



### University Requirements:

- University Core Curriculum (UCC)\*
- Gordon Rule with Writing (GRW) (Two courses; 6 credits total)
- Foreign Language requirement (FLENT/FLEX) \*
- Summer Enrollment (9 credits)
- Global Learning (GL) requirement (For class options: [goglobal.fiu.edu/courses](http://goglobal.fiu.edu/courses)) \*
- Civics Literacy requirement\*
- Minimum of a 2.0 GPA
- 120 credit hours required for graduation

### College of Arts, Sciences, and Education Requirements:

- 45 credits of Upper Division hours (3000-4000 level)

### Biochemistry Lower Division Prerequisite Coursework: Complete all of the following courses with a grade of "C" or better:

Course Availability: This is when courses are typically offered and is subject to change:

F (Fall), S (Spring), SS (Summer)

General Chemistry		Credits
CHM 1045	General Chemistry I- Prerequisites: MAC1105 or MAC1114 or MAC1140 or MAC1147 or any calculus course; or CHM1025 or adequate placement test score Prerequisite or Corequisite: CHM1045L (F,S,SS)	3
CHM 1045L	General Chemistry Lab I- Prerequisite or Corequisite: CHM1045 (F,S,SS)	1
CHM 1046	General Chemistry II- Prerequisites: CHM1045, CHM1045L. (F,S,SS)	3
CHM 1046L	General Chemistry Lab II- Prerequisite or Corequisite: CHM1046. (F,S,SS)	1
<b>Organic Chemistry</b>		
CHM 2210	Organic Chemistry I- Prerequisites: CHM1046, CHM1046L. Prerequisite or Corequisite: CHM2210L. (F,S,SS)	4
CHM 2210L	Organic Chemistry Lab I- Prerequisite or Corequisite: CHM2210 (F,S,SS)	1
CHM 2211	Organic Chemistry II- Prerequisites: CHM2210, CHM2210L. Prerequisite or Corequisite: CHM2211L. (F,S,SS)	3
CHM 2211L	Organic Chemistry Lab II- Prerequisite or Corequisite: CHM2211 (F,S,SS)	1
<b>General Biology</b>		
BSC 2010	General Biology I- Prerequisite or Corequisite: BSC2010L (F,S,SS)	3
BSC 2010L	General Biology I Lab- Prerequisite or Corequisite: BSC2010 (F,S,SS)	1
BSC 2011	General Biology II- Prerequisite or Corequisite: BSC2011L (F,S,SS)	3
BSC 2011L	General Biology II Lab- Prerequisite or Corequisite: BSC2011 (F,S,SS)	1
<b>Chemistry Math</b>		
MAC 2311	Calculus I- Prerequisites: MAC1147 or MAC1140 and MAC1114 or appropriate score on placement exam (F,S,SS)	4
MAC 2312	Calculus II- Prerequisite: MAC2311 (F,S,SS)	4

Physics		
PHY 2048	Physics W/Calculus I- Prerequisite or Corequisite: MAC2311 or equivalent (F,S,SS)	4
PHY 2048L	General Physics Lab I- Prerequisite or Corequisite: PHY2048 (F,S,SS)	1
PHY 2049	Physics W/Calculus II- Prerequisite: PHY2048; Prerequisite or Corequisite: MAC2312 (F,S,SS)	4
PHY 2049L	General Physics Lab II- Prerequisite or Corequisite: PHY2049 (F,S,SS)	1

