

# Associate in Science in Biology and Medical Pre-Professional

## Program Outcomes

This degree prepares students to transfer to a four-year institution to study upper-division science courses in a medical pre-professional program, with the ultimate goal of successful completion of an entrance exam and/or admissions requirements to a medical professional program.

## Employment Opportunities or Additional Educational Options

With this degree, students are prepared well to transfer to a four-year institution to study pre-med, chemistry, biology, health services, physics, or other related health or science fields.

## To Learn More About This Program

Contact Anna Norris at 269-782-1254 or [anorris@swmich.edu](mailto:anorris@swmich.edu) or contact Tom Beaven at 269-782-1253 or [tbeaven@swmich.edu](mailto:tbeaven@swmich.edu).

## Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students, working closely with their advisor, are permitted to substitute the courses in the General Education and MTA Courses section below according to the guidelines on page 34 of this catalog. Each general education course, prerequisite course, internship/practicum, and capstone course must be completed with a final grade of "C" or better.

## General Education and MTA Courses

### COMMUNICATIONS

Course ID	Course	Credits
ENGL 103 or ENGL 103W	Freshman English 2 (or with workshop)	3 to 4 credits
ENGL 104	Freshman English 3	3 credits

### MATHEMATICS

Course ID	Course	Credits
MATH 130	Precalculus Mathematics	5 credits

### NATURAL SCIENCE

Course ID	Course	Credits
BIOL 101	General Biology 1	5 credits
BIOL 102	General Biology 2	5 credits
CHEM 101	General Chemistry 1	5 credits
CHEM 102	General Chemistry 2	5 credits

### SOCIAL SCIENCE

Course ID	Course	Credits
PSYC 101	General Psychology	3 credits
SOCI 201	Principles of Sociology	3 credits

### HUMANITIES

Course ID	Course	Credits
ART 110	Art Appreciation	3 credits
PHIL 201	Introduction to World Religion	3 credits

### Major-specific Required Courses

Course ID	Course	Credits
EDUC 120	Educational Exploration and Planning	1 credit
CHEM 201	Organic Chemistry 1	5 credits
CHEM 202	Organic Chemistry 2	5 credits
PHYS 101	Introductory Physics 1	5 credits
PHYS 102	Introductory Physics 2	5 credits

**Total Program Credits: 64**

## Additional Notes About the A.S. in Biology and Medical Pre-Professional Program

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites are listed below in the Example Course Sequence section.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.

### Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

#### FIRST SEMESTER

Courses	Credits	Prerequisites (Minimum Grade of "C" Required)
EDUC 120 Educational Exploration and Planning	1 credit	ENGL 115 or test score (concurrent enrollment allowed)
BIOL 101 General Biology 1	5 credits	CHEM 100, or one year of high school chemistry with minimum grade of B taken within the last 5 years, or test score; ENGL 115 or test score (concurrent enrollment in ENGL 115 allowed)
CHEM 101 General Chemistry 1	5 credits	MATH 127 or test score (concurrent enrollment allowed); CHEM 100, or one year of high school chemistry with minimum grade of B taken within the last 5 years, or test score; ENGL 115 or test score (concurrent enrollment in ENGL 115 allowed)
MATH 130 Precalculus Mathematics	5 credits	MATH 127 or test score

#### SECOND SEMESTER

Courses	Credits	Prerequisites (Minimum Grade of "C" Required)
ART 110 Art Appreciation	3 credits	ENGL 115 or test score (concurrent enrollment allowed)
BIOL 102 General Biology 2	5 credits	BIOL 101
CHEM 102 General Chemistry 2	5 credits	CHEM 101 and MATH 127 or test score
PSYC 101 General Psychology	3 credits	ENGL 115 or test score (concurrent enrollment allowed)

#### THIRD SEMESTER

Courses	Credits	Prerequisites (Minimum Grade of "C" Required)
ENGL 103 or ENGL 103W Freshman English 2 (or with workshop)	3 to 4 credits	ENGL 115 or test score (concurrent enrollment allowed)
SOCI 201 Principles of Sociology	3 credits	ENGL 115 or test score (concurrent enrollment allowed)
CHEM 201 Organic Chemistry 1	5 credits	CHEM 102
PHYS 101 Introductory Physics 1	5 credits	MATH 130 or test score

#### FOURTH SEMESTER

Courses	Credits	Prerequisites (Minimum Grade of "C" Required)
PHIL 201 Introduction to World Religion	3 credits	ENGL 115 or test score (concurrent enrollment allowed)
ENGL 104 Freshman English 3	3 credits	ENGL 103 or ENGL 103W
CHEM 202 Organic Chemistry 2	5 credits	CHEM 201
PHYS 102 Introductory Physics 2	5 credits	PHYS 101