

Bachelor's Degree in Chemistry, Pre-Professional Option

The Bachelor's degree in Chemistry with a Pre-Professional option is our most flexible program. The credit hours for electives allow students to pursue a minor in another subject or take a variety of courses in subjects that interest them. With these options, students can customize a degree program to suit their career goals.



Chemists work in research, clinical, and testing laboratories and perform outdoor field work. Chemists are employed as scientific and technical writers and as sales consultants for companies that provide goods and services to the chemical industry. The Pre-Professional option is appropriate for students interested in graduate school as well.

Typical Four-Year Degree Program

Year 1 Fall	Hrs.
CHEM 1211 and 1211L	4
CHEM 1210 (take fall or spring)	1
MATH 1113 or 1112	3
ENGL 1101	3
POLS 1101	3
Total hours	14

Year 1 Spring	Hrs.
CHEM 1212 and 1212L	4
MATH 2261	4
ENGL 1102	3
HIST 2111 or 2112	3
Total hours	14

Year 2 Fall	Hrs.
CHEM 3401	4
MATH 2262	4
CHEM 2310	4
Core or elective	3
Total hours	15

Year 2 Spring	Hrs.
CHEM 3402	4
BIOL 1107/1107L	4
Core or Elective	7
CHEM 2210 (take fall or spring)	1
Total hours	16

Year 3 Fall	Hrs.
CHEM 3601	3
BIOL 1108/1108L or elective	4
PHYS 1111K or 2211K	4
CHEM 3510	4
Total hours	15

Year 3 Spring	Hrs.
CHEM 3601L	2
PHYS 1112K or 2212K	4
Core or elective	9
Total hours	15

Year 4 Fall	Hrs.
CHEM 3801 or elective	4
Core or elective	12
Total hours	16

Year 4 Spring	Hrs.
CHEM 3802 or elective	4
CHEM 4210	1
Core or elective	10
Total hours	15



Graduation Checklist

Chemistry – B.S. Degree

Pre-Professional Option

This packet can be downloaded at <https://www.valdosta.edu/chemistry/student-advising.php>

Updated 9/15/21, 2021-22 Catalog Year

Name _____
 Student #870 _____ Cell _____
 Email _____
 Grad Sem/Yr _____ Applied for Grad _____
 Minor _____ Major #2 _____

Courses are listed with prerequisites in parentheses and semesters abbreviated (Fall, Spring, Summer and Maymester).

Core Area A (9 hrs): Essential Skills		
Course	Grade	Hrs
ENGL 1101		3
ENGL 1102		3
MATH 1113 (OR MATH 1111 + 1112) ¹		3

¹ MATH 1111 will count in General Electives and MATH 1112 in Area A, if taken. Submit course sub. form for MATH 1113.

Core Area B (4 hrs): Perspectives		
Course	Grade	Hrs
PERS ¹		2
PERS ¹		2

¹ Each must be from a different area of Perspectives, 21xx, 22xx, ..., 27xx.

Core Area C (6 hrs): Humanities/Fine Arts		
Course	Grade	Hrs
ENGL 2111, 2112 or 2113		3
¹		3

¹ Foreign language preferred (Part of any 2-course for. lang. sequence. If for. lang. not taken in Area C, then complete sequence in General Electives.) or ART 1100; COMM 1100, 1110; DANC 1500; MUSC 1100, 1110, 1120, 1130; MDIA 2000; THEA 1100; PHIL 2010, 2020; REL 2020; WGST 2010; ENGL 2111, 2112, 2113.

Core Area D.2.a (11 hrs): Math & Science		
Course	Grade	Hrs
MATH 2261 ¹ (MATH 1112 or 1113)		3
CHEM 1211 & CHEM 1211L ²		4
BIOL 1107 & 1107L		4

¹ 1 hr. spills to Area F

² Prerequisites: Score 540 SAT MATH or 23 ACT, pass CHEM 1200 with a C or higher, or pass Chemistry Placement Exam; Co or Pre-requisite: MATH 1111 or higher.

Core Area E (12 hrs): Social Sciences		
Course	Grade	Hrs
POLS 1101		3
HIST 2111 or 2112		3
¹		3
¹		3

¹ AFAM/WGST 2020; ANTH 1102; ECON 1500; GEOG 1100, 1101, 1102, 1103; HIST 1011, 1012, 1013; POLS 2101, 2401, 2501; PSYC 1101; SOCI 1101, 1160.

Core Area F (18 hrs.): Major Courses ¹		
Course	Grade	Hrs
MATH 2262 (MATH 2261) F Sp Sum		4
CHEM 1212 & CHEM 1212L (CHEM 1211/L F Sp Su)		4
CHEM 2310 (CHEM 1211/L & 1212/L) F		4
PHYS 1111K (MATH 1112) F Sp Sum or PHYS 2211K (MATH 2261 PRE OR CO-REQUISITE) F Sp		4
PHYS 1112K (PHYS 1112K) F Sp or PHYS 2212K (PHYS 2211K) F Sp		4
MATH 2261 (spilled from D)		1

¹ Excess hours applied to Required Major Courses.

Required Major Courses (38-39 hours)		
Course	Grade	Hrs
Science Elective 2000 or above or BIOL 1108 & 1108L ¹		4
CHEM 1210 F Sp		1
CHEM 2210 (CHEM 1210) F Sp		1
CHEM 3401 (CHEM 1212/L) F Sp		4
CHEM 3402 (CHEM 3401) Sp Su		4
CHEM 3510 (CHEM 1212/L) F Sum-MM		4
CHEM 3601 (CHEM 3402) Sp Su		3
CHEM 3601L (CHEM 3601) F Sp		2
CHEM 3801 or 3802 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K.) 3801 F; 3802 Sp		4
Upper-Division Mathematics, Computer Science, or Science Electives ²		7-8
CHEM 4210 (Senior Year) F Sp		1
Excess hours from Core Area F		3

¹ BIOL 1108 & 1108L are recommended for Pre-Med/Pharm students

² May only include up to 4 hours of CHEM 4910

General Electives (6-9 hrs)		
Course	Grade	Hrs

Foreign Language (6 hrs; 3 hrs may count in Area C)		
Course	Grade	Hrs
		3
		0-3

Upper-Division Electives (9-10 hrs)		
Course	Grade	Hrs
¹		

Must make a C or better in major courses and math

Bachelor's Degree in Chemistry, ACS Certified Option

The American Chemical Society (ACS) certifies that this VSU Chemistry degree option meets the highest standards for chemistry education. We offer this certification for both Chemistry and Biochemistry options. These are the most rigorous degree options and are appropriate for the student pursuing a Master's (MS) or doctorate (PhD) in Chemistry graduate school or a career as a chemical researcher. The Biochemistry option, discussed on another page, includes several additional courses in biology that prepare the student for a career in pharmaceutical or medical research.