**Biochemistry BS Upper Division Core: Complete all of the following courses with a grade of “C” or better:**

Course	Description	Credits
CHM 3120	Intro Analytical Chemistry- Prerequisites: CHM1046 and CHM1046L (F,S,SS)	3
CHM 3120L	Intro Analytical Chemistry Lab- Prerequisite or Corequisite: CHM3120 (F,S,SS)	1
CHM 3410	Physical Chemistry I- Prerequisites: CHM3120, CHM3120L, MAC2311, MAC2312, PHY2049, PHY2049L. Corequisite: CHM 3410L (F,S)	4
CHM 3411	Physical Chemistry II- Prerequisite: CHM3410, CHM3410L (F,S)	4
CHM 4304	Biological Chemistry I- Prerequisites: CHM 2211 and CHM 2211L (F,S,SS)	3
CHM 4304L	Biological Chemistry I Lab- Prerequisite or Corequisite: CHM4304 (F,S,SS)	1
CHM 4307	Biological Chemistry II- Prerequisites: CHM4304 (F,S,SS)	3
CHM 4307L	Biological Chemistry II Lab- Prerequisite or Corequisite: CHM4304 (F,S,SS)	1
MCB 3020	General Microbiology- Prerequisites: BSC2011, BSC2011L, CHM2210, CHM2210L (F,S,SS)	3
MCB 3020L	General Microbiology Lab- Prerequisites or Corequisite: MCB3020 (F,S,SS)	1
PCB 3063	Genetics- Prerequisite: BSC2010 (F,S,SS)	3
PCB 3063L	Genetics Lab- Prerequisite or Corequisite: PCB3063 (F,S,SS)	1

**Biochemistry Core Set: Complete 1 of the 2 following sets of courses:**

Option A	Description	Credits
CHM 3410L	Physical Chemistry I Lab- Prerequisite or corequisite: CHM3410 (F,S)	1
CHM 3411L	Physical Chemistry II Lab- Prerequisite or Corequisite: CHM3411 (F,S)	2
<b>OR</b>		
Option B		
CHM 4130	Instrumental Analysis- Prerequisites: CHM3120, CHM3120L, CHM2211, CHM2211L, CHM3410 or CHM3400, PHY2048, PHY2048L, PHY2049, PHY2049L or PHY2053, PHY2048L, PHY2054, PHY2049L (F,S)	3
CHM 4130L	Instrumental Analysis Lab- Prerequisite or corequisite: CHM4130 (F,S)	1

**Biochemistry Elective: Complete 1 course with a “C” or higher. Students may not use CHM3410L, CHM3411L or CHM4130, CHM4130L if they were used to complete the Set Option Requirement above.**

Course	Description	Credits
CHM 3410L	Physical Chemistry I Lab- Prerequisite or corequisite: CHM3410 (F)	1
CHM 3411L	Physical Chemistry II Lab- Prerequisite or Corequisite: CHM3411 (S)	2
CHM 4130	Instrumental Analysis- Prerequisites: CHM3120, CHM3120L, CHM2211, CHM2211L, CHM3410 or CHM3400, PHY2048, PHY2048L, PHY2049, PHY2049L or PHY2053, PHY2048L, PHY2054, PHY2049L (F,S)	3
CHM 4130L	Instrumental Analysis Lab- Prerequisite or corequisite: CHM4130 (F,S)	1
CHM 3610	Fundamentals of Inorganic Chemistry- Prerequisites: CHM2211 and CHM2211L (S)	3
CHM 4220	Advanced Organic Chemistry- Prerequisites: CHM2211 and CHM2211L. (F)	3
CHM 4300	Bio-Organic Chemistry- Prerequisites: CHM2211 and CHM2211L. (S)	3

CHM 4611	Advanced Inorganic Chemistry- Prerequisites: CHM3610, CHM2211, CHM2211L, CHM3410 and CHM3410L (F)	3
CHS 4100	Radiochemistry- Prerequisites: CHM1046, CHM3410 or CHM3400, or PHY107 Corequisite: CHS4100L (F)	3
CHS 4430	Intro Chemical Toxicology- Prerequisites: CHM4304 or BCH3033 (F)	3
MCB 4503	Virology- Prerequisites: CHM2210 and PCB3063	3
PCB 4023	Cell Biology- Prerequisites: CHM1046 and PCB3063 (F,S,SS)	3
PCB 4233	Immunology- Prerequisite: PCB3063 (F,S)	3
PCB 4524	Molecular Biology- Prerequisites: PCB3063, BCH3033 or CHM4304	3

