Biology - DTA/MRP



2023-24

Program map for Biology Direct Transfer Agreement/Major Ready Pathway (DTA/MRP)

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.

See also: (lowercolumbia.edu/programs/stem)

- Degree Requirements for Science, Technology, Engineering and Math programs (lowercolumbia.edu/programs/stem)
- Course descriptions in LCC Catalog (lowercolumbia.edu/publications/catalog/courses)
- Distribution lists in LCC Catalog (lowercolumbia.edu/publications/catalog/distribution-lists)

Please note that many course sequences only begin in fall quarter. Please check with your program advisor for more information.

Please review both the "By Quarter Overview" and "Detailed Class Sequence" tabs below.

By Quarter Overview

First Quarter

COLL 101: College Success 101 (2 credits)

• BIOL& 221: Majors Ecology/Evolution w/ Lab (5 credits)

• MATH& 141: Precalculus I (6 credits)

Meet with faculty advisor (lowercolumbia.edu/advising/meet-with-advisor)

Apply for FAFSA (lowercolumbia.edu/financial-aid)

Second Quarter

- BIOL& 222: Majors Cell/Molecular w/ Lab (5 credits)
- MATH& 142: Precalculus II (5 credits)
- ENGL& 101: English Composition I (5 credits)

Meet with faculty advisor (lowercolumbia.edu/advising/meet-with-advisor)

Decide on transfer university; research transfer requirements; contact transfer university advisor (lowercolumbi a.edu/university-center)

Third Quarter

- BIOL& 223: Majors Organismal Physiology (5 credits)
- · Choose one:
 - ANTH& 204: Archaeology (5 credits)
 - CDS 101: Intro to Addictions/Chemical Dependency (5 credits)
 - ECON 105: Introduction to Economics (5 credits)
 - HIST& 128: World Civilization III (5 credits)
 - POLS& 202: American Government (5 credits)
 - PSYC& 100: General Psychology (5 credits)
 - SOC& 101: Intro to Sociology (5 credits)
- ENGL& 102: English Composition II (5 credits)

Meet with faculty advisor (lowercolumbia.edu/advising/meet-with-advisor)

Fourth Quarter (Summer)

- · Choose one:
 - ART& 100: Art Appreciation (5 credits)
 - HUM 104: Ethics and Cultural Values (5 credits)
 - MUSC& 105: Music Appreciation (5 credits)

Fifth Quarter

- CHEM& 161: General Chemistry w/ Lab I (5 credits)
- MATH& 151: Calculus I (5 credits)
- · Choose one:
 - ANTH& 100: Survey of Anthropology (5 credits)
 - CDS 101: Intro to Addictions/Chemical Dependency (5 credits)
 - ECON 105: Introduction to Economics (5 credits)
 - HIST& 128: World Civilization III (5 credits)
 - POLS&202: American Government (5 credits)
 - PSYC& 100: General Psychology (5 credits)
 - SOC& 101: Intro to Sociology (5 credits)

Meet with faculty advisor (lowercolumbia.edu/advising/meet-with-advisor)

Apply for FAFSA (lowercolumbia.edu/financial-aid)

Contact transfer university advisor (lowercolumbia.edu/university-center)

Apply to transfer university (lowercolumbia.edu/university-center)

Sixth Quarter

- CHEM& 162: General Chemistry w/ Lab II (5 credits)
- · Choose one:
 - ART&100: Art Appreciation (5 credits)
 - ART 130: Intro to Graphic Design (5 credits)
 - CMST& 250: Intercultural Communication (5 credits)
 - DRMA& 101: Intro to Theatre (5 credits)
 - HUM 104: Ethics and Cultural Values (5 credits)
 - HUM 210: Myths and Rites (5 credits)
 - MUSC& 105: Music Appreciation (5 credits)
- · Choose one:
 - CMST& 220: Public Speaking (5 credits)
 - CMST& 230: Small Group Communication (5 credits)

Meet with faculty advisor (lowercolumbia.edu/advising/meet-with-advisor)

Apply for Spring graduation (lowercolumbia.edu/graduation)

