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

#3450 CHEMICAL TECHNOLOGY

FALL 2023

COURSE	CODE	CR	GR	TR
General Education Foundation (21 CR)				
COMMUNICATION (6 CR)				
English Composition I	ENG 111	3		
English Composition II	ENG 112	3		
MATH/SCIENCE/TECHNOLOGY (3 CR)*				
Statistics	MAT 124	3		
SOCIAL SCIENCE OR HUMANITIES (3 CR)				
Choose from General Education course list (Humanities/Social Science)		3		
GENERAL EDUCATION ELECTIVES (9 CR)*				
Choose from General Education course list		9		
CHEMICAL TECHNOLOGY CORE (39 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		
General Biology I	BIO 121	4		
General Biology II	BIO 122	4		
Analytical Chemistry – Instrumental Analysis	CHM 218	4		
Essentials of Organic Chemistry+	CHM 210	4		
Concepts of Physics++	PHY 103	4		
Technical Electives*		11		
	TOTAL	60		
		1	1	
		1		
		1		
		1		

NOTES:

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.

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, please contact the Biology/Chemistry Department, 973-328-5360.

Although the A.A.S. degree is a careeroriented program, selected four-year institutions may provide graduates of this program opportunity for transfer. For more information, contact the Transfer Coordinator and/or your academic advisor.

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 must prove their competency by testing, or they must retake the courses.

+CHM 231/232 Organic Chemistry may be substituted.

++ PHY 125/126 General Physics I may be substituted.

Note: All developmental Math courses must be completed prior to enrolling in the core science courses. Please see the course catalog for English prerequisites.

*See back page for more information.

CHEMICAL TECHNOLOGY #3450 Suggested Sequence by Semester

SEMESTER I CREDITS **SEMESTER II CREDITS** English Composition I ENG 111 3 **English Composition II ENG 112** 3 General Chemistry I Lecture CHM 125 3 General Chemistry II Lecture CHM 127 3 General Chemistry I Lab CHM 126 CHM 128 1 1 General Chemistry II Lab General Biology II **Statistics MAT 124** 3 **BIO 122** 4 General Education Elective General Biology I 3 BIO 121 4 Social Science/Humanities Elective 3 14 TOTAL 17 TOTAL **SEMESTER III SEMESTER IV** Essentials of Organic Chemistry CHM 210 4 Analytical Chemistry – Instrumental **CHM 218** 4 **Concepts of Physics PHY 103** Analysis 4 General Education Elective **Technical Electives** 7 3 **Technical Elective** General Education Elective 4 3 TOTAL 15 TOTAL 14

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

TECHNOLOGY LITERACY: If you do not pass the Technology Literacy Competency exam, you must take a course to satisfy the Technology Literacy requirement. You may use a general education elective to fill this requirement from the list of Technological Competency/Information Literacy.

GENERAL EDUCATION ELECTIVES: Please select any courses from the approved list of General Education courses. Students who plan to transfer to a B.A. (Bachelor of Arts) degree program should take COM 109, Speech Fundamentals since this is required for B.A. degrees. <u>Click here for the most recent General Education course list.</u>

SOCIAL SCIENCE OR HUMANITIES: See attached General Education course list for Humanities or Social Science choices.

TECHNICAL ELECTIVES:

BIO 118 Biomedical Ethics BIO 202 Ecology BIO 215 Microbiology BIO 223 Cell and Molecular Biology (Fall) CHM 212 Biochemistry CHM 229 Internship Work Experience (3 CR) CHM 230 Internship Work Experience (2 CR) CHM 236 Internship Work Experience (1 CR) CHM 235 Independent Study in Chemistry BIO 201 Genetics (Spring) CHM 233/234 Organic Chemistry II Lecture/Lab (Spring) CMP 135 Computer Concepts with Applications – satisfies the Technology Literacy requirement. MAT 110 College Algebra MAT 123 Precalculus PHY 127/128 General Physics II Lecture/Lab

Students interested in pursuing a career in an environmental related position, such as environmental technician, consider taking Ecology (BIO 202) as a technical elective.

HONORS COURSES: BIO 121, BIO 122 and BIO 202 offer selected sections with an honors option. Consult with your Academic Advisor for more information.

Note: Students will not receive credit for more than one of the following courses: MAT 124 and MAT 130.