Northern Virginia Community College 2007-2008 Catalog

SCIENCE - Mathematics Specialization
Associate of Science Degree **AL, AN, LO, MA, WO**

Purpose: The curriculum is designed for persons who plan to transfer to a four-year college or university to complete a baccalaureate degree. This curriculum is designed to prepare students to major in one of the following fields: mathematics, mathematics education, statistics, operations research, applied mathematics or computer science.

Transfer Information: Students are advised to work closely with the faculty and counseling staff for program and course scheduling. Electives should be chosen carefully to meet requirements of transfer institution. The responsibility for proper course selection rests with the student.

Recommended Preparation: Satisfactory completion of the following high school units or equivalent as a minimum: 4 units of English, 4 units of college preparatory mathematics, 1 unit of laboratory science, and 1 unit of social science.

Two Years		**Credits**
1st Semester		
CSC	110 Introduction to Computing	3
ENG	111 College Composition I	3
[1]HIS	Elective	3
MTH	173 Calc. with Analytic Geometry I	5
[2]___	Social Science Elective	3
SDV	Elective	1
	Total	**18**
2nd Semester		
CSC	130 Scientific Programming or	
	MTH 286 Discrete Mathematics	3-4
[3]ENG	112 College Composition II	3
MTH	174 Calc. with Analytic Geometry II	5
[2]___	Social Science Elective	3
	Total	**14-15**
3rd Semester		
[4]___	Humanities/Fine Arts Elective	3
MTH	277 Vector Calculus	4
[5]MTH	Elective	3
[6]___	Natural Science/Lab Elective	4
[7]PED	116 Lifetime Fitness & Wellness	1
	Total	**15**
4th Semester		
[4]___	Humanities/Fine Arts Elective	3
[5]MTH	Elective	3-4
[6]___	Natural Science/Lab Elective	4
[7]PED/RPK		1
SPD	110 Intro. to Speech Communication	3
	Total	**14-15**

Total credits for the A.S. Degree in Science with a Specialization in Mathematics = 61-63.

Twenty of these credits must be taken in MTH courses for transfer to a four-year institution with a major in Science.

[1] HIS 101, 102, 121, or 122 recommended. Although not required, students are encouraged to take a two-semester sequence in history, depending on the requirements of the transfer institution.

[2] The social science electives may be selected from the economics, geography, history, political science, psychology, or sociology (includes anthropology) courses listed on page 54. Base selection on requirements of transfer institution.

[3] ENG 125 may be substituted with the advice of a counselor or faculty advisor according to requirements of transfer institutions.

[4] The humanities/fine arts elective may be selected from list on page 54. Elective should be selected with advice of a counselor or faculty advisor to meet requirements of transfer institution.

[5] Math electives should be chosen carefully from 200-level courses and after investigation of requirements of the institution to which transfer is intended.

[6] Science courses (with laboratories) may be selected from the following: BIO 101-102, CHM 111-112, PHY 231-232 or PHY 241-242, PHY 243, GOL 105-106, or any 200-level biology, chemistry, geology, or physics course.

[7] The PED requirement may be met by one of the following options: PED 116, 2 cr.; PED 116, 1 cr. plus a PED activities course, 1 cr.; or PED 116, 1 cr. plus RPK activities course. PED 116 is offered as both a 1-credit and a 2-credit course.