLED 195, STEM 101 and STEM 102			3
PHY	241	Gen Univ. Physics or Univ. Physics I*	4	PHYS	231N	University Physics I	4
PHY	242	Gen Univ. Physics or Univ. Physics II*	4	PHYS	232N	University Physics II	4
Humanities Elective		Humanities Elective	6	To meet Lower-Division General Education Package			6
Social Science Electives		Social Science Electives	6	To meet Lower-Division General Education Package			6
<b>Total Credits for AS Degree</b>			<b>62</b>	<b>Transfer Credits from AS Degree</b>			<b>62</b>
<b>Additional Required Courses for BS Degree (offered at TNCC)</b>				<b>ODU Equivalency</b>			
CHM	111	General Chemistry I*	4	CHEM 121N/122N		Found. of Chemistry I and Lab	4
CHM	112	General Chemistry II*	4	CHEM 123N/124N		Found. of Chemistry II and Lab	4
NAS	131 or 132	Astronomy I* or II*	4	PHYS	103N or 104N	Introductory Astronomy I or II	4
<b>Additional Credits Required</b>			<b>12</b>				<b>12</b>

<p><b>*Indicates a departmental requirement at ODU, not automatically satisfied by completion of articulation agreement. Student must earn a C or better.</b></p> <p><b>The lower division general education requirements will be met by completion of all courses outlined in this program agreement.</b></p> <p><b>To participate in this articulation agreement please visit Old Dominion University's website to complete The Letter of Intent: <a href="http://www.odu.edu/transfer/vccs">http://www.odu.edu/transfer/vccs</a></b></p> <p><b>Completion of this articulation agreement alone does not guarantee admission to Old Dominion University. All students must meet the requirements set by the Office of Admissions and the Guaranteed Admissions Agreement (GAA). Please visit <a href="http://admissions.odu.edu">admissions.odu.edu</a> for more information regarding guaranteed admission to Old Dominion University.</b></p>	<b>Requirements for BS to be taken at ODU</b>			
	PHYS	323	Modern Physics I	3
	PHYS	355	Math Methods	3
	PHYS	319	Analytical Mechanics	3
	PHYS	425	Electromagnetism I	3
	PHYS	303	Intermediate Experimental Physics	3
	PHYS	413	Methods of Exp. Physics	3
	PHYS	120 or 309	Physics in the 21 <sup>st</sup> Century or Physics on the Back of an Envelope	1
	PHYS	499W or (489W& 490W)	Senior Thesis, or Senior Thesis I & II	3
	STEM	201	Knowing and Learning in STEM Ed.	3
	STEM	202	Classroom Interactions in STEM Ed.	3
	STEM	401	Project Based Instruction in STEM Ed.	3
	PHYS	468W	Research Methods in Math & Science	3
	STEM	402	Perspectives on Science & Math	3
	STEM	485	Apprentice Teaching	9
	<b>Credits to be taken at ODU</b>			<b>46</b>
	<b>SUMMARY</b>			
<b>Transfer Credits from AAS Degree</b>			<b>62</b>	
<b>Additional Credits Required</b>			<b>12</b>	
<b>Credits to be taken at ODU</b>			<b>46</b>	
<b>Total Credits</b>			<b>120</b>	

Susan English 7/10/19  
Signature Date

Dr. Susan English  
Vice President for Academic Affairs  
Thomas Nelson Community College

[Signature] 7/12/19  
Signature Date

Dr. Brian Payne  
Vice Provost, Academic Affairs  
Old Dominion University