

Program Change Request

Date Submitted: 02/05/26 11:28 am

Viewing: **SC-BA-CHEM : Chemistry, BA**

Last approved: 11/13/20 8:12 am

Last edit: 02/05/26 11:28 am

Changes proposed by: jbazaz

Catalog Pages
Using this Program
[Chemistry, BA](#)

Are you completing this form on someone else's behalf?

No

Effective Catalog: 2026-2027

Program Level: Undergraduate

Program Type: Bachelor's

Degree Type: Bachelor of Arts

Title: Chemistry, BA

Banner Title: BA Chemistry

Registrar/OAPI Use
Only – SCHEV
Status [Pending Approval](#)

Registrar's Office
Use Only –
Program Start Term

Registrar/OAPI Use
Only – SCHEV
Letter

Registrar/OAPI Use
Only – SACSCOC
Status

Concentration(s):

In Workflow

1. **CHEM Assoc Chair**
2. CHEM Chair
3. SC Curriculum Committee
4. SC Assistant Dean
5. Assoc Provost-Undergraduate
6. Registrar-Programs

History

1. Oct 23, 2017 by clmig-jwehrheim
2. Feb 15, 2018 by rzachari
3. Nov 13, 2020 by Tory Sarro (vsarro)

	Associated Concentrations	Registrar's Office Use Only: Concentration Code
1	Biochemistry	BC

Registrar/IRR Use Only – Concentration CIP Code

College/School: College of Science

Department / Academic Unit: Chemistry & Biochemistry

Jointly Owned Program? No

Is there an embedded degree as part of a program?

Justification

What: Updating the curriculum to account for BIOL course lecture and lab decoupling.

Why: To ensure students are still required to complete the course's lecture and lab components in light of the course being decoupled into two courses.

Total Credits Required: Total credits: minimum 120

Registrar's Office Use Only - Program Code:

SC-BA-CHEM

Registrar/IRR Use Only – Program CIP Code 40.0501 - Chemistry, General.

Admission Requirements:

Admissions

University-wide admissions policies can be found in the [Undergraduate Admissions Policies](#) section of this catalog. To apply for this program, please complete the [George Mason University Admissions Application](#).

Program-Specific Policies:

Policies

Students must fulfill all [Requirements for Bachelor's Degrees](#), including the [Mason Core](#). As outlined in the [Requirements](#) section, students in this bachelor's program must also complete the additional College Requirements for the BA Degree.

[CHEM 336](#) Physical Chemistry Lab I([Mason Core](#)) or [CHEM 465](#) Biochemistry Lab([Mason Core](#)) will fulfill the writing intensive requirement.

For policies governing all undergraduate programs, see [AP.5 Undergraduate Policies](#).

Termination from the Major

To ensure the academic integrity of the Chemistry and Biochemistry undergraduate major program, students are expected to maintain a satisfactory level of academic performance.

No chemistry, math, or science course that is required for the major may be attempted more than three times. Students who do not successfully complete such a course with a grade of C or better by the third attempt may be terminated from the major.

Students who have been terminated from the chemistry major may not register for a chemistry course without the permission of the Department of Chemistry and Biochemistry.

A student may not declare a major in chemistry if the student has previously met the termination criteria for the major at any time, regardless of what the student's major was at the time the courses were taken.

Degree Requirements: Students should refer to the [Admissions & Policies](#) tab for specific policies related to this program.

Students must complete the chemistry program requirements with a minimum GPA of 2.30 and present no more than two courses with a grade of 'D' (1.00) in CHEM coursework at graduation.

BA without Concentration

Students who do not select the optional concentration complete the curriculum requirements listed below.

Chemistry Courses

CHEM 211	General Chemistry I(Mason Core)	3
CHEM 213	General Chemistry Laboratory I(Mason Core)	1
CHEM 212	General Chemistry II(Mason Core)	3
CHEM 214	General Chemistry Laboratory II(Mason Core)	1
CHEM 313	Organic Chemistry I	3
CHEM 314	Organic Chemistry II	3
CHEM 315	Organic Chemistry Lab I	2
CHEM 318	Organic Chemistry Lab II	2
CHEM 321	Quantitative Chemical Analysis	4
CHEM 331	Physical Chemistry I	3
CHEM 332	Physical Chemistry II	3
CHEM 336	Physical Chemistry Lab I(Mason Core) ¹	2

<u>CHEM 337</u>	Physical Chemistry Lab II	2
Select 5 credits of electives in chemistry		5
Total Credits		37

1

Fulfills the writing intensive requirement.

Mathematics Courses

<u>MATH 113</u>	Analytic Geometry and Calculus I(<u>Mason Core</u>)	4
<u>MATH 114</u>	Analytic Geometry and Calculus II	4
<u>MATH 213</u>	Analytic Geometry and Calculus III	3
Total Credits		11

Physics Courses

Select one sequence:		8
<u>PHYS 243</u>	College Physics I(<u>Mason Core</u>)	
& <u>PHYS 244</u>	and College Physics I Lab(<u>Mason Core</u>)	
& <u>PHYS 245</u>	and College Physics II(<u>Mason Core</u>)	
& <u>PHYS 246</u>	and College Physics II Lab(<u>Mason Core</u>)	
<u>PHYS 160</u>	University Physics I(<u>Mason Core</u>)	
& <u>PHYS 161</u>	and University Physics I Laboratory(<u>Mason Core</u>)	
& <u>PHYS 260</u>	and University Physics II(<u>Mason Core</u>)	
& <u>PHYS 261</u>	and University Physics II Laboratory(<u>Mason Core</u>)	
Total Credits		8

Concentration in Biochemistry (BC)

The concentration in biochemistry is designed for students interested in studying chemistry at its interface with the biological sciences. Those interested in health science careers can obtain an excellent science background through this concentration.

