

**Associate in Biology DTA/MRP****Biology**

This pathway is applicable to students planning to prepare for upper division Bachelor's degree majors in Biology, including the medical field. This Biology MRP streamlines and facilitates preparation for upper division coursework in Biology across the state. Students planning a career in medicine, medical technology, dentistry, chiropractic, pharmacy, physical therapy or veterinary can begin their studies at LCC and gain a solid foundation in the basic sciences required in those fields.

Careers in medical professions require several years of advanced study. Medical coursework is rigorous and entry into professional schools is very competitive. A number of medical schools require a foreign language.

**Degree Requirements**

- **Communications:**  
15 credits - ENGL& 101 English Composition I AND ENGL& 102 Composition II AND CMST& 220 (was SPCH 110) Public Speaking OR CMST& 230 (was SPCH 114) Small Group Communication.
- **Quantitative/Symbolic Reasoning Skills:**  
5 credits – MATH& 151 Calculus I
- **Humanities:**  
15 credits – From the Distribution List. Selected from at least two disciplines. No more than 10 credits per discipline area. No more than 5 credits in world languages. No more than 5 credits in foreign language at the 100 level. No more than 5 credits of performance/skills classes are allowed.
- **Diversity:**  
5 credits - From the Diversity Course List. Courses that meet this requirement may also be used toward other graduation requirements. Diversity courses are listed in the quarterly schedule and identified by "DIV" attached to the course title. Example: SOC& 101 - Intro to Sociology:DIV.
- **Natural Sciences:**  
30 credits – BIOL& 221 Majors Ecology/Evolution: w/Lab, BIOL& 222 Majors Cell/Molecular: w/Lab, BIOL& 223 Majors Organismal Phys: w/Lab, CHEM& 161 General Chem w/Lab I, CHEM& 162 General Chem w/Lab II, and CHEM& 163 General Chem w/Lab III.
- **Social Sciences:**  
15 credits – Selected from at least three disciplines on the Distribution List for Transfer Degrees. No more than 10 credits from any one discipline.
- **Electives:**  
15 credits - No more than 15 credits may be taken from the Restricted Course List on the Distribution List.

**Suggested Electives (15 credits)**

CHEM& 261	Organic Chemistry w/Lab I	5
CHEM& 262	Organic Chemistry w/Lab II	5
CHEM& 263	Organic Chemistry w/Lab III	5

Diversity and Distribution Lists are available in the Lower Columbia College Academic Catalog and at [lowercolumbia.edu/catalog](http://lowercolumbia.edu/catalog).

*Total transferable credits required to earn this degree: 90 with a cumulative grade point average (GPA) of at least 2.0. A course cannot be credited toward more than one distribution or skill area.*

\*It is recommended that sequence courses be completed at one institution.

**Students completing this program should acquire the following skills and abilities:**

## Core Competencies\*

- Apply the scientific method of problem solving.
- Use quantitative reasoning to interpret data
- Demonstrate critical thinking.

- Express ideas and information in writing in a format that is clear and appropriate to both scientific and non-scientific audiences.
- Evaluate and explain the relationship between science and society.

Core Concepts\*

- Apply the concepts of evolution to the diversity and adaptation of living organisms.
- Explain how matter and energy are stored and transformed by living systems.
- Explain how information is stored, copied, transferred, and expressed in biological systems.
- Describe the structure and function of biological components at various levels.
- Describe the significance of systems in maintaining life.

\*Vision and Change: A Call to Action, AAAS (American Association for the Advancement of Science) with support from NSF (National Science Foundation)

**Revised June 2019 (Effective Fall 2019)**

**Planner**

The distribution lists are in the LCC Catalog. If you are online, click on the links below:

**Diversity Course List**

**Distribution List**

Fall Quarter			Winter Quarter			Spring Quarter			Summer Quarter		
√	Courses	Crs	√	Courses	Crs	√	Courses	Crs	√	Courses	Crs
<b>Total:</b>			<b>Total:</b>			<b>Total:</b>			<b>Total:</b>		

Fall Quarter			Winter Quarter			Spring Quarter			Summer Quarter		
√	Courses	Crs	√	Courses	Crs	√	Courses	Crs	√	Courses	Crs
<b>Total:</b>			<b>Total:</b>			<b>Total:</b>			<b>Total:</b>		

**Notes:**

Program planning is based on information available at the time of preparation. It is the student's responsibility to meet with their LCC advisor and with an advisor at the college to which they plan to transfer for specific requirements. Consult the LCC catalog for LCC graduation requirements. Most four-year universities require one year of a single foreign language as a graduation requirement.