

# LANSING COMMUNITY COLLEGE

## CURRICULUM GUIDE

### Biology

#### Associate in Science Degree

Curriculum Code: 0221 (Effective Fall 2005 – Summer 2010)

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, Suite 2300, Gannon (GVT) 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 Opportunities* 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 & Science Building, Room 301, telephone number (517) 483-1092. Website: <http://www.lcc.edu/science/>

### REQUIREMENTS

CODE	TITLE	TOTAL: 21 CREDITS CREDIT HOURS
BIOL127	Cell Biology	4
BIOL128	Organismal Biology	4
CHEM151	General Chemistry Lecture I	4
CHEM152	General Chemistry Lecture II	3
CHEM161	General Chemistry Lab I	1
CHEM162	General Chemistry Lab II	1
MATH121	College Algebra I	4

### LIMITED CHOICE REQUIREMENTS

**TOTAL: 39-47 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**

WRIT121	Composition I	4
WRIT131	Honors Composition I	4

**Subchoice 3B**

ENGL122	Writing About Literature and Ideas	4
ENGL132	Honors Writing – Literature and Ideas	4
WRIT122	Composition II	4
WRIT132	Honors Composition II	4

**CHOICE 4: Electives** **15 Credits**

BIOL201	Human Anatomy	4
BIOL202	Human Physiology	4
BIOL203	Microbiology	3
BIOL204	Microbiology Laboratory	1
BIOL210	Natural Resource Conservation	4
BIOL260	Botany	4
BIOL265	Zoology	4
BIOL270	Human Genetics	3
BIOL275	Molecular Biology I	4
CHEM251	Organic Chemistry Lecture I	4
CHEM252	Organic Chemistry Lecture II	4
CHEM272	Organic Chemistry Laboratory	2
ENVR122	Environmental Sampling & Instrumentation	4
STAT170	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.

<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>
BIOL128	BIOL127		
CHEM151	CHEM152		
CHEM161	CHEM162		
MATH121			