Typical Four-Year Degree Program

Year 1 Fall	Hrs.
CHEM 1211 and 1211L	4
CHEM 1210 (take fall or spring)	1
MATH 1113	3
ENGL 1101	3
POLS 1101	3
Total hours	14

Year 1 Spring	Hrs.
CHEM 1212 and 1212L	4
MATH 2261	4
ENGL 1102	3
HIST 2111 or 2112	3
Total hours	14

Year 2 Fall	Hrs.
CHEM 3401	4
CHEM 2310	4
MATH 2262	4
PHYS 2211K or 1111K	4
Total hours	16

Year 2 Spring	Hrs.
CHEM 3402	4
PHYS 2212K or 1112K	4
Core or elective (MATH 3340 rec.)	3
Core or elective	3
CHEM 2210	1
Total hours	15

Year 3 Fall	Hrs.
CHEM 3801	4
CHEM 3601	3
CHEM 3510	4
Core or elective	5
Total hours	16

Year 3 Spring	Hrs.
CHEM 3802	4
CHEM 3601L	2
Core or elective	9
Total hours	15

Year 4 Fall	Hrs.
CHEM 4910 or elective	3
Core or elective	12
Total hours	15

Year 4 Spring	Hrs.
CHEM 4310	4
CHEM 4210	1
Core or elective	10
Total hours	15

Since this degree option is designed for students pursuing graduate school and a career in research, we highly recommend that students enroll in at least one semester of undergraduate research (CHEM 4910). Calculus-based physics (PHYS 2221 and 2222) will better prepare the student for graduate courses.



Graduation Checklist

Chemistry - American Chemical Society Certified Degree

Updated 9/15/21, 2021-22 Catalog Year

[This packet can be downloaded at https://www.valdosta.edu/chemistry/student-advising.php](https://www.valdosta.edu/chemistry/student-advising.php)

Name _____
 Student #870 _____ Cell _____
 Email _____
 Grad Sem/Yr _____ Applied for Grad _____
 Minor _____ Major #2 _____

Courses are listed with prerequisites in parentheses and semesters abbreviated (Fall, Spring, Summer and Maymester).

Core Area A (9 hrs): Essential Skills		
Course	Grade	Hrs
ENGL 1101		3
ENGL 1102		3
MATH 1113 (OR MATH 1111 + 1112) ¹		3

¹ MATH 1111 will count in General Electives and MATH 1112 in Area A, if taken. Submit course sub. form for MATH 1113.

Core Area B (4 hrs): Perspectives		
Course	Grade	Hrs
PERS ¹		2
PERS ¹		2

¹ Each must be from a different area of Perspectives, 21xx, 22xx, ..., 27xx.

Core Area C (6 hrs): Humanities/Fine Arts		
Course	Grade	Hrs
ENGL 2111, 2112 or 2113		3
¹		3

¹ Foreign language preferred (Part of any 2-course for. lang. sequence.) If for. lang. not taken in Area C, then choose one: ART 1100; COMM 1100, 1110; DANC 1500; MUSC 1100, 1110, 1120, 1130; MDIA 2000; THEA 1100; PHIL 2010, 2020; REL 2020; WGST 2010; ENGL 2111, 2112, 2113.

Core Area D.2.a (11 hrs): Math & Science		
Course	Grade	Hrs
MATH 2261 ¹ (MATH 1112 or 1113)		3
CHEM 1211 & CHEM 1211L ²		4
CHEM 1212 & CHEM 1212L (CHEM 1211/1211L)		4

¹ 1 hr. spills to Area F

² Prerequisites: Score 540 SAT MATH or 23 ACT, pass CHEM 1200 with a C or higher, or pass Chemistry Placement Exam; Co or Pre-requisite: MATH 1111 or higher.

Core Area E (12 hrs): Social Sciences		
Course	Grade	Hrs
POLS 1101		3
HIST 2111 or 2112		3
¹		3
¹		3

¹ AFAM/WGST 2020; ANTH 1102; ECON 1500; GEOG 1100, 1101, 1102, 1103; HIST 1011, 1012, 1013; POLS 2101, 2401, 2501; PSYC 1101; SOCI 1101, 1160.

Core Area F (18 hrs): Major Courses		
Course	Grade	Hrs
MATH 2262 (MATH 2261) F Sp Sum		4
CHEM 2310 (CHEM 1211/L & 1212/L) F		4
PHYS 1111K (MATH 1112) F Sp Sum or PHYS 2211K (MATH 2261 PRE OR CO-REQUISITE) F Sp		4
PHYS 1112K (PHYS 1111K) F Sp or PHYS 2212K (PHYS 2211K) F Sp		4
MATH 2261 (spilled from D)		1
CHEM 1210 F Sp		1

Required Major Courses (31 hours)		
Course	Grade	Hrs
CHEM 2210 (CHEM 1210) F Sp		1
CHEM 3401 (CHEM 1212/L) F Sp		4
CHEM 3402 (CHEM 3401) Sp Su		4
CHEM 3510 (CHEM 1212/L) F Sum-MM		4
CHEM 3601 (CHEM 3402) F Su-MM		3
CHEM 3601L (CHEM 3601) F Sp		2
CHEM 3801 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K) F		4
CHEM 3802 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K) Sp		4
CHEM 4210 (Senior Year) F Sp		1
CHEM 4310 (CHEM 3801) Sp		4

Advanced Major Courses: Upper-Division CHEM Electives (6 hrs)		
Course	Grade	Hrs
¹		3
¹		3

¹ 6 hours at 3000 level or above in Chemistry: Recommend CHEM 3602 (CHEM 3601); may only apply 4 credits of CHEM 4910 (CHEM 1212/L); Internship - 3 credits may apply with permission from dept. head.

General Electives (14-17 hrs)		
Course	Grade	Hrs

Foreign Language (6 hrs; 3 hrs may count in Area C)		
Course	Grade	Hrs
		3
		0-3

Upper-Division Electives (3 hrs)		
Course	Grade	Hrs
¹		3

¹ 3 hours at 3000 level or above in any discipline outside the major.

Must make a C or better in major courses and math.

Bachelor's Degree in Chemistry, ACS Certified Biochemistry Option

The American Chemical Society (ACS) certifies that this VSU Chemistry degree option meets the highest standards for biochemistry education. The Biochemistry option includes additional courses in biology that prepare the student for a Master's (MS) or doctorate (PhD) in Biochemistry graduate school and career in pharmaceutical or medical research. The Chemistry option is discussed on another page.