Seventh Quarter

- CHEM& 163: General Chemistry w/ Lab III (5 credits)
- · Choose one:
 - ANTH& 204: Archaeology (5 credits)
 - CDS 101: Intro to Addictions/Chemical Dependency (5 credits)
 - ECON 105: Introduction to Economics (5 credits)
 - HIST& 128: World Civilization III (5 credits)
 - POLS&202: American Government (5 credits)
 - PSYC& 100: General Psychology (5 credits)
 - SOC& 101: Intro to Sociology (5 credits)
- · Choose one:
 - ART&100: Art Appreciation (5 credits)
 - ART 162: Digital Fundamentals for Art and Design (5 credits)
 - CMST& 250: Intercultural Communication (5 credits)
 - DRMA& 101: Intro to Theatre (5 credits)
 - MUSC& 105: Music Appreciation (5 credits)
 - PHIL& 101: Intro to Philosophy (5 credits)
 - HUM 210: Myths and Rites (5 credits)

Spring Graduation (lowercolumbia.edu/commencement)

Detailed Class Sequence

1. College Success

COLL 101: College Success 101 (2 credits)

2. Natural Sciences Requirement

BIOL& 221: Majors Ecology/Evolution w/ Lab (5 credits)

3. Prerequisite Coursework / Elective

MATH& 141: Precalculus I (6 credits)

• Prerequisites: C or better in MATH 098, B or better in ABE 092, or placement.

4. Natural Sciences Requirement

BIOL& 222: Majors Cell/Molecular w/ Lab (5 credits)

5. Prerequisite Coursework / Elective

MATH& 142: Precalculus II (5 credits)

• Prerequisites: C or better in MATH& 141.

6. Communications Requirement

ENGL& 101: English Comp I (5 credits)

 Prerequisites: College level reading and writing skills or completion of ENGL 099 or TECH 105 with a grade of C or better.

7. Natural Sciences Requirement

BIOL& 223: Majors Organismal Phys w/ Lab (5 credits)

8. Social Science Requirement

Choose one of these recommended courses:

- ANTH& 204: Archaeology (5 credits)
- CDS 101: Intro to Addictions/Chemical Dependency (5 credits)

- ECON 105: Introduction to Economics (5 credits)
- HIST& 128: World Civilization III (5 credits)
 - Meets LCC's diversity requirement
 - Fulfills [ROOT] requirement at WSU
- POLS& 202: American Government (5 credits)
- PSYC& 100: General Psychology (5 credits)
- SOC& 101: Intro to Sociology (5 credits)
 - · Meets LCC's diversity requirement

9. Communication Requirement

ENGL& 102: English Composition II (5 credits)

• Prerequisite: ENGL& 101

10. Humanities Requirement

Choose one of these recommended courses:

- ART& 100: Art Appreciation (5 credits)
 - · Meets LCC's diversity requirement
- HUM 104: Ethics and Cultural Values (5 credits)
 - · Meets LCC's diversity requirement
- MUSC& 105: Music Appreciation (5 credits)

11. Natural Sciences Requirement

CHEM& 161: General Chemistry w/ Lab I (5 credits)

• Prerequisites: CHEM& 100 or high school chemistry and MATH 098.

12. Math Requirement

MATH& 151: Calculus I (5 credits)

Prerequisite: MATH& 142 with a grade of C or better.

13. Social Sciences Requirement

Choose one of the following recommended courses:

- ANTH& 100: Survey of Anthropology (5 credits)
 - Meets LCC's diversity requirement
 - Fulfills [DIVR] requirement at WSU
- CDS 101: Intro to Addictions/Chemical Dependency (5 credits)
- ECON 105: Introduction to Economics (5 credits)
- HIST& 128: World Civilization III (5 credits)
 - · Meets LCC's diversity requirement
 - Fulfills [ROOT] requirement at WSU

- POLS& 202: American Government (5 credits)
- PSYC& 100: General Psychology (5 credits)
- SOC& 101: Intro to Sociology (5 credits)
 - Meets LCC's diversity requirement

14. Natural Sciences Requirement

CHEM& 162: General Chemistry w/ Lab II (5 credits)

• Prerequisites: CHEM& 161

15. Humanities Requirement

Choose one of these recommended courses:

- ART& 100: Art Appreciation (5 credits)
 - · Meets LCC's diversity requirement
- ART 130: Intro to Graphic Design (5 credits)
- CMST& 250: Intercultural Communication (5 credits)
 - Meets LCC's diversity requirement
 - Fulfills [DIVR] requirement at WSU
- DRMA& 101: Intro to Theatre (5 credits)
- HUM 104: Ethics and Cultural Values (5 credits)
 - Meets LCC's diversity requirement
- HUM 210: Myths and Rites (5 credits)
 - Meets LCC's diversity requirement
- MUSC& 105: Music Appreciation (5 credits)

