

# Bachelor of Science - Molecular Biology and Biotechnology: Research Concentration

## Transfer Pathway Guide for Oakland Community College

This is a tool designed to assist OCC students transferring to the University of Michigan-Flint. This is not a self-advising tool.

University of Michigan-Flint		Oakland Community College
✓	General Education Requirements	Course Equivalent
	English Composition - 3 credit hours	ENG 1510- Composition I <b>OR</b> <a href="#">MTA satisfies</a>
	English Composition - 3 credit hours	ENG 1520- Comp II <b>OR</b> COM 1290- Inter Com <b>OR</b> COM 1600- Speech <b>OR</b> SPE 1000- Speech <b>OR</b> SPE 1610- Speech <b>OR</b> <a href="#">MTA satisfies</a>
	Social Science (S) - 6 credit hours	Options at: <a href="#">Transfer.umflint.edu</a> <b>OR</b> <a href="#">MTA satisfies</a>
	Humanities (H) - 6 credit hours	Options at: <a href="#">Transfer.umflint.edu</a> <b>OR</b> <a href="#">MTA satisfies</a>
	Fine Arts (F) - 3 credit hours	Options at: <a href="#">Transfer.umflint.edu</a> <b>OR</b> <a href="#">MTA satisfies</a>
	Mathematics (FQ) - 3 credit hours	Satisfied by major <b>OR</b> <a href="#">MTA satisfies</a>
	Natural Science (N/NL)- 4 credit hours w/ lab	Satisfied by major <b>OR</b> <a href="#">MTA satisfies</a>

Add'l credit hours of the student's designation choice are required to complete 30 credit hours. MTA meets this requirement

### Required Program Curriculum

At least 40 credits in biology, with no more than 16 below the 300 level, including:

	Course Requirements	Course Equivalent
	CIT 100 - Technology Foundations	<a href="#">Completed at UM-Flint</a>
	BIO 111 - Organismal Biology	BIO 1560: Organismal Biology-Biodiversity, Ecology and Evolution
	BIO 113 - Principles of Biology	BIO 1530: Molecular and Cellular Biology
	BIO 326 - Cell Biology	<a href="#">Completed at UM-Flint</a>
	BIO 327 - Ecology	<a href="#">Completed at UM-Flint</a>
	BIO 328 - Genetics	BIO 2560: Principles of Genetics
	BIO 405 - Microbiology Lecture	<a href="#">Completed at UM-Flint</a>
	BIO 406 - Microbiology Lab	<a href="#">Completed at UM-Flint</a>
	BIO 425 - Immunology	<a href="#">Completed at UM-Flint</a>
	BIO 467 - Molecular Biology of Prokaryotes	<a href="#">Completed at UM-Flint</a>
	BIO 468 - Molecular Biology of Eukaryotes	<a href="#">Completed at UM-Flint</a>
	CHM 260 - Principles of Chemistry	CHE 1510: General Chemistry I
	CHM 261 - General Chemistry Lab	CHE 1510: General Chemistry I
	CHM 262 - Principles of Chemistry II	CHE 1520: General Chemistry II
	CHM 263 - Introductory Quantitative Analysis Lab	CHE 1520: General Chemistry II
	CHM 330 - Organic Chemistry I	CHE 2610 - Organic Chemistry I
	CHM 331 - Organic Chemistry Lab I	CHE 2610 - Organic Chemistry I
	CHM 332 - Organic Chemistry II	CHE 2620 - Organic Chemistry II
	CHM 333 - Organic Chemistry Lab II	CHE 2620 - Organic Chemistry II
	CHM 350 - Fundamentals of Biochemistry <b>OR</b> CHM 450 - Biochemistry I <b>AND</b> CHM 452 - Biochemistry II	<a href="#">Completed at UM-Flint</a>
	MTH 120- Pre-Calculus Mathematics *	MAT 1630: Precalculus <b>OR</b> MAT 1540: College Algebra and 1560: Trig
	PHY 143 - College Physics or PHY 243 - Principles of Physics I	PHY 1610: College Physics I <b>OR</b> PHY 2400: Engineering Physics I
	PHY 145 - College Physics II or PHY 245 - Prin of Physics II	PHY 1620: College Physics II <b>OR</b> PHY 2500: Engineering Physics I

### Research Concentration

### Course Equivalent

Electives are met by many other courses listed, but recommended options include:

	BIO 301 - Biostatistics	<a href="#">Completed at UM-Flint</a>
	BIO 438 - Medical Microbiology	<a href="#">Completed at UM-Flint</a>
	BIO 491 - Independent Study	<a href="#">Completed at UM-Flint</a>

1. Remaining requirements (general education & program requirement curriculum) may be completed through UM-Flint.
2. Students must earn a min. of 120 college credits (transfer & UM-Flint); a min. of 30 credit hours at UM-Flint
3. Catalog and transfer credit are subject to change annually. Please speak with an UM-Flint representative before taking any additional coursework (810.762.3085, [umflint.edu/advising](#))
4. To view courses that transfer to UM-Flint, please visit [transfer.umflint.edu](#)

**For an official evaluation, apply for free at [UMFLINT.EDU/APPLY](#).**