Typical Four-Year Degree Program

Year 1 Fall	Hrs.
CHEM 1211 and 1211L	4
CHEM 1210 (take fall or spring)	1
MATH 1113	3
ENGL 1101	3
POLS 1101	3
Total hours	14

Year 1 Spring	Hrs.
CHEM 1212 and 1212L	4
MATH 2261	4
ENGL 1102	3
HIST 2111 or 2112	3
Total hours	14

Year 2 Fall	Hrs.
CHEM 3401	4
CHEM 2310	4
MATH 2262	4
PHYS 2211K or 1111K	4
Total hours	16

Year 2 Spring	Hrs.
CHEM 3402	4
PHYS 2212K or 1112K	4
Core or elective	7
CHEM 2210	1
Total hours	16

Year 3 Fall	Hrs.
CHEM 3801	4
CHEM 3601	3
CHEM 3510	4
BIOL 1107/1107L	4
Total hours	15

Year 3 Spring	Hrs.
CHEM 3802	4
CHEM 3601L	2
BIOL 1108/1108L	4
CHEM 3602	3
Core or elective	2
Total hours	15

Year 4 Fall	Hrs.
CHEM 4910 or elective	3
BIOL 3200	3
Core or elective	9
Total hours	15

Year 4 Spring	Hrs.
CHEM 4310	4
CHEM 4210	1
BIOL 3100	4
Core or elective	6
Total hours	15

Since this degree option is designed for students pursuing graduate school and a career in research, we highly recommend that students enroll in at least one semester of undergraduate research (CHEM 4910). Calculus-based physics (PHYS 1112 and 2212) will better prepare the student for graduate courses.



Graduation Checklist

Chemistry - American Chemical Society Certified Degree Biochemistry Option

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Updated 9/15/21, 2021-22 Catalog Year

Name _____
 Student #870 _____ Cell _____
 Email _____
 Grad Sem/Yr _____ Applied for Grad _____
 Minor _____ Major #2 _____

Courses are listed with prerequisites in parentheses and semesters abbreviated (Fall, Spring, Summer and Maymester).

Core Area A (9 hrs): Essential Skills		
Course	Grade	Hrs
ENGL 1101		3
ENGL 1102		3
MATH 1113 (OR MATH 1111 + 1112) ¹		3

¹ MATH 1111 will count in General Electives and MATH 1112 in Area A, if taken. Submit course sub. form for MATH 1113.

Core Area B (4 hrs): Perspectives		
Course	Grade	Hrs
PERS ¹		2
PERS ¹		2

¹ Each must be from a different area of Perspectives, 21xx, 22xx, ..., 27xx.

Core Area C (6 hrs): Humanities/Fine Arts		
Course	Grade	Hrs
ENGL 2111, 2112 or 2113		3
¹		3

¹ Foreign language preferred (Part of any 2-course for. lang. sequence.) If for. lang. not taken in Area C, then choose one: ART 1100; COMM 1100, 1110; DANC 1500; MUSC 1100, 1110, 1120, 1130; MDIA 2000; THEA 1100; PHIL 2010, 2020; REL 2020; WGST 2010; ENGL 2111, 2112, 2113.

Core Area D.2.a (11 hrs): Math & Science		
Course	Grade	Hrs
MATH 2261 ¹ (MATH 1112 or 1113)		3
CHEM 1211 & CHEM 1211L ²		4
CHEM 1212 & CHEM 1212L (CHEM 1211/1211L)		4

¹ 1 hr. spills to Area F

² Prerequisites: Score 540 SAT MATH or 23 ACT, pass CHEM 1200 with a C or higher, or pass Chemistry Placement Exam; Co or Pre-requisite: MATH 1111 or higher.

Core Area E (12 hrs): Social Sciences		
Course	Grade	Hrs
POLS 1101		3
HIST 2111 or 2112		3
¹		3
¹		3

¹ AFAM/WGST 2020; ANTH 1102; ECON 1500; GEOG 1100, 1101, 1102, 1103; HIST 1011, 1012, 1013; POLS 2101, 2401, 2501; PSYC 1101; SOCI 1101, 1160.

Core Area F (18 hrs): Major Courses ¹		
Course	Grade	Hrs
MATH 2262 (MATH 2261) F Sp Sum		4
CHEM 2310 (CHEM 1211/L & 1212/L) F		4
PHYS 1111K (MATH 1112) F Sp Sum or PHYS 2211K (MATH 2261 PRE OR CO-REQUISITE) F Sp		4
PHYS 1112K (PHYS 1111K) F Sp or PHYS 2212K (PHYS 2211K) F Sp		4
MATH 2261 (spilled from Area D)		1
BIOL 1107 & 1107L		1

¹ Excess hours applied to Required Major Courses.

Required Major Courses (49 hours)		
Course	Grade	Hrs
BIOL 1108 & 1108L		4
CHEM 1210 F Sp		1
CHEM 2210 (CHEM 1210) F Sp		1
CHEM 3401 (CHEM 1212/L) F Sp		4
CHEM 3402 (CHEM 3401) Sp Su		4
CHEM 3510 (CHEM 1212/L) F Sum-MM		4
CHEM 3601 (CHEM 3402) F Su-MM		3
CHEM 3601L (CHEM 3601) F Sp		2
CHEM 3602 (CHEM 3601) Sp		3
CHEM 3801 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K) F		4
CHEM 3802 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K) Sp		4
CHEM 4210 (Senior Year) F Sp		1
CHEM 4310 (CHEM 3801) Sp		4
BIOL 3200 (BIOL 1108/1108L) F Sp		3
BIOL 3100 (BIOL 3200) F Sp		4
BIOL 1107 & 1107L (spilled from Area F)		3

General Electives (5-8 hrs)		
Course	Grade	Hrs

Foreign Language (6 hrs; 3 hrs may count in Area C)		
Course	Grade	Hrs
		3
		0-3

Must make a C or better in major courses and math.

Bachelor's Degree in Chemistry, Business Option

The chemical industry employs millions of workers and is a significant part of the global economy. The Chemistry degree with a Business option prepares students with skills and knowledge to be a successful chemist and entrepreneur. Students will also receive the new Certificate in Entrepreneurship from the Langdale College of Business.



Students pursuing the Business option develop a strong foundation in Chemistry. We design the degree program to be flexible so that students can also take business courses that fit their career goals in entrepreneurship and international business.

Typical Four-Year Degree Program

Year 1 Fall	Hrs.
CHEM 1211 and 1211L	4
CHEM 1210 (take fall or spring)	1
MATH 1113 or 1112	3
ENGL 1101	3
POLS 1101	3
Total hours	14

Year 1 Spring	Hrs.
CHEM 1212 and 1212L	4
MATH 2261	4
ENGL 1102	3
HIST 2111 or 2112	3
Total hours	14

Year 2 Fall	Hrs.
CHEM 3401	4
MATH 2262	4
CHEM 2310	4
Core or elective	3
Total hours	15

Year 2 Spring	Hrs.
CHEM 3402	4
BIOL 1107/1107L	4
Core or elective	7
CHEM 2210 (take fall or spring)	1
Total hours	16

Year 3 Fall	Hrs.
CHEM 3601	3
BIOL 1108/1108L or elective	4
PHYS 1111K or 2211K	4
CHEM 3510	4
Total hours	15

Year 3 Spring	Hrs.
CHEM 3601L	2
PHYS 1112K or 2212K	4
Core or elective	9
Total hours	15

Year 4 Fall	Hrs.
CHEM 3801 or elective	4
Core or elective	12
Total hours	16

Year 4 Spring	Hrs.
CHEM 3802 or elective	4
CHEM 4210	1
Core or elective	10
Total hours	15

To earn the Certificate in Entrepreneurship, students take classes in accounting, marketing, and either (A) skills for entrepreneurs and small business owners or (B) international business and economics. Both paths consist of 9 credit hours.