16. Communications Requirement

Choose one:

- CMST& 220: Public Speaking (5 credits)
- CMST& 230: Small Group Communication (5 credits)

17. Natural Sciences Requirement

CHEM& 163: General Chemistry w/ Lab III (5 credits)

• Prerequisites: CHEM& 162

18. Social Science Requirement

Choose one of these recommended courses:

- ANTH& 204: Archaeology (5 credits)
- CDS 101: Intro to Addictions/Chemical Dependency (5 credits)
- ECON 105: Introduction to Economics (5 credits)

- HIST& 128: World Civilization III (5 credits)
 - Meets LCC's diversity requirement
 - Fulfills [ROOT] requirement at WSU
- POLS&202: American Government (5 credits)
- PSYC& 100: General Psychology (5 credits)
- SOC& 101: Intro to Sociology (5 credits)
 - Meets LCC's diversity requirement

19. Humanities Requirement

Choose one of these recommended courses:

- ART& 100: Art Appreciation (5 credits)
 - Meets LCC's diversity requirement
- ART 162: Digital Fundamentals for Art and Design (5 credits)
- CMST& 250: Intercultural Communication (5 credits)
 - · Meets LCC's diversity requirement
 - Fulfills [DIVR] requirement at WSU
- DRMA& 101: Intro to Theatre (5 credits)
- MUSC& 105: Music Appreciation (5 credits)
- PHIL& 101: Intro to Philosophy (5 credits)
- HUM 210: Myths and Rites (5 credits)
 - · Meets LCC's diversity requirement



Program Maps for Science, Technology, Engineering and Math (STEM) (lowercolumbia.edu/program-maps/stem)

- Bioengineering and Chemical Pre-Engineering AS-T (Chemical Option) (lowercolumbia.edu/program-maps/stem/AST-Bioengineering-and-Chemical-Pre-Engineering-Chemical-Option)
- Bioengineering and Chemical Pre-Engineering AS-T (Bioengineering Option) (lowercolumbia.edu/program-maps/stem/AST-Bioengineering-and-Chemical-Pre-Engineering-Bioengineering-Option)
- Biological Sciences AS-T (lowercolumbia.edu/program-maps/stem/AST-Biological-Sciences)
- Biology DTA/MRP (lowercolumbia.edu/program-maps/stem/DTA-MRP-Biology)
- Chemistry AS-T (lowercolumbia.edu/program-maps/stem/AST-Chemistry)
- Computer Science AST (lowercolumbia.edu/program-maps/stem/AST-Computer-Science)
- Computer Science AS-T (WSU-V) (lowercolumbia.edu/program-maps/stem/AST-Computer-Science-WSU-V)
- Computer and Electrical Pre-Engineering AS-T COMP E EE/MRP (2 year) (lowercolumbia.edu/program-ma ps/stem/AST-Computer-and-Electrical-Pre-Engineering-2-year)
- Computer and Electrical Pre-Engineering AS-T COMP E EE/MRP (3 year) (lowercolumbia.edu/program-ma ps/stem/AST-Computer-and-Electrical-Pre-Engineering-3-year)
- Earth Sciences AA-DTA (lowercolumbia.edu/program-maps/stem/AADTA-Earth-Sciences)
- Earth Sciences AS-T (lowercolumbia.edu/program-maps/stem/AST-Earth-Sciences)

- Environmental Science AS-T (lowercolumbia.edu/program-maps/stem/AST-Environmental-Science)
- Mechanical, Civil, Aeronautical, Industrial, Materials Science Engineering AS-T (2 year) (lowercolumbia.ed u/program-maps/stem/AST-Mechanical-Civil-Aeronautical-Industrial-Materials-Science-Engineering-2-year)
- Mechanical, Civil, Aeronautical, Industrial, and Materials Science Engineering AS-T (3 year) (lowercolumbia .edu/program-maps/stem/AST-Mechanical-Civil-Aeronautical-Industrial-Materials-Science-Engineering-3-ye ar)
- Physics AS-T (lowercolumbia.edu/program-maps/stem/AST-Physics)
- Physics AS-T (Math Transfer Option) (lowercolumbia.edu/program-maps/stem/AST-Physics-Math-Transfe r-Option)