Students majoring in chemistry with a concentration in biochemistry will complete the coursework below:

Chemistry Courses

<u>CHEM 211</u>	General Chemistry I(<u>Mason Core</u>)	3
<u>CHEM 213</u>	General Chemistry Laboratory I(<u>Mason Core</u>)	1
<u>CHEM 212</u>	General Chemistry II(<u>Mason Core</u>)	3
<u>CHEM 214</u>	General Chemistry Laboratory II(<u>Mason Core</u>)	1
<u>CHEM 313</u>	Organic Chemistry I	3

<u>CHEM 314</u>	Organic Chemistry II	3
<u>CHEM 315</u>	Organic Chemistry Lab I	2
<u>CHEM 318</u>	Organic Chemistry Lab II	2
<u>CHEM 321</u>	Quantitative Chemical Analysis	4
<u>CHEM 331</u>	Physical Chemistry I	3
<u>CHEM 336</u>	Physical Chemistry Lab I(<u>Mason Core</u>). ¹	2
<u>CHEM 446</u>	Bioinorganic Chemistry	3
<u>CHEM 463</u>	General Biochemistry I	4
<u>CHEM 464</u>	General Biochemistry II	3
<u>CHEM 465</u>	Biochemistry Lab(<u>Mason Core</u>). ¹	2
Total Credits		39

¹

Fulfills the writing intensive requirement.

Mathematics and Statistics Courses

<u>MATH 113</u>	Analytic Geometry and Calculus I(<u>Mason Core</u>).	4
<u>MATH 114</u>	Analytic Geometry and Calculus II	4
<u>STAT 250</u>	Introductory Statistics I(<u>Mason Core</u>).	3
Total Credits		11

Physics Courses

<u>PHYS 243</u>	College Physics I(<u>Mason Core</u>).	3
<u>PHYS 244</u>	College Physics I Lab(<u>Mason Core</u>).	1
<u>PHYS 245</u>	College Physics II(<u>Mason Core</u>).	3
<u>PHYS 246</u>	College Physics II Lab(<u>Mason Core</u>).	1
Total Credits		8

Biology Courses

<u>BIOL 213</u> & <u>BIOL 215</u>	Cell Structure and Function and Cell Structure and Function Laboratory	4
Total Credits		4

**Retroactive
Requirements
Updates:**

Plan of Study:**Honors****Information:**

Honors in the Major

Chemistry majors who have completed prerequisites for [CHEM 455](#) Honors Research in Chemistry and [CHEM 456](#) Honors Research in Chemistry and have maintained an overall GPA of at least 3.00 in mathematics and science courses are eligible to enter the departmental honors program. To graduate with honors in chemistry, a student is required to maintain a minimum GPA of 3.00 in mathematics and science courses and successfully complete the two semesters of [CHEM 455](#) Honors Research in Chemistry and [CHEM 456](#) Honors Research in Chemistry with a minimum GPA of 3.50.

In order to apply for Chemistry Honors, please complete the [application](#) and submit it to the undergraduate coordinator.

Program Outcomes

Additional Program Information

This information is required by the Office of Accreditation and Program Integrity.

Courses offered via distance (if applicable):

What is the primary delivery format for the program?
Face-to-Face Only

Does any portion of this program occur off-campus?

No

Are you working with a vendor / other collaborators to offer your program?

No

Related Departments

Could this program prepare students for any type of professional licensure, in Virginia or elsewhere?

Yes

Please explain:

Teacher licensure in conjunction with CEHD.

Are you adding or removing a licensure component?

No

Additional SCHEV & SACSCOC Information

Is this change a simple retitling of an existing program, with no other changes, to any existing program content, curriculum requirements, etc?

No

Does this change represent a repackaging of content in an existing approved degree/certificate program at the same instructional level (i.e., baccalaureate, master's, or doctoral)?

No

Percentage of total credits containing new course content. ("New course content" is defined by SACSCOC as content that is not currently included in an existing approved degree/certificate program at the same instructional level. Do not exclude gen ed credits in calculations for undergraduate programs.)

0%-24%

Does this change include the addition of a distance education or face-to-face method of delivery for this program?

No

Does this change include the addition of a course/credit-based competency-based education delivery option?

No

Will any additional equipment/facilities be needed?

No

Will any additional faculty be required?

No

Will any additional financial resources be needed?

No

Additional library/learning resources needed?

No

Have you reached out to the Libraries to determine whether there are adequate resources to support your program? If not, please email Meg Meiman, Associate University Librarian for Learning, Research, and Engagement at mmeiman2@gmu.edu.

No

OAPI Use Only – Determination of SACSCOC Impact

Comments or Notes**Green Leaf Program Designation**

Is this a Green Leaf program? No

Does this program cover material which crosses into another department?

No

Additional Attachments [CHEMtermfrommajorapproval.pdf](#)

SCHEV Proposal

Executive Summary

Reviewer Comments

Additional Comments

Is this course required of all students in this degree program?

%wi_required.eshtml%

Key: 35