Graduation Checklist Chemistry – B.S. Degree Business Option

This packet can be downloaded at <https://www.valdosta.edu/chemistry/student-advising.php>

Updated 9/15/21, 2021-22 Catalog Year

Name _____
 Student #870 _____ Cell _____
 Email _____
 Grad Sem/Yr _____ Applied for Grad _____
 Minor _____ Major #2 _____

Courses are listed with prerequisites in parentheses and semesters abbreviated (Fall, Spring, Summer and Maymester).

Core Area A (9 hrs): Essential Skills		
Course	Grade	Hrs
ENGL 1101		3
ENGL 1102		3
MATH 1113 (OR MATH 1111 + 1112) ¹		3

¹ MATH 1111 will count in General Electives and MATH 1112 in Area A, if taken. Submit course sub. form for MATH 1113.

Core Area B (4 hrs): Perspectives		
Course	Grade	Hrs
PERS ¹		2
PERS ¹		2

¹ Each must be from a different area of Perspectives, 21xx, 22xx, ..., 27xx.

Core Area C (6 hrs): Humanities/Fine Arts		
Course	Grade	Hrs
ENGL 2111, 2112 or 2113		3
¹		3

¹ Foreign language preferred (Part of any 2-course for. lang. sequence. If for. lang. not taken in Area C, then complete sequence in General Electives.) or ART 1100; COMM 1100, 1110; DANC 1500; MUSC 1100, 1110, 1120, 1130; MDIA 2000; THEA 1100; PHIL 2010, 2020; REL 2020; WGST 2010; ENGL 2111, 2112, 2113.

Core Area D.2.a (11 hrs): Math & Science		
Course	Grade	Hrs
MATH 2261 ¹ (MATH 1112 or 1113)		3
CHEM 1211 & CHEM 1211L ²		4
BIOL 1107 & 1107L		4

¹ 1 hr. spills to Area F

² Prerequisites: Score 540 SAT MATH or 23 ACT, pass CHEM 1200 with a C or higher, or pass Chemistry Placement Exam; Co or Pre-requisite: MATH 1111 or higher.

Core Area E (12 hrs): Social Sciences		
Course	Grade	Hrs
POLS 1101		3
HIST 2111 or 2112		3
¹		3
¹		3

¹ AFAM/WGST 2020; ANTH 1102; ECON 1500; GEOG 1100, 1101, 1102, 1103; HIST 1011, 1012, 1013; POLS 2101, 2401, 2501; PSYC 1101; SOCI 1101, 1160.

Core Area F (18 hrs.): Major Courses ¹		
Course	Grade	Hrs
MATH 2262 (MATH 2261) F Sp Sum		4
CHEM 1212 & CHEM 1212L (CHEM 1211/L F Sp Su)		4
CHEM 2310 (CHEM 1211/L & 1212/L) F		4
PHYS 1111K (MATH 1112) F Sp Su or PHYS 2211K (MATH 2261 PRE OR CO-REQUISITE) F Sp		4
PHYS 1112K (PHYS 1112K) F Sp or PHYS 2212K (PHYS 2211K) F Sp		4
MATH 2261 (spilled from D)		1

¹ Excess hours applied to Required Major Courses.

Required Major Courses (38-39 hours)		
Course	Grade	Hrs
Science Elective 2000 or above or BIOL 1108 & 1108L ¹		4
CHEM 1210 F Sp		1
CHEM 2210 (CHEM 1210) F Sp		1
CHEM 3401 (CHEM 1212/L) F Sp		4
CHEM 3402 (CHEM 3401) Sp Su		4
CHEM 3510 (CHEM 1212/L) F Sum-MM		4
CHEM 3601 (CHEM 3402) Sp Su		3
CHEM 3601L (CHEM 3601) F Sp		2
CHEM 3801 or 3802 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K.) 3801 F; 3802 Sp		4
Upper-Division Mathematics, Computer Science, or Science Electives ²		7-8
CHEM 4210 (Senior Year) F Sp		1
Excess hours from Core Area F		3

¹ BIOL 1108 & 1108L are recommended for Pre-Med/Pharm students

² May only include up to 4 hours of CHEM 4910

General Electives (6-9 hrs)		
Course	Grade	Hrs

Foreign Language (6 hrs; 3 hrs may count in Area C)		
Course	Grade	Hrs
		3
		0-3

Upper-Division Electives (3-4 hrs)		
Course	Grade	Hrs

Business Courses (9 hrs)		
Course	Grade	Hrs
ACCT 2099 F Sp		3
MKTG 3050 F Sp Su		3
(MGNT 3900 or 3910) or (IB 3000 & ECON 3600) F Sp Su for all courses		3

Must make a C or better in major courses and math

Bachelor's Degree in Chemistry, Environmental Option

Chemists can make a difference in the world by designing more environmentally friendly chemical reactions, harnessing alternative sources of energy to reduce fossil fuel emissions, and creating sustainable materials. If these sound like interesting and rewarding goals, a VSU Chemistry degree with an Environmental option is the right choice for you.



The Environmental option provides you with a well-rounded education in Chemistry along with courses that are essential to your career as an environmental chemist. You will also learn non-technical skills, such as environmental ethics and philosophy that provide the knowledge you need to make wise decisions that help our planet.

Typical Four-Year Degree Program

Year 1 Fall	Hrs.
CHEM 1211 and 1211L	4
CHEM 1210 (take fall or spring)	1
MATH 1113 or 1112	3
ENGL 1101	3
POLS 1101	3
Total hours	14

Year 1 Spring	Hrs.
CHEM 1212 and 1212L	4
MATH 2261	4
ENGL 1102	3
HIST 2111 or 2112	3
Total hours	14

Year 2 Fall	Hrs.
CHEM 3401	4
CHEM 2310	4
MATH 2262	4
Core or elective	3
Total hours	15

Year 2 Spring	Hrs.
CHEM 3402	4
BIOL 1107/1107L	4
Core or elective	7
CHEM 2210 (take fall or spring)	1
Total hours	16

Year 3 Fall	Hrs.
CHEM 3601	3
BIOL 1108/1108L or elective	4
PHYS 1111K or 2211K	4
CHEM 3510	4
Total hours	15

Year 3 Spring	Hrs.
CHEM 3601L	2
GEOL 3010	3
Core or elective	6
PHYS 1112K or 2212K	4
Total hours	15

Year 4 Fall	Hrs.
Elective (CHEM 3801 rec.)	4
CHEM 3320	3
Core or elective	9
Total hours	16

Year 4 Spring	Hrs.
CHEM 3802 or elective	4
CHEM 4210	1
CHEM 4310	4
Core or elective	6
Total hours	15

At least one Humanities or Social Science elective will have an environmental theme, such as Environmental Ethics or Environmental Philosophy.