**Upper Division Biochemistry Research Requirement: Please select 1 of the following:**

Course	Description	Credits
BCH 4910L	Undergrad Research- This requirement is completed over two-three semesters in collaboration with a Chemistry Faculty member. Please contact a chemistry faculty member for more information as early as your sophomore year of college. Students who do not enroll in this course by 90 credits will have an advising hold placed on their account. (F,S,SS)	3
CHM 4910L		3

**Chemistry Senior Seminar**

Course	Description	Credits
CHM 4930	Senior Seminar- Prerequisite: Senior standing in <b>last term of enrollment</b> . Advisor permission required. Please message advisor or schedule an appointment requesting permission. (F,S,SS)	1

**Interested in Teaching?** Students interested in Secondary Teacher Certification should contact the College of Arts, Sciences & Education Center for Advising & Student Success at (305) 348-2978

**Pre-Health Interest:** Interested students should consult a Pre-Health Advisor (DM 337; 305-348-0515; preprofca@fiu.edu) for arranging a curriculum to enhance their potential to gain admission to these professional schools.

**University Core Curriculum**

Students transferring with an AA degree or General Education requirements met from a Florida public college or university, or a bachelor's degree from a regionally accredited institution, automatically satisfy the UCC. All others require course-by-course evaluations.

**Summer Enrollment**

Students transferring to FIU with **less than 60 credits** are required to earn at least 9 credits during one or more summer terms at FIU or any other university in the State University System of Florida. Courses may be completed in person or online.

**Civics Literacy Requirement**

The Civic Literacy requirement is a statewide mandate that applies to undergraduate students *initially* entering a Florida State University System (SUS) and/or Florida College System (FCS) institution in the 2018-19 academic year and thereafter. Please see your academic advisor to learn about your options to complete this requirement.

**Enrollment Status**

Full Time= 12 credit hours or more

## **FLENT/FLEX: State-mandated foreign language requirement**

### **Students Satisfy FLENT/FLEX as follows:**

- Two terms of the same language at the introductory level (levels 1 & 2) OR One term of an intermediate or advanced level course
- International evaluation or high school transcript noting studies were completed in a country where English is not an official language
- Passing scores on CLEP exam (Spanish, French, German)
- Passing scores on BYU FLATS (nearly 60 languages offered)
- Two years of the same foreign language in high school
- A previously earned bachelor's degree from a regionally accredited institution
- An AA degree earned at a Florida public college or university prior to 1989
- Passing TOEFL or IELTS scores required for FIU admission

### **Global Learning**

The Global Learning for Global Citizenship (GL) requirement is unique to FIU, and therefore, students may not use transfer credits to satisfy it. GL courses, activities, and programs enhance students' understanding of global issues and engagement as global citizens. For a list of courses: [goglobal.fiu.edu](http://goglobal.fiu.edu)

### **Transfer Students**

FIU accepts transfer credits from regionally accredited institutions and nationally accredited institutions that participate in Florida's Statewide Course Numbering System (SCNS).

60 = Maximum number of lower-division credits applied toward the bachelor's degree.

30 = Maximum number of upper-division credits applied toward the bachelor's degree.

### **Academic Advising**

You should meet with your advisor at least once a semester. To make an appointment with your advisor, Log onto MyFIU, click on the Academic Advising tile, click on the Success Network tile, click on the Go to Panther Success Network button, sign-in again using your FIU credentials.

**Success Markers:** Department of Chemistry and Biochemistry has identified important courses in the major that indicate you are on track for successful degree completion. **In cases where students are not making good progress, a change of major may be required.**

- 15 credits- Complete MAC 1105 (or higher) with a C or better
- 30 credits- Complete CHM 1045/1045L with a C or better
- 45 credits- Complete in CHM 1046/1046L with a C or better
- 60 credits- Complete CHM 2210/2210L with a C or better
- 75 credits- Complete MAC 2311 (or higher) with a C or better
- 75 credits- Complete CHM 2211/2211L a C or better
- 75 credits- Complete PHY 2048/PHY 2048L with a C or better
- 75 credits- Complete CHM3120/3120L with a C or better
- 90 credits- Complete MAC 2312 with C or better
- 90 credits- Complete PHY 2049/PHY 2049L with a C or better