

 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Undergraduate Programs		UUPC Approval <u>11-03-25</u> UFS Approval _____ Banner _____ Catalog _____
	Department <u>Chemistry and Biochemistry</u> College <u>Science</u>		
Program Name BS in Chemistry: Concentration in Biochemistry		<input type="checkbox"/> New Program* <input checked="" type="checkbox"/> Change Program*	Effective Date (TERM & YEAR) Spring 2026
Please explain the requested change(s) and offer rationale below or on an attachment. <p>The Department of Chemistry and Biochemistry at Florida Atlantic University proposes revising the general mathematics requirements and elective course language for the BS in Chemistry with a Concentration in Biochemistry. This revision introduces an alternate pathway and updates the corresponding catalog language to reflect this increased flexibility.</p> <p>The primary objective is to offer a more flexible pathway for fulfilling general mathematics requirements by allowing students to substitute Introductory Statistics (STA2023) and Methods of Calculus (MAC2233) in place of Calculus with Analytical Geometry I (MAC2311) and Experimental Design and Statistical Inference (PSY3234). This alternative pathway is intended to expand access and encourage increased enrollment in the Chemistry program.</p> <p>In addition, we recommend simplifying the current detailed listing of elective courses by replacing them with the following streamlined statement: "Other chemistry or biochemistry elective courses - At least 3 credits. Any approved course at the 3000, 4000, 5000, or 6000 levels from the Chemistry Department (CHM, CHS, or BCH)."</p> <p>These proposed revisions are designed to enhance academic flexibility, better align student preparation with workforce demands, and support the College of Science's Strategic Plan and mission to grow the Chemistry majors at FAU.</p>			
*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.			
Faculty Contact/Email/Phone Donella Beckwith, dbeckwith@fau.edu, (561)297-0046		Consult and list departments that may be affected by the change(s) and attach documentation	
Approved by Department Chair <u>Andrew Tepuk's</u> College Curriculum Chair <u>[Signature]</u> College Dean <u>[Signature]</u> UUPC Chair <u>Korey Sorge</u> Undergraduate Studies Dean <u>Dan Meeroff</u> UFS President _____ Provost _____		Date <u>10/15/2025</u> <u>10-22-25</u> <u>10/22/25</u> <u>11-03-25</u> <u>11-03-25</u> _____ _____	

Email this form and attachments to mjenning@fau.edu seven business days before the UUPC meeting.

Core Curriculum

The following courses are required for all Chemistry majors:

Biochemistry 1	BCH 3033	3
General Chemistry 1	CHM 2045	3
General Chemistry 1 Lab	CHM 2045L	1
General Chemistry 2	CHM 2046	3
General Chemistry 2 Lab	CHM 2046L	1
Organic Chemistry 1	CHM 2210	3
Organic Chemistry 2	CHM 2211	3
Organic Chemistry Lab	CHM 2211L	2
Quantitative Analysis	CHM 3120	2
Quantitative Analysis Lab	CHM 3120L	2
General Physics 1 Lab	PHY 2048L	1
General Physics 2 Lab	PHY 2049L	1

Biochemistry Concentration

In addition to the core curriculum, the B.S. in Chemistry (Biochemistry concentration) program requires the following courses.

Biochemistry 2	BCH 3034	3
Biochemistry Lab	BCH 3103L	3
RI: Advanced Biochemistry	BCH 4035	3
Biological Principles	BSC 1010	3
Biological Principles Lab	BSC 1010L	1
Chemical Literature	CHM 3060	1
Physical Chemistry 1	CHM 3410	3
Physical Chemistry 1 Lab	CHM 3410L	2
Calculus with Analytic Geometry 1 and	MAC 2311	4
Experimental Design and Statistical Inference	PSY 3234	3
or		
Introductory Statistics and	STA 2023	3
Methods of Calculus	MAC 2233	3
General Physics 1	PHY 2048	4 or
College Physics 1	PHY 2053	4

General Physics 2	PHY 2049	4 or
College Physics 2	PHY 2054	4

Choose a minimum of one of the following.

Environmental Chemistry	CHM 3080	3
Inorganic Chemistry	CHM 3609	3
Inorganic Chemistry Lab	CHM 3609L	1
Bioanalytical Instrumentation	CHM 4139	2
Bioanalytical Instrumentation Lab	CHM 4139L	2
Organic Chemistry 3	CHM 4220	2
RI: Introduction to Drug Design	CHM 4273	3
Introduction to Drug Development	CHM 4274G	3
RI: Structural Biochemistry	CHM 4350	3
Materials Chemistry	CHM 4714	3

Other chemistry or biochemistry elective courses – At least 3 credits

Any **approved** course at the 3000, 4000, 5000, or 6000 levels from the Chemistry Department (CHM, CHS, or BCH)

Minimum one of the following:

General Microbiology & Lab MCB 3020 3 & 3020L 1 (4 total)

Genetics PCB 3063 4

Cell Biology PCB 4023 3

~~Biological bases of behavior PSB 3002 3~~

~~Minimum one of the following:~~

~~Seminar BSC 4932 1~~

~~Directed Independent Study CHM 4905 1-3~~

~~Science Internship IDS 3941 1-3~~

~~Directed Independent Research in Chemistry CHM 4915 1-3~~

~~Directed Independent Research in Chemistry CHM 4916 0-3~~

~~Special Topics CHM 4933 1-4~~

Additional courses for Pre-Professional majors:

Required course

Biodiversity BSC 1011 3

Biodiversity Lab BSC 1011 1

Suggested electives

Human Morph & Function 1 & Lab PCB 3703 3 & PCB 3703L 1 (4 Total) or
Comparative Vertebrate Morph & Lab ZOO 4690 3 & ZOO 4690L 1 (4 total)
Human Morph & Function 2 & Lab PCB 3704 3 & PCB 3704L 1 (4 total) or
Comparative Animal Physiology & Lab PCB 4723 3 & PCB 4723L 1 (4 total)
Comparative Animal Behavior CBH 4024 3
Medical Shadowing Internship IDS 3940 1