Graduation Checklist

Chemistry – B.S. Degree Environmental Option

This packet can be downloaded at <https://www.valdosta.edu/chemistry/student-advising.php>

Updated 9/15/21, 2021-22 Catalog Year

Name _____
 Student #870 _____ Cell _____
 Email _____
 Grad Sem/Yr _____ Applied for Grad _____
 Minor _____ Major #2 _____

Courses are listed with prerequisites in parentheses and semesters abbreviated (Fall, Spring, Summer and Maymester).

Core Area A (9 hrs): Essential Skills		
Course	Grade	Hrs
ENGL 1101		3
ENGL 1102		3
MATH 1113 (OR MATH 1111 + 1112) ¹		3

¹ MATH 1111 will count in General Electives and MATH 1112 in Area A, if taken. Submit course sub. form for MATH 1113.

Core Area B (4 hrs): Perspectives		
Course	Grade	Hrs
PERS ¹		2
PERS ¹		2

¹ Each must be from a different area of Perspectives, 21xx, 22xx, ..., 27xx.

Core Area C (6 hrs): Humanities/Fine Arts		
Course	Grade	Hrs
ENGL 2111, 2112 or 2113		3
¹		3

¹ Foreign language preferred (Part of any 2-course for. lang. sequence. If for. lang. not taken in Area C, then complete sequence in General Electives.) or ART 1100; COMM 1100, 1110; DANC 1500; MUSC 1100, 1110, 1120, 1130; MDIA 2000; THEA 1100; PHIL 2010, 2020; REL 2020; WGST 2010; ENGL 2111, 2112, 2113.

Core Area D.2.a (11 hrs): Math & Science		
Course	Grade	Hrs
MATH 2261 ¹ (MATH 1112 or 1113)		3
CHEM 1211 & CHEM 1211L ²		4
BIOL 1107 & 1107L		4

¹ 1 hr. spills to Area F

² Prerequisites: Score 540 SAT MATH or 23 ACT, pass CHEM 1200 with a C or higher, or pass Chemistry Placement Exam; Co or Pre-requisite: MATH 1111 or higher.

Core Area E (12 hrs): Social Sciences		
Course	Grade	Hrs
POLS 1101		3
HIST 2111 or 2112		3
¹		3
¹		3

¹ AFAM/WGST 2020; ANTH 1102; ECON 1500; GEOG 1100, 1101, 1102, 1103; HIST 1011, 1012, 1013; POLS 2101, 2401, 2501; PSYC 1101; SOCI 1101, 1160.

Core Area F (18 hrs.): Major Courses ¹		
Course	Grade	Hrs
MATH 2262 (MATH 2261) F Sp Sum		4
CHEM 1212 & CHEM 1212L (CHEM 1211/L F Sp Su)		4
CHEM 2310 (CHEM 1211/L & 1212/L) F		4
PHYS 1111K (MATH 1112) F Sp Sum or PHYS 2211K (MATH 2261 PRE OR CO-REQUISITE) F Sp		4
PHYS 1112K (PHYS 1112K) F Sp or PHYS 2212K (PHYS 2211K) F Sp		4
MATH 2261 (spilled from D)		1

¹ Excess hours applied to Required Major Courses.

Required Major Courses (38 hours)		
Course	Grade	Hrs
Science Elective 2000 or above or BIOL 1108 & 1108L		4
CHEM 1210 F Sp		1
CHEM 2210 (CHEM 1210) F Sp		1
CHEM 3401 (CHEM 1212/L) F Sp		4
CHEM 3402 (CHEM 3401) Sp Su		4
CHEM 3510 (CHEM 1212/L) F Sum-MM		4
CHEM 3601 (CHEM 3402) Sp Su		3
CHEM 3601L (CHEM 3601) F Sp		2
CHEM 3801 or 3802 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K.) 3801 F; 3802 Sp		4
CHEM 4310 (CHEM 2310) Sp		4
CHEM 3320 F		3
CHEM 4210 (Senior Year) F Sp		1
Excess hours from Core Area F		3

General Electives (6-9 hrs)		
Course	Grade	Hrs

Foreign Language (6 hrs; 3 hrs may count in Area C)		
Course	Grade	Hrs
		3
		0-3

Upper-Division Electives (10 hrs)		
Course	Grade	Hrs
Environmental-themed social science or humanities course (e.g., PHIL 3180 or PHIL 3640)		3

Must make a C or better in major courses and math

Bachelor's Degree in Chemistry, Pre-Dental Option

The Bachelor's degree in Chemistry with a Pre-Dental option prepares students for admission to dental schools in Georgia and across the country, where they can earn a Doctorate in Dental Medicine (DMD) to become a dentist. Dental schools offer other degrees too, such as a doctorate in oral biology, a DMD with a concentration in business, and a doctorate in medicine (MD) with additional training in oral surgery.



Students pursuing the Pre-Dental option develop a strong foundation in Chemistry. We design the degree program to be flexible so that students can also take additional courses in biology to boost their performance on their admissions exam and dental school coursework.

Typical Four-Year Degree Program

Year 1 Fall	Hrs.
CHEM 1211 and 1211L	4
CHEM 1210 (take fall or spring)	1
MATH 1113 or 1112	3
ENGL 1101	3
POLS 1101	3
Total hours	14

Year 1 Spring	Hrs.
CHEM 1212 and 1212L	4
MATH 2261	4
ENGL 1102	3
HIST 2111 or 2112	3
Total hours	14

Year 2 Fall	Hrs.
CHEM 3401	4
MATH 2262	4
CHEM 2310	4
Core or elective	3
Total hours	15

Year 2 Spring	Hrs.
CHEM 3402	4
BIOL 1107/1107L	4
Core or elective	7
CHEM 2210 (take fall or spring)	1
Total hours	16

Year 3 Fall	Hrs.
CHEM 3601	3
BIOL 1108/1108L	4
PHYS 1111K or 2211K	4
CHEM 3510	4
Total hours	15

Year 3 Spring	Hrs.
CHEM 3601L	2
PHYS 1112K or 2212K	4
Core or elective	9
Total hours	15

Year 4 Fall	Hrs.
CHEM 3801 or elective	4
Core or elective	12
Total hours	16

Year 4 Spring	Hrs.
CHEM 3802 or elective	4
CHEM 4210	1
Core or elective	10
Total hours	15

Recommended electives include introductory psychology or sociology, anatomy & physiology, pottery, microbiology, and genetics.



Graduation Checklist

Chemistry – B.S. Degree

Pre-Dental Option

This packet can be downloaded at <https://www.valdosta.edu/chemistry/student-advising.php>

Updated 7/11/2022

Name _____
 Student #870 _____ Cell _____
 Email _____
 Grad Sem/Yr _____ Applied for Grad _____
 Minor _____ Major #2 _____

Courses are listed with prerequisites in parentheses and semesters abbreviated (Fall, Spring, Summer and Maymester).

Core Area A (9 hrs): Essential Skills		
Course	Grade	Hrs
ENGL 1101		3
ENGL 1102		3
MATH 1113 (OR MATH 1111 + 1112) ¹		3

¹ MATH 1111 will count in General Electives and MATH 1112 in Area A, if taken. Submit course sub. form for MATH 1113.

