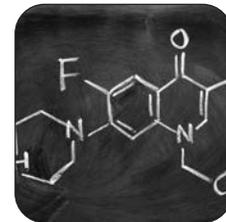




MIDDLESEX COMMUNITY COLLEGE STRATEGIES FOR SUCCESS ADVISING GUIDE: *Physical Science Concentration Associate in Arts*

Students in the **Physical Science Concentration Associate in Arts, Liberal Arts and Sciences** degree program pursue interests in the sciences, while exploring other academic disciplines through the general education requirements of a liberal arts education. This program qualifies for *MassTransfer*, which guarantees credit transfer to Massachusetts state colleges and the University of Massachusetts.



Most students in the physical science major continue their studies toward a bachelor's degree. Students should check the requirements of the transfer institution and meet with career and academic/transfer counselors at MCC for specific program planning. Students may pursue various careers in chemistry, physics, environmental sciences, geosciences, teaching or engineering.

Students should begin their Middlesex experience by taking the foundation-level courses in English and mathematics prior to, or along with, their science courses. Writing and mathematics are fundamental to every subsequent course that students experience in a Liberal Arts and Science program.



EXPLORE YOUR OPTIONS WITH ACADEMIC ADVISING

Throughout each semester, meet with your advisor so that he/she can guide you through a self-exploration process that will help you identify your academic and career interests.

Beginning of Semester:

___ Schedule an appointment to meet with your academic advisor during the first few weeks to discuss future plans and how a **Physical Science Concentration Associate in Arts, Liberal Arts and Sciences** degree can help you achieve your goals.

___ Explore your personal interests by completing Focus2, an online career assessment tool:
<https://www.middlesex.mass.edu/careerservices/focus2.aspx>

Mid-Semester:

___ Schedule an appointment with academic advisor review your academic progress, Focus2 results and create an academic plan in Degree Works.

Before Semester Ends:

___ Schedule an appointment to discuss and register for the classes you will take the following semester. (early November for spring, early April for fall and summer).

___ Visit the Academic Career & Transfer Center or call 1-800-818-3434 to schedule an appointment.

► INSIDE THIS GUIDE

- Exploring Your Options
- Personality Inventory
- Career Path
- Transfer Path

PHYSICAL SCIENCE PROGRAM OUTCOMES

Graduates of the program are prepared to:

- Use their scientific educational experiences to provide a solid foundation for further study of the sciences;
- Convey scientific information through written, oral, numerical or visual communication;
- Demonstrate investigative skills that underlie the scientific method;
- Gather and interpret information about the natural world;
- Evaluate and discuss societal issues impacted by science.



WOULD I MAKE A GOOD PHYSICAL SCIENTIST?

For every statement below that you consider to be true, give yourself 1 point. Consult the scale below the table.

STATEMENT

TRUE

FALSE

I enjoy studying chemistry, physics, astronomy or the geosciences.

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I like understanding how things work.

--	--

I like watching TV shows or movies about science.

--	--

I like to read about science in newspapers, magazines or on the web.

--	--

I enjoyed my high school science classes.

--	--

I like to take laboratory courses.

--	--

I am organized and methodical.

--	--

I like to solve problems and ask questions.

--	--

I like to use graphs and charts.

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Ideally, potential physical science students should answer “true” to all of the statements.

If your final score is seven or more, then consider trying the physical sciences. If your score is less than seven, perhaps you should try a different program of study.



THE CAREER PATH

The **Physical Science Concentration Associate in Arts, Liberal Arts and Sciences** degree program prepares students for further study in preparation for careers such as high school teachers and college professors, physicists, chemists, geologists, oceanographers, meteorologists, occupational health and safety specialists.

Physicists study the properties of matter and energy as well as the relationship between matter and energy. They prepare tests and observe how matter reacts to heat and light. Physicists work for many different types of companies and physics research has spurred advances in medicine and electronics. Physicists often specialize in a subfield of physics such as nuclear.

Chemists, meanwhile, study the properties of matter and observe how substances react to heat, light, or other chemicals. Chemists work for many different types of companies and chemical research has spurred advances in medicine and farming. Chemists create new synthetic fibers, cosmetics, and drugs as well as analyzing data and creating new methods to reduce pollution. Chemists also work in quality control in manufacturing plants. Chemists often specialize in a subfield of chemistry such as organic chemistry.



THE CAREER PATH (CONTINUED)

Typically, workers in this field:

- Communicate by e-mail, over the telephone, and in face-to-face discussions.
Write letters and memos, but less frequently.
Have a medium level of social interaction. They spend much of their time in the lab but they also interact with other physicists and scientists.
May work as part of a team of scientists.
Must be accurate and thorough in their work.
Sometimes have to repeat the same mental tasks.
Usually have the freedom to make decisions and set their daily tasks and goals independently.
Sometimes must meet weekly and monthly deadlines, such as when teaching at a university.

Career Planning Activities:

- Work with career advisor to create resume, cover letter and help improve your interview skills
Identify internship and volunteer opportunities in your desired field
Attend career workshops and job fairs

MCC ADVISING RESOURCES

Career Services:
https://www.middlesex.mass.edu/careerservices

Transfer Services:
https://www.middlesex.mass.edu/transfer

MassTransfer:
https://www.mass.edu/transfer/

Financial Aid:
https://www.middlesex.mass.edu/financialaid

Foundation Scholarships:
https://www.middlesex.mass.edu/foundation/scholarships

College Board Match Maker:
http://collegesearch.collegeboard.com/search/adv_typeofschool.jsp

You can find more information about careers and salaries at: www.bls.gov.



THE TRANSFER PATH

Most students in the physical sciences concentration continue their studies toward a bachelor's degree. Students should check the requirements of transfer institutions and meet with career and academic/transfer counselors at MCC for specific program planning. This program qualifies for MassTransfer, which guarantees credit transfer to Massachusetts state colleges and the University of Massachusetts. Students in this concentration transfer to four year institutions as chemistry, physics, astronomy, geoscience, and environmental science majors.

Transfer Planning Activities:

- Work with an advisor to discuss MassTransfer, Articulations and transfer agreements.
Visit your selected campuses in person. Every college looks good online or in a glossy photo, but you can get a better feel when you visit.
Meet with a transfer counselor to identify transfer scholarships.
Research admissions requirements and deadlines at four-year colleges and universities.