

# LANSING COMMUNITY COLLEGE

## CURRICULUM GUIDE

### Biology

#### Associate in Science Degree

Curriculum Code: 0221 (Effective Fall 2008 – Summer 2013)

This degree is designed for students who intend to transfer to a four-year college or university to pursue a baccalaureate degree in this subject area. Students completing this curriculum will also satisfy the MACRAO Transfer Agreement between two-year and four-year institutions in Michigan. General education and subject area requirements vary from one college or university to another.

Prior to beginning this curriculum, students should contact the Counseling and Advising Center, Room 204, Gannon Building, telephone number (517) 483-1904, to consult with an academic advisor or counselor and obtain an appropriate transfer guide. They are also available on the web at [www.lcc.edu/transfer/guides](http://www.lcc.edu/transfer/guides). Students should also contact the school to which they will transfer for specific transfer institution requirements. (See *Transfer Information* for a list of institutions for which transfer guides are available.)

### PREREQUISITES

Students should see *Course Descriptions* or *Course Offerings* for course prerequisite information. See the *Assessment and Placement Testing* section for skills assessment and advising information.

### INFORMATION

Contact the Science Department, Arts and Sciences Building, Room 301, telephone number (517) 483-1092 (Website: [www.lcc.edu/science/](http://www.lcc.edu/science/)) or Counseling and Advising Center, Gannon Building, Room 204, telephone number (517) 483-1904.

### REQUIREMENTS

CODE	TITLE	TOTAL: 17 CREDITS CREDIT HOURS
BIOL 127	Cell Biology	4
BIOL 128	Organismal Biology	4
CHEM 151	General Chemistry Lecture I	4
CHEM 152	General Chemistry Lecture II	3
CHEM 161	General Chemistry Lab I	1
CHEM 162	General Chemistry Lab II	1

### LIMITED CHOICE REQUIREMENTS

TOTAL: 43-51 CREDITS

Complete the indicated number of credits from EACH CHOICE listed below.

#### CHOICE 1: General Education MACRAO Requirements

16 Credits

(See *Transfer Information/MACRAO Transfer Agreement* for approved courses in each area.)

English Composition (see Note 2)	0
Science and Mathematics (see Note 1)	0
Social Science (see Note 3)	8
Humanities (see Note 3)	8

**CHOICE 2: General Education Core Requirements** **0–8 Credits**  
 (See *General Education Core Requirements* for information on how to fulfill these requirements. Core area proficiency exams, where appropriate, are available for each core area. Meeting Core with a proficiency test may require additional MACRAO credits.)

Communication Core Area (see Note 3)	0–4
Global Perspectives and Diversity Core Area (see Note 3)	0–4
Mathematics Core Area (see Note 1)	0
Science Core Area (see Note 1)	0
Writing Core Area (see Note 2)	0

**CHOICE 3: Writing** (Complete one course from each subchoice) **8 Credits**

**Subchoice 3A**

WRIT 121	Composition I	4
WRIT 131	Honors Composition I	4

**Subchoice 3B**

ENGL 122	Writ About Literature & Ideas	4
ENGL 132	Honors Writ–Literature & Ideas	4
WRIT 122	Composition II	4
WRIT 132	Honors Composition II	4

**CHOICE 4: Math** **4 Credits**

MATH 120	College Algebra	4
MATH 121	Precalculus I	4

**CHOICE 5: Related Courses** **15 Credits**

BIOL 201	Human Anatomy	4
BIOL 202	Human Physiology	4
BIOL 203	Microbiology	3
BIOL 204	Microbiology Laboratory	1
BIOL 210	Natural Resource Conservation	4
BIOL 260	Botany	4
BIOL 265	Zoology	4
BIOL 270	Human Genetics	3
BIOL 275	Molecular Biology I	4
BIOL 285	Biology in the Tropics	2
BIOL 287	Tropical Aquatic Systems	4
CHEM 251	Organic Chemistry Lecture I	4
CHEM 252	Organic Chemistry Lecture II	4
CHEM 272	Organic Chemistry Laboratory	2
ENVR 122	Enviro Sampl & Instrumentation	4
STAT 170	Introduction to Statistics	3

**MINIMUM TOTAL** **60**

**NOTES:**

1. Students completing “REQUIREMENTS” have fulfilled the requirements for these MACRAO and Core areas.
2. Students completing CHOICE 3 have fulfilled the requirements for these MACRAO and Core areas.
3. Certain Core courses may also be used to meet MACRAO requirements. See *Transfer Information/LCC Core–MACRAO Crosswalk* for suggested courses.

## SUGGESTED COURSE SEQUENCE

Students should see course descriptions to find out when departments plan to offer courses. Students who are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor or counselor for help with adjustments.

The following is a suggested course sequence for required courses. If you are unable to follow this sequence, contact an academic advisor or counselor for help with adjustments.

I

BIOL 128  
CHEM 151  
CHEM 161  
Lim. Ch. 4

II

BIOL 127  
CHEM 152  
CHEM 162

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