Core Area B (4 hrs): Perspectives		
Course	Grade	Hrs
PERS ¹		2
PERS ¹		2

¹ Each must be from a different area of Perspectives, 21xx, 22xx, ..., 27xx.

Core Area C (6 hrs): Humanities/Fine Arts		
Course	Grade	Hrs
ENGL 2111, 2112 or 2113		3
¹		3

¹ Foreign language preferred (Part of any 2-course for. lang. sequence. If for. lang. not taken in Area C, then complete sequence in General Electives.) or ART 1100; COMM 1100, 1110; DANC 1500; MUSC 1100, 1110, 1120, 1130; MDIA 2000; THEA 1100; PHIL 2010, 2020; REL 2020; WGST 2010; ENGL 2111, 2112, 2113.

Core Area D.2.a (11 hrs): Math & Science		
Course	Grade	Hrs
MATH 2261 ¹ (MATH 1112 or 1113)		3
CHEM 1211 & CHEM 1211L ²		4
BIOL 1107 & 1107L		4

¹ 1 hr. spills to Area F

² Prerequisites: Score 540 SAT MATH or 23 ACT, pass CHEM 1200 with a C or higher, or pass Chemistry Placement Exam; Co or Pre-requisite: MATH 1111 or higher.

Core Area E (12 hrs): Social Sciences		
Course	Grade	Hrs
POLS 1101		3
HIST 2111 or 2112		3
¹		3
¹		3

¹ AFAM/WGST 2020; ANTH 1102; ECON 1500; GEOG 1100,1101,1102, 1103; HIST 1011, 1012, 1013; POLS 2101, 2401, 2501; PSYC 1101 (recommended); SOCI 1101 (recommended), 1160.

Core Area F (18 hrs.): Major Courses ¹		
Course	Grade	Hrs
MATH 2262 (MATH 2261) F Sp Sum		4
CHEM 1212 & CHEM 1212L (CHEM 1211/L F Sp Su)		4
CHEM 2310 (CHEM 1211/L & 1212/L) F Sp		4
PHYS 1111K (MATH 1112) F Sp Sum or PHYS 2211K (MATH 2261 PRE OR CO-REQUISITE) F Sp		4
PHYS 1112K (PHYS 1112K) F Sp or PHYS 2212K (PHYS 2211K) F Sp		4
MATH 2261 (spilled from D)		1

¹Excess hours applied to Required Major Courses.

Required Major Courses (38-39 hours)		
Course	Grade	Hrs
BIOL 1108 & 1108L		4
CHEM 1210 F Sp		1
CHEM 2210 (CHEM 1210) F Sp		1
CHEM 3401 (CHEM 1212/L) F Sp		4
CHEM 3402 (CHEM 3401) Sp Su		4
CHEM 3510 (CHEM 1212/L) F Sp Sum-MM		4
CHEM 3601 (CHEM 3402) Sp Su		3
CHEM 3601L (CHEM 3601) F Sp		2
CHEM 3801 or 3802 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K.) 3801-F; 3802 Sp		4
Upper-Division Mathematics, Computer Science, or Science Electives ¹		7-8
CHEM 4210 (Senior Year) F Sp		1
Excess hours from Core Area F		3

¹ May only include up to 4 hours of CHEM 4910; BIOL 3200 recommended

General Electives (6-9 hrs)		
Course	Grade	Hrs
BIOL 2251 (recommended)		4

Foreign Language (6 hrs; 3 hrs may count in Area C)		
Course	Grade	Hrs
		3
		0-3

Upper-Division Electives (9-10 hrs)		
Course	Grade	Hrs
BIOL 3100 (recommended)		3
ART 3081 (recommended)		3

Must make a C or better in major courses and math. Courses are recommended based on admission standards of many dental schools, including Dental College of Georgia at Augusta University (DCG).

Bachelor's Degree in Chemistry, Pre-Medical Option

The Bachelor's degree in Chemistry with a Pre-Medical option prepares students for admission to all medical schools in Georgia, where they can earn a Doctorate in Medicine (MD). With this degree, a student can become a physician or medical researcher.



Students pursuing the Pre-Medical option develop a strong foundation in Chemistry. We design the degree program to be flexible so that students can also take additional courses to boost their performance on the MCAT and medical school coursework.

Typical Four-Year Degree Program

Year 1 Fall	Hrs.
CHEM 1211 and 1211L	4
CHEM 1210 (take fall or spring)	1
MATH 1113 or 1112	3
ENGL 1101	3
POLS 1101	3
Total hours	14

Year 1 Spring	Hrs.
CHEM 1212 and 1212L	4
MATH 2261	4
ENGL 1102	3
HIST 2111 or 2112	3
Total hours	14

Year 2 Fall	Hrs.
CHEM 3401	4
CHEM 2210 (take fall or spring)	1
MATH 2262	4
CHEM 2310	4
Core or elective	3
Total hours	16

Year 2 Spring	Hrs.
CHEM 3402	4
BIOL 1107/1107L	4
Core or elective	4
MATH 1401	3
Total hours	15

Year 3 Fall	Hrs.
CHEM 3601	3
BIOL 1108/1108L	4
PHYS 1111K or 2211K	4
CHEM 3510	4
Total hours	15

Year 3 Spring	Hrs.
CHEM 3601L	2
PHYS 1112K or 2212K	4
Core or elective	6
CHEM 3602	3
Total hours	15

Year 4 Fall	Hrs.
CHEM 3801 or elective	4
CHEM 4210	1
Core or elective	10
Total hours	15

Year 4 Spring	Hrs.
CHEM 3802 or elective	4
Core or elective	12
Total hours	16

Recommended electives include anatomy, physiology, neuroscience, and cell biology.



Graduation Checklist

Chemistry – B.S. Degree

Pre-Medical Option

This packet can be downloaded at <https://www.valdosta.edu/chemistry/student-advising.php>

Name _____
 Student #870 _____ Cell _____
 Email _____
 Grad Sem/Yr _____ Applied for Grad _____
 Minor _____ Major #2 _____

Courses are listed with prerequisites in parentheses and semesters abbreviated (Fall, Spring, Summer and Maymester).

Core Area A (9 hrs): Essential Skills		
Course	Grade	Hrs
ENGL 1101		3
ENGL 1102		3
MATH 1113 (OR MATH 1111 + 1112) ¹		3

¹ MATH 1111 will count in General Electives and MATH 1112 in Area A, if taken. Submit course sub. form for MATH 1113.

Core Area B (4 hrs): Perspectives		
Course	Grade	Hrs
PERS ¹		2
PERS ¹		2

¹ Each must be from a different area of Perspectives, 21xx, 22xx, ..., 27xx.

Core Area C (6 hrs): Humanities/Fine Arts		
Course	Grade	Hrs
ENGL 2111, 2112 or 2113		3
¹		3

¹ Foreign language preferred (Part of any 2-course for. lang. sequence. If for. lang. not taken in Area C, then complete sequence in General Electives.) or ART 1100; COMM 1100, 1110; DANC 1500; MUSC 1100, 1110, 1120, 1130; MDIA 2000; THEA 1100; PHIL 2010, 2020; REL 2020; WGST 2010; ENGL 2111, 2112, 2113.

