COUNTY COLLEGE OF MORRIS CURRICULUM CHECK SHEET Requirements for Graduation A. S. DEGREE

#2152 CHEMISTRY OPTION Science & Math Degree

DTotal Transfer C	redits			
Date				
COURSE	CODE	CR	GR	TR
General Education Foundation (32 CR)				
COMMUNICATION (6 CR)				
English Composition I	ENG 111	3		
English Composition II	ENG 112	3		
MATH/SCIENCE/TECHNOLOGY (11 CR)				
Precalculus	MAT 123	4		
Biology or Physics Elective*		4		
Math/Science/Technology Elective*		3		
SOCIAL SCIENCE (3 CR)	````	2		
Choose from General Education course list (Social Sci	ence)	3		
HUMANITIES (3 CR)				
Choose from General Education course list (Humanitie	26)	3		
choose nom General Education course not (numanitie		5		
SOCIAL SCIENCE OR HUMANITIES (3 CR)				
Choose from General Education course list (Social Science of	or Humanities)	3		
``````````````````````````````````````		5		
GENERAL EDUCATION ELECTIVES (6 CR)				
Choose from General Education course list	3			
		3		
CHEMISTRY CORE (28 CR)				
General Chemistry I Lecture	CHM 125	3		
General Chemistry I Lab	CHM 126	1		
General Chemistry II Lecture	CHM 127	3		
General Chemistry II Lab	CHM 128	1	ļ	
Organic Chemistry I Lecture (Fall)	CHM 231	3		
Organic Chemistry I Lab (Fall)	CHM 232	1		
Organic Chemistry II Lecture (Spring)	CHM 233	3		
Organic Chemistry II Lab (Spring)	CHM 234	1		
Biology or Physics Elective*	N ( A TT 1 2 1	4		
Analytic Geometry & Calculus I	MAT 131	4		
DESTRICTED ELECTIVE (A CD)*		4		
RESTRICTED ELECTIVE (4 CR)*		4		
	TOTAL	60		

## **OTES:**

This is an unofficial document and should be used for academic planning purposes only. All students are required to see their Academic Advisors each semester to discuss and approve their selection of courses before they register.

**FALL 2020** 

Due to continual program revisions mandated by accrediting agencies and/or changes in state mandated requirements, students should consult their academic advisor when selecting courses. If you need the name of your academic advisor, contact the Biology/Chemistry Department 973-328-5360.

This program is intended for students with strong math and science skills, planning to transfer to a B.S. in Biology or Chemistry, Pharmacy, Pre-Med, Pre-Dental or Pre-Veterinary programs.

*See back page for more information.

To determine the transferability of your courses to participating NJ Colleges & Universities, visit the NJ Transfer site at www.njtransfer.org.

Science courses completed by students prior to entering the program must be less than seven years old. If the science courses exceed the seven year limit, students can prove their competency by testing or they must retake the courses.

**Note:** All developmental Math and English courses (including ESL) must be completed before enrolling in the core science courses.

# CHEMISTRY OPTION Science & Math Degree #2152

# Suggested Sequence by Semester

*This suggested sequence does not include any required developmental courses. Degree completion time may vary depending upon the number of credits taken each semester.* 

SEMESTER I		CREDITS	SEMESTER II		CREDITS
English Composition I	ENG 111	3	English Composition II	ENG 112	3
Social Science Elective		3	Math/Science/Tech Elective		3
Precalculus <b>OR</b>	MAT 123	4	Analytic Geometry & Calc. I <b>OR</b>	MAT 131	4
Analytic Geometry & Calculus I	MAT 131		Analytic Geometry & Calc. II	MAT 132	
General Chemistry I Lecture	CHM 125	3	General Chemistry II Lecture	CHM 127	3
General Chemistry I Lab	CHM 126	<u>1</u>	General Chemistry II Lab	CHM 128	<u>1</u>
	TOTAL	14		TOTAL	14
SEMESTER III			SEMESTER IV		
General Education Elective		3	General Education Elective		3
Humanities Elective		3	Restricted Elective		4
Soc. Science or Humanities Elective		3	Biology or Physics Elective		4
Biology or Physics Elective		4	Organic Chemistry II Lecture	CHM 233	3
Organic Chemistry I Lecture	CHM 231	3	Organic Chemistry II Lab	CHM 234	<u>1</u>
Organic Chemistry I Lab	CHM 232	<u>1</u>			
	TOTAL	17		TOTAL	15

MATH/SCIENCE/TECHNOLOGY: See attached General Education course list. Work closely with your faculty advisor to select the appropriate courses.

**MATHEMATICS:** Students who place out of MAT 123, Precalculus should start at a higher level Math class – MAT 131, Calculus I and continue on to MAT 132, Calculus II. Discuss this sequence of Math courses with your advisor.

#### **BIOLOGY/PHYSICS ELECTIVES:**

BIO 121-122 General Biology I, II PHY 125/126-127/128 General Physics I & II CHM 212 Biochemistry BIO 202 Ecology (Fall) BIO 215 Microbiology PHY 130,-133/134-232/233 Engineering Physics I, II, III

**TECHNOLOGY LITERACY:** If you do not pass the Technology Literacy Competency exam, you must take one of the courses in Technological Competency or Information Literacy listing from the General Education course list. This course can be used to fulfill a General Education Math/Science/Technology elective.

**GENERAL EDUCATION ELECTIVES:** Please select appropriate courses from the approved list of General Education courses. Work closely with your faculty advisor to select the appropriate courses. Students planning to transfer to a B.A. (Bachelor of Arts) program should take COM 109, Speech Fundamentals, since this is required for that degree.

SOCIAL SCIENCE: See attached General Education course list. Work closely with your faculty advisor to select the appropriate courses.

HUMANITIES: See attached General Education course list. Work closely with your faculty advisor to select the appropriate courses.

**RESTRICTED ELECTIVE:** Choose one from the following: BIO 121, 122, 201, 202, 215, 223 CHM 212, 218 PHY 125/126, 127/128, 130, 133/134, 232/233 MAT 130, 210, 230

HONORS COURSES: You may be eligible to take honors courses. For more information, contact Prof. Laura Gabrielsen, 973-328-5459.