LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Mathematics/Physics
Associate in Science Degree

Curriculum Code: 0200 (Effective Fall 2011 – Summer 2016)

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 Academic Advising Department, Room 212, Gannon Building, telephone number (517) 483-1904, to consult with an academic advisor and obtain an appropriate transfer guide. They are also available on the web at 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 Mathematics & Computer Science Department, Arts & Sciences Building, Room 309, telephone number (517) 483-1073 (Website: www.lcc.edu/mathematics/) or the Academic Advising Department, Gannon Building, Room 212, telephone number (517) 483-1904.

REQUIREMENTS — TOTAL: 20 CREDITS

CODE	TITLE	CREDIT HOURS
MATH 253	Calculus III	4
MATH 254	Intro to Differential Equation	3
MATH 260	Linear Algebra	3
PHYS 251	Physics I: Mechanics	5
PHYS 252	Physics II:Electrom/Wave/Optic	5

LIMITED CHOICE REQUIREMENTS — TOTAL: 40-48 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 1)	0
Science and Mathematics (See Note 2)	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 2)	0
	Science Core Area (See Note 2)	0
	Writing Core Area (See Note 1)	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: Mathematics (Complete one course from each Subchoice) **8 Credits**

Subchoice 4A

MATH 151	Calculus I	4
MATH 161	Honors Calculus I	4

Subchoice 4B

MATH 152	Calculus II	4
MATH 162	Honors Calculus II	4

CHOICE 5: Related Courses **8 Credits**

CHEM 151	General Chemistry Lecture I	4
CHEM 161	General Chemistry Lab I	1
CPSC 131	Numerical Methods and MATLAB	3
CPSC 227	Algorithm & Computing w/Python	4
CPSC 230	Algorithms and Computing w/C++	4
CPSC 231	Computing and Data Structures	4
CPSC 260	Computer Science Structures	4
MATH 281	Honors Math Seminar	1
STAT 215	Intro to Probability and Stats	4

	MINIMUM TOTAL	**60**

NOTES:

1. Students completing "CHOICE 3" have fulfilled the requirements for these Core and MACRAO areas.
2. Students completing "REQUIREMENTS" and/or "LIMITED CHOICE REQUIREMENTS" have fulfilled the requirements for this Core area.
3. Certain Core courses may also be used to meet MACRAO requirements. See the *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 for any reason 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 for help with adjustments.

I	II	III	IV
MATH 151 or 161	MATH 152 or 162	MATH 253	MATH 254
Lim. Ch. 5	Lim. Ch. 3B	PHYS 251	MATH 260
	Lim. Ch. 5		PHYS 252