Core Area D.2.a (11 hrs): Math & Science		
Course	Grade	Hrs
MATH 2261 ¹ (MATH 1112 or 1113)		3
CHEM 1211 & CHEM 1211L ²		4
BIOL 1107 & 1107L		4

¹ 1 hr. spills to Area F

² Prerequisites: Score 540 SAT MATH or 23 ACT, pass CHEM 1200 with a C or higher, or pass Chemistry Placement Exam; Co or Pre-requisite: MATH 1111 or higher.

Core Area E (12 hrs): Social Sciences		
Course	Grade	Hrs
POLS 1101		3
HIST 2111 or 2112		3
¹		3
¹		3

¹ AFAM/WGST 2020; ANTH 1102; ECON 1500; GEOG 1100, 1101, 1102, 1103; HIST 1011, 1012, 1013; POLS 2101, 2401, 2501; PSYC 1101 (recommended); SOCI 1101 (recommended), 1160.

Core Area F (18 hrs.): Major Courses ¹		
Course	Grade	Hrs
MATH 2262 (MATH 2261) F Sp Sum		4
CHEM 1212 & CHEM 1212L (CHEM 1211/L F Sp Su)		4
CHEM 2310 (CHEM 1211/L & 1212/L) F		4
PHYS 1111K (MATH 1112) F Sp Su or PHYS 2211K (MATH 2261 PRE OR CO-REQUISITE) F Sp		4
PHYS 1112K (PHYS 1112K) F Sp or PHYS 2212K (PHYS 2211K) F Sp		4
MATH 2261 (spilled from D)		1

¹ Excess hours applied to Required Major Courses.

Required Major Courses (38-39 hours)		
Course	Grade	Hrs
BIOL 1108 & 1108L		4
CHEM 1210 F Sp		1
CHEM 2210 (CHEM 1210) F Sp		1
CHEM 3401 (CHEM 1212/L) F Sp		4
CHEM 3402 (CHEM 3401) Sp Su		4
CHEM 3510 (CHEM 1212/L) F Sum-MM		4
CHEM 3601 (CHEM 3402) Sp Su		3
CHEM 3601L (CHEM 3601) F Sp		2
CHEM 3801 or 3802 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K.) 3801-F; 3802 Sp		4
CHEM 3602 (CHEM 3601) Sp		3
Upper-Division Mathematics, Computer Science, or Science Electives ¹		4-5
CHEM 4210 (Senior Year) F Sp		1
Excess hours from Core Area F		3

¹ May only include up to 4 hours of CHEM 4910

General Electives (6-9 hrs)		
Course	Grade	Hrs
MATH 1401 F Sp Su		3
¹		

¹ BIOL 2251, BIOL 2252 recommended.

Foreign Language (6 hrs; 3 hrs may count in Area C)		
Course	Grade	Hrs
		3
		0-3

Upper-Division Electives (9-10 hrs)		
Course	Grade	Hrs
¹		

¹ BIOL 3700, BIOL 4250, BIOL 4500 recommended.

Must make a C or better in major courses and math. Recommended courses will improve students' preparation for MCAT and medical school courses.

Bachelor's Degree in Chemistry, Pre-Optometry Option

The Bachelor's degree in Chemistry with a Pre-Optometry option prepares students for admission to optometry school where they earn a Doctorate in Optometry (OD) degree. Optometrists are in high demand and enjoy a rewarding career.



Students pursuing the Pre-Optometry option develop a strong foundation in Chemistry. We design the degree program to be flexible so that students can also take additional courses in order to qualify for admission to any optometry school in the United States.

Typical Four-Year Degree Program

Year 1 Fall	Hrs.
CHEM 1211 and 1211L	4
CHEM 1210 (take fall or spring)	1
MATH 1113 or 1112	3
ENGL 1101	3
POLS 1101	3
Total hours	14

Year 1 Spring	Hrs.
CHEM 1212 and 1212L	4
MATH 2261	4
ENGL 1102	3
HIST 2111 or 2112	3
Total hours	14

Year 2 Fall	Hrs.
CHEM 3401	4
CHEM 2210 (take fall or spring)	1
MATH 2262	4
CHEM 2310	4
PSYC 1101	3
Total hours	16

Year 2 Spring	Hrs.
CHEM 3402	4
BIOL 1107/1107L	4
MATH 1401	3
Core or elective	4
Total hours	15

Year 3 Fall	Hrs.
CHEM 3601	3
BIOL 2900	4
PHYS 1111K or 2211K	4
CHEM 3510	4
Total hours	15

Year 3 Spring	Hrs.
CHEM 3601L	2
PHYS 1112K or 2212K	4
Core or elective	9
Total hours	15

Year 4 Fall	Hrs.
CHEM 3801 or elective	4
Core or elective	12
Total hours	16

Year 4 Spring	Hrs.
CHEM 3802 or elective	4
CHEM 4210	1
Core or elective	10
Total hours	15

Elective courses can include a course in genetics, anatomy, physiology, or other subjects which an OD program may require.



Graduation Checklist

Chemistry – B.S. Degree

Pre-Optometry Option

*This packet can be downloaded at <https://www.valdosta.edu/chemistry/student-advising.php>
Updated: 7/22/2022*

Name _____
 Student #870 _____ Cell _____
 Email _____
 Grad Sem/Yr _____ Applied for Grad _____
 Minor _____ Major #2 _____

Courses are listed with prerequisites in parentheses and semesters abbreviated (Fall, Spring, Summer and Maymester).

Core Area A (9 hrs): Essential Skills		
Course	Grade	Hrs
ENGL 1101		3
ENGL 1102		3
MATH 1113 (OR MATH 1111 + 1112) ¹		3

¹ MATH 1111 will count in General Electives and MATH 1112 in Area A, if taken. Submit course sub. form for MATH 1113.

Core Area B (4 hrs): Perspectives		
Course	Grade	Hrs
¹ PERS		2
¹ PERS		2

¹ Each must be from a different area of Perspectives, 21xx, 22xx, ..., 27xx.

Core Area C (6 hrs): Humanities/Fine Arts		
Course	Grade	Hrs
ENGL 2111, 2112 or 2113		3
¹		3

¹ Foreign language preferred (Part of any 2-course for. lang. sequence. If for. lang. not taken in Area C, then complete sequence in General Electives.) or ART 1100; COMM 1100, 1110; DANC 1500; MUSC 1100, 1110, 1120, 1130; MDIA 2000; THEA 1100; PHIL 2010, 2020; REL 2020; WGST 2010; ENGL 2111, 2112, 2113.

Core Area D.2.a (11 hrs): Math & Science		
Course	Grade	Hrs
MATH 2261 ¹ (MATH 1112 or 1113)		3
CHEM 1211 & CHEM 1211L ²		4
BIOL 1107 & 1107L		4

¹ 1 hr. spills to Area F

² Prerequisites: Score 540 SAT MATH or 23 ACT, pass CHEM 1200 with a C or higher, or pass Chemistry Placement Exam; Co or Pre-requisite: MATH 1111 or higher.

