## Chemistry with MFS Option/ BS Degree

# Suggested Course Sequence

For students entering the major in catalog year 2021-22

INT 100 Principles of Academic Integrity   0   FSCI 101 Survey of Forensic Sciences   3   FYS 100 First Year Seminar   1   0   0   0   0   0   0   0   0   0	SEMESTER	STER FALL 2021		SPRING 2022	
FVS 100 First Year Seminar			0		3
MATH 220 Calculus   Quantitative Literacy (QL)   4   MATH 221 Calculus   4			1	•	3
MATH 220 Calculus   Quantitative Literacy (QL)   4   MATH 221 Calculus   4			3	ENG 152 College Writing II	+
CHEM 114 General Chem I and CHEM 115 General Chem I and CHEM 115 General Chem I and CHEM 115 General Chem I aboratory and CHEM 115 General Chem I aboratory and CHEM 115 General Chem I Soute Scientific Reasoning - Lab (SR-L)					-
SEMESTER   FALL 2022   SPRING 2023   CHEM 210 Organic Chemistry I and CHEM 210 Organic Chemistry I Laboratory   4		CHEM 114 General Chem I with Problem Solving or CHEM 115 General Chem I and CHEM 115L General Chem I Laboratory and CHEM 115S General Chem I SoLVE Scientific Reasoning – Lab (SR-L)  BIO 112 Principles of Biology I or BIO 113 Gen Biology I: Cell and Genetics and BIO 113L Gen Biology I Laboratory		CHEM 116L General Chemistry II Laboratory &	4
FALL 2022   SPRING 2023   CHEM 210 Organic Chemistry I and CHEM 211 Organic Chemistry II and CHEM 211. Organic Chemistry I Laboratory   4	PEDITS		PEDITS	17 C	PENTT
SEMESTER		10 C	KLDIIS	17 C	KLDII
CHEM 210 Organic Chemistry   and CHEM 211 Organic Chemistry   land CHEM 210 Organic Chemistry   Laboratory   4   CHEM 211 Organic Chemistry   4   4   CHEM 211 Organic Chemistry   4   4   CHEM 212   Introduction to Statistics   4   Humanities I* (HUM)   3   Fine Arts (FA)   3   SCI 215 Writing in the Sciences   PSY 101 Intro to Psychology RECOMMENDED   200-Level Writing Intensive (WI)   3   Social Science I** (SS)   3   SCREDITS   TABLE 2023   SPRING 2024   TABLE 2023   SPRING 2024   TABLE 2023   SPRING 2024   TABLE 2023   SPRING 2024   TABLE 2024   CHEM 313 Career Connections in Chemistry   1   BIOCH 325 Biochemistry: Thermodynamics   3   CHEM 346 Integrative Lab II   2   BIOCH 345 Integrative Lab I   2   BIOCH 345 Integrative Lab I   2   PHYS 216 General Physics II with Calculus   4   Humanities II* (HUM)   3   Humanities II* (HUM)   3   FSCI 540 Crime Scene Photography or Elective   3   Social Science II** (SS)   3   FSCI 620 Drug Analysis   3   TCREDITS   TCREDITS		EALL 2022		SDRING 2022	
CHEM 210L Organic Chemistry   Laboratory					
CHEM 221 Inorganic Chemistry   3			4		4
Humanities I* (HUM)   3   Fine Arts (FA)   3     SCI 215 Writing in the Sciences   200-Level Writing Intensive (WI)   3   Social Science I** (SS)   3     STREDITS   14 CREDITS   18 CREDITS   18 CREDITS     YEAR 3   SEMESTER   FALL 2023   SPRING 2024		CHEM 213 Digital Information Literacy for Chem.	1	PHYS 215 General Physics I with Calculus	4
SCI 215 Writing in the Sciences 200-Level Writing Intensive (WI)   3   Social Science  ** (SS)   3		CHEM 221 Inorganic Chemistry	3	MATH 136 Introduction to Statistics	4
200-Level Writing Intensive (WI)   3   Social Science I** (\$S)   3			3	Fine Arts (FA)	3
SEMESTER			3		3
SEMESTER	CREDITS	14 C	REDITS	18 CR	<b>EDITS</b>
CHEM 310 Analytical Chemistry   3	YEAR 3				
CHEM 313 Career Connections in Chemistry	SEMESTER	FALL 2023		SPRING 2024	
CHEM 346L Integrative Lab II   2   BIOCH 345L Integrative Lab I   2		CHEM 310 Analytical Chemistry	3	CHEM 432 Physical Chemistry: Thermodynamics	3
PHYS 216 General Physics II with Calculus		CHEM 313 Career Connections in Chemistry	1	BIOCH 327 Biochemistry	3
Humanities II* (HUM)   3   FSCI 540 Crime Scene Photography or Elective   3     Social Science II** (SS)   3   FSCI 620 Drug Analysis   3     STEEDITS   16   CREDITS   17   CREDITS		CHEM 346L Integrative Lab II	2	BIOCH 345L Integrative Lab I	2
Social Science II** (SS)   3   FSCI 620 Drug Analysis   3		PHYS 216 General Physics II with Calculus	4	Humanities III* (HUM)	3
TREDITS         16 CREDITS         17 CREDITS           YEAR 4         SPRING 2025           CHEM 475 Capstone Seminar 300/400-Level Writing Intensive (WI)         3 CHEM Elective¹         2/3           CHEM 470 or 471 Capstone Internship¹         3/6 Humanities IV* (HUM)         3           CHEM 431 Physical Chem: Quantum Mechanics         3 General Elective         3/4           CHEM Elective¹, if 3 credit internship         2/3 General Elective         3           FSCI 675 The Crime Laboratory         3 FSCI 610 Physical Evidence & Crime Scenes         3           FSCI 615 Safety/Quality Control/Assurance         3 FSCI 617 Trace Evidence         3		, , ,	3	FSCI 540 Crime Scene Photography or Elective	3
YEAR 4           SEMESTER         FALL 2024         SPRING 2025           CHEM 475 Capstone Seminar 300/400-Level Writing Intensive (WI)         3 CHEM Elective¹         2/3           CHEM 470 or 471 Capstone Internship¹         3/6 Humanities IV* (HUM)         3           CHEM 431 Physical Chem: Quantum Mechanics         3 General Elective         3/4           CHEM Elective¹, if 3 credit internship         2/3 General Elective         3           FSCI 675 The Crime Laboratory         3 FSCI 610 Physical Evidence & Crime Scenes         3           FSCI 615 Safety/Quality Control/Assurance         3 FSCI 617 Trace Evidence         3		Social Science II** (SS)	3	FSCI 620 Drug Analysis	3
SEMESTER         FALL 2024         SPRING 2025           CHEM 475 Capstone Seminar 300/400-Level Writing Intensive (WI)         3 CHEM Elective¹         2/3           CHEM 470 or 471 Capstone Internship¹         3/6 Humanities IV* (HUM)         3           CHEM 431 Physical Chem: Quantum Mechanics         3 General Elective         3/4           CHEM Elective¹, if 3 credit internship         2/3 General Elective         3           FSCI 675 The Crime Laboratory         3 FSCI 610 Physical Evidence & Crime Scenes         3           FSCI 615 Safety/Quality Control/Assurance         3 FSCI 617 Trace Evidence         3	REDITS	16 C	REDITS	17 CR	EDITS
CHEM 475 Capstone Seminar 300/400-Level Writing Intensive (WI)  CHEM 470 or 471 Capstone Internship¹  3/6 Humanities IV* (HUM)  CHEM 431 Physical Chem: Quantum Mechanics  CHEM Elective¹, if 3 credit internship  2/3 General Elective  3/4  CHEM Elective¹, if 3 credit internship  2/3 General Elective  3  FSCI 675 The Crime Laboratory  3 FSCI 610 Physical Evidence & Crime Scenes  3  FSCI 615 Safety/Quality Control/Assurance  3 FSCI 617 Trace Evidence	YEAR 4				
300/400-Level Writing Intensive (WI)  CHEM 470 or 471 Capstone Internship¹  3/6 Humanities IV* (HUM)  CHEM 431 Physical Chem: Quantum Mechanics  General Elective  3/4  CHEM Elective¹, if 3 credit internship  2/3 General Elective  3  FSCI 675 The Crime Laboratory  3 FSCI 610 Physical Evidence & Crime Scenes  FSCI 615 Safety/Quality Control/Assurance  3 FSCI 617 Trace Evidence  3	SEMESTER	-		SPRING 2025	
CHEM 431 Physical Chem: Quantum Mechanics 3 General Elective 3/4 CHEM Elective¹, if 3 credit internship 2/3 General Elective 3  FSCI 675 The Crime Laboratory 3 FSCI 610 Physical Evidence & Crime Scenes 3  FSCI 615 Safety/Quality Control/Assurance 3 FSCI 617 Trace Evidence 3	SEMESTER			CHEM Floctive1	2/3
CHEM Elective¹, if 3 credit internship     2/3     General Elective     3       FSCI 675 The Crime Laboratory     3     FSCI 610 Physical Evidence & Crime Scenes     3       FSCI 615 Safety/Quality Control/Assurance     3     FSCI 617 Trace Evidence     3	SEMESTER		3	CITEIVI Elective	_, _
FSCI 675 The Crime Laboratory  3 FSCI 610 Physical Evidence & Crime Scenes 3 FSCI 615 Safety/Quality Control/Assurance 3 FSCI 617 Trace Evidence 3	SEMESTER	300/400-Level Writing Intensive (WI)	_		
FSCI 615 Safety/Quality Control/Assurance 3 FSCI 617 Trace Evidence 3	SEMESTER	300/400-Level Writing Intensive (WI) CHEM 470 or 471 Capstone Internship <sup>1</sup>	3/6	Humanities IV* (HUM)	
FSCI 615 Safety/Quality Control/Assurance 3 FSCI 617 Trace Evidence 3	SEMESTER	300/400-Level Writing Intensive (WI) CHEM 470 or 471 Capstone Internship <sup>1</sup> CHEM 431 Physical Chem: Quantum Mechanics	3/6	Humanities IV* (HUM) General Elective	3 3/4
37 4 3 7	SEMESTER	300/400-Level Writing Intensive (WI) CHEM 470 or 471 Capstone Internship¹ CHEM 431 Physical Chem: Quantum Mechanics CHEM Elective¹, if 3 credit internship	3/6 3 2/3	Humanities IV* (HUM)  General Elective  General Elective	3 3/4 3
	SEMESTER	300/400-Level Writing Intensive (WI)  CHEM 470 or 471 Capstone Internship <sup>1</sup> CHEM 431 Physical Chem: Quantum Mechanics  CHEM Elective <sup>1</sup> , if 3 credit internship  FSCI 675 The Crime Laboratory	3/6 3 2/3 3	Humanities IV* (HUM)  General Elective  General Elective  FSCI 610 Physical Evidence & Crime Scenes	3 3/4 3 3

#### **PROGRAM POLICIES**

Specific information regarding program policies and tracks (if applicable) may be found in the Stevenson University Catalog. Please consult with your academic advisor/success coach if you need additional information.

Prerequisite and co-requisite information is listed in the course descriptions.

No student, regardless of major, will be permitted to advance to the next course without earning a grade of "C" or better in the prerequisite course(s). When a grade below a "C" is earned in a major course, the student must repeat that course. A course may be repeated once without special permission.

**BA Option:** Students also have the option of completing a Bachelor of Arts degree in Chemistry. The student must fulfill all SEE requirements, program requirements, and complete two semesters of a foreign language from the point of placement or completion of 202 level.

#### **COURSE INFORMATION**

FYS-100 First Year Seminar

1-credit course required for all first year students.

INT-100

Principles of Academic Integrity
O-credit Blackboard course required for all students

SU0-101

Online Learning Strategies and Success O-credit Blackboard course to prepare for taking SU online classes.

<sup>1</sup>Students choosing the 6 credit capstone internship (CHEM 471) take one CHEM Elective. CHEM Electives: CHEM 203, CHEM 206, CHEM 362, CHEM 365, CHEM 435, BIOCH 362, BIOCH 365, and BIOCH 427, BME 314, SCI 201

Master's courses listed in green.

### **GENERAL EDUCATION NOTES**

Stevenson Educational Experience (SEE) courses are identified in blue.

- Specific courses that fulfill SEE requirements are listed in the SU Catalog, on the SU Now Portal, and through Student Planning.
- Students must complete all SEE and major requirements and earn a minimum of 120 credits.
- In the Bachelor's to Master's option six of the 120 credits may be graduate level.
- A minimum of 15 credits must be taken at the 300/400 level.

\*HUMANITIES classes must be from at least three different disciplines.

\*\*SOCIAL SCIENCE classes must be from two different disciplines