

SECONDARY EDUCATION - MATHEMATICS (AAT)

Award: Associate of Arts in Teaching

No. of credits required: 61

For more information: Contact *Brigid Cook*,

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Program Description

The A.A.T. degree program prepares students for transfer into a four-year college or university education program which results in certification to teach mathematics at grades 7 through 12. High school preparation should include four units of English, three units of math of which two should be algebra, and three units of science.

Students must obtain a passing score on Praxis CORE or an alternative measurement of basic skills as set forth by COMAR and MSDE in order to earn an A.A.T. degree. Students should plan to take Praxis CORE, which includes core English and math competencies, near completion of 45 credit hours. Information can be obtained from Laura Hutton (lhutton@harford.edu). Passing scores on Praxis, SAT, GRE, or ACT may be substituted in place of Praxis CORE, but may not be accepted by all transfer institutions.

Program Goals

Upon completion of the Teacher Education A.A.T. degree programs, students will be able to

1. Demonstrate professional teaching behavior including effective communication.
2. Discuss the development of education/curriculum and select instructional techniques appropriate for a variety of students.
3. Describe influences on growth and development, as well as theories of learning.
4. Make decisions in accordance with legal and ethical standards.
5. Summarize past and present practices pertaining to education.

Transfer Information

This program requires the successful completion of Praxis CORE and at least a 2.75 GPA. Because the program courses are chosen to fulfill predetermined outcomes, the entire program will transfer to any four-year state or private college in Maryland; however, students are not guaranteed admission to any four-year institution and must apply to and meet the criteria required by that particular institution. Additionally, courses in the program will transfer to private and public colleges nationwide.

Past graduates of this program have transferred to four-year state colleges and universities in Maryland and to private and public colleges nationwide. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses.

Employment Information

According to the United States Department of Labor, Bureau of Labor Statistics, the number of secondary teachers needed between 2019 and 2029 is expected to grow 4%. According to the U.S. Department of

Education, during the 2020-21 school year there is a critical shortage of mathematics teachers in 43 states.

Degree Requirements

Recommended Course Sequence

First Semester		Credits
EDUC 100	Professionalism and Ethics in Teaching (D)	3
ENG 101	English Composition (GE)	3
MATH 203	Calculus I (GM) ¹	4
Behavioral/Social Science Elective (GB) (https://catalog.harford.edu/general-education/#behavioral-social-science) ²		3
Physical Education Elective		1
Credits		14
Second Semester		Credits
EDUC 101	Introduction to Education: Early Childhood through Secondary ^{3,4}	3
MATH 204	Calculus II (GM)	4
PHYS 203	General Physics: Mechanics and Particle Dynamics (GS) ³	3
PSY 101	General Psychology (GB)	3
Arts/Humanities Elective (GAH) ^{2,6}		3
Credits		16
Third Semester		Credits
CIS 115	Fundamentals of Programming	3
MATH 206	Calculus III	4
PHYS 204	General Physics II: Heat, Electricity and Magnetism (GL) ⁷	4
PSY 207	Educational Psychology	3
Arts/Humanities Elective (GAH) ²		3
Credits		17
Fourth Semester		Credits
CIS 111	Programming I: C/C++	4
EDUC 217	Introduction to Special Education ^{3,4,8}	3
MATH 217	Linear Algebra	4
PSY 216	Adolescent Psychology	3
Credits		14
Total Credits		61

¹ Students that do not meet the prerequisite for MATH 203 Calculus I (GM) will take the STEM Divisional Math Assessment then plan to take summer coursework

to prepare for MATH 203 Calculus I (GM).

² Select in accordance with transfer institution requirements. HIST 104 History of the United States II (GB) (GAH) (D) is recommended to satisfy the Behavioral/Social Science (GB) in the first semester.

³ Students are required to participate in a thirty-hour field placement experience in addition to class time in EDUC 101 Introduction to Education: Early Childhood through Secondary and EDUC 217 Introduction to Special Education, generally during regular school hours

between 8:30 a.m. and 3:00 p.m.

⁴ A criminal background check and fingerprinting, at the student's expense, may be required for courses including a field placement.

⁵ CHEM 111 General Chemistry I (GL) or PHYS 101 Introductory Physics I (GL) may be substituted if not transferring to a college requiring calculus-based physics.

⁶ An arts/humanities literature course is recommended.

⁷ CHEM 112 General Chemistry II A (GL) or PHYS 102 Introductory Physics II (GL) may be substituted if not transferring to a college requiring calculus-based physics.

⁸ EDUC 217 Introduction to Special Education is a necessary requirement of the College's AAT degree, but is not sufficient to meet all special education or inclusion course requirements for four-year teacher education programs. Students may be required to take additional special education or inclusion courses as a part of the requirements for a baccalaureate degree and teacher education certification at four-year institutions.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)

English Composition (GE)

Arts/Humanities (GAH)

Interdisciplinary and Emerging Issues (GI)

Biological/Physical Laboratory Science (GL)

Mathematics (GM)

Biological/Physical Science (GS)