Core Area E (12 hrs): Social Sciences		
Course	Grade	Hrs
POLS 1101		3
HIST 2111 or 2112		3
PSYC 1101		3
¹		3

¹ AFAM/WGST 2020; ANTH 1102; ECON 1500; GEOG 1100, 1101, 1102, 1103; HIST 1011, 1012, 1013; POLS 2101, 2401, 2501; SOCI 1101, 1160.

Core Area F (18 hrs.): Major Courses ¹		
Course	Grade	Hrs
MATH 2262 (MATH 2261) F Sp Sum		4
CHEM 1212 & CHEM 1212L (CHEM 1211/L F Sp Su)		4
CHEM 2310 (CHEM 1211/L & 1212/L) F		4
PHYS 1111K (MATH 1112) F Sp Su or PHYS 2211K (MATH 2261 PRE OR CO-REQUISITE) F Sp		4
PHYS 1112K (PHYS 1112K) F Sp or PHYS 2212K (PHYS 2211K) F Sp		1
MATH 2261 (spilled from D)		1

¹ Excess hours applied to Required Major Courses.

Required Major Courses (38-39 hours)		
Course	Grade	Hrs
BIOL 2260 F Sp		4
CHEM 1210 F Sp		1
CHEM 2210 (CHEM 1210) F Sp		1
CHEM 3401 (CHEM 1212/L) F Sp		4
CHEM 3402 (CHEM 3401) Sp Su		4
CHEM 3510 (CHEM 1212/L) F Sum-MM		4
CHEM 3601 (CHEM 3402) Sp Su		3
CHEM 3601L (CHEM 3601) F Sp		2
CHEM 3801 or 3802 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K.) 3801-F; 3802 Sp		4
CHEM 4210 (Senior Year) F Sp		1
Upper-Division Mathematics, Computer Science, or Science Electives ¹		7-8
Excess hours from Core Area F		3

¹ May only include up to 4 hours of CHEM 4910

General Electives (6-9 hrs)		
Course	Grade	Hrs
MATH 1401 F Sp Su		3

Foreign Language (6 hrs; 3 hrs may count in Area C)		
Course	Grade	Hrs
		3
		0-3

Upper-Division Electives (9-10 hrs)		
Course	Grade	Hrs
¹		

¹ Elective courses can include a course in genetics, anatomy, physiology, or other subjects which an OD program may require.

Must make a C or better in major courses and math

Bachelor's Degree in Chemistry, Pre-Pharmacy Option

The Bachelor's degree in Chemistry with a Pre-Pharmacy option prepares students for admission to pharmacy school and a Doctorate in Pharmacy (PharmD) degree. Pre-Pharmacy is one of our most popular degree options because pharmacists are in high demand and enjoy a rewarding career. Pharmacy schools in Georgia seek out our Chemistry graduates because of their strong work ethic, maturity, and Chemistry knowledge.



Students pursuing the Pre-Pharmacy option develop a strong foundation in Chemistry. We design the degree program to be flexible so that students can also take additional courses in order to qualify for admission to the specific pharmacy school of their choice.

Typical Four-Year Degree Program

Year 1 Fall	Hrs.
CHEM 1211 and 1211L	4
CHEM 1210 (take fall or spring)	1
MATH 1113 or 1112	3
ENGL 1101	3
POLS 1101	3
Total hours	14

Year 1 Spring	Hrs.
CHEM 1212 and 1212L	4
MATH 2261	4
ENGL 1102	3
HIST 2111 or 2112	3
Total hours	14

Year 2 Fall	Hrs.
CHEM 3401	4
MATH 2262	4
CHEM 2310	4
Core or elective	3
Total hours	15

Year 2 Spring	Hrs.
CHEM 3402	4
BIOL 1107/1107L	4
Core or elective	7
CHEM 2210 (take fall or spring)	1
Total hours	16

Year 3 Fall	Hrs.
CHEM 3601	3
BIOL 2251	4
PHYS 1111K or 2211K	4
CHEM 3510	4
Total hours	15

Year 3 Spring	Hrs.
CHEM 3601L	2
PHYS 1112K or 2212K	4
Core or elective	5
BIOL 2252	4
Total hours	15

Year 4 Fall	Hrs.
CHEM 3801 or elective	4
Core or elective	12
Total hours	16

Year 4 Spring	Hrs.
CHEM 3802 or elective	4
CHEM 4210	1
Core or elective	10
Total hours	15

Elective courses can include a course in statistics, microbiology, public speaking, or other subjects which PharmD programs in Georgia may require.



Graduation Checklist

Chemistry – B.S. Degree Pre-Pharmacy Option

This packet can be downloaded at <https://www.valdosta.edu/chemistry/student-advising.php>
Updated: 7/12/2022

Name _____
 Student #870 _____ Cell _____
 Email _____
 Grad Sem/Yr _____ Applied for Grad _____
 Minor _____ Major #2 _____

Courses are listed with prerequisites in parentheses and semesters abbreviated (Fall, Spring, Summer and Maymester).

Core Area A (9 hrs): Essential Skills		
Course	Grade	Hrs
ENGL 1101		3
ENGL 1102		3
MATH 1113 (OR MATH 1111 + 1112) ¹		3

¹ MATH 1111 will count in General Electives and MATH 1112 in Area A, if taken. Submit course sub. form for MATH 1113.

Core Area B (4 hrs): Perspectives		
Course	Grade	Hrs
PERS ¹		2
PERS ¹		2

¹ Each must be from a different area of Perspectives, 21xx, 22xx, ..., 27xx.

Core Area C (6 hrs): Humanities/Fine Arts		
Course	Grade	Hrs
ENGL 2111, 2112 or 2113		3
¹ foreign language		3

¹ Foreign language preferred (Part of any 2-course for. lang. sequence. If for. lang. not taken in Area C, then complete sequence in General Electives.). Students seeking a PharmD degree must verify that their course selection satisfies both VSU graduation and PharmD entrance requirements.

Core Area D.2.a (11 hrs): Math & Science		
Course	Grade	Hrs
MATH 2261 ¹ (MATH 1112 or 1113)		3
CHEM 1211 & CHEM 1211L ²		4
BIOL 1107 & 1107L		4

¹ 1 hr. spills to Area F

² Prerequisites: Score 540 SAT MATH or 23 ACT, pass CHEM 1200 with a C or higher, or pass Chemistry Placement Exam; Co or Pre-requisite: MATH 1111 or higher.

Core Area E (12 hrs): Social Sciences		
Course	Grade	Hrs
POLS 1101		3
HIST 2111 or 2112		3
¹		3
		3

¹ Students seeking a PharmD degree must verify that their course selection satisfies both VSU graduation and PharmD entrance requirements.

Core Area F (18 hrs.): Major Courses ¹		
Course	Grade	Hrs
MATH 2262 (MATH 2261) F Sp Sum		4
CHEM 1212 & CHEM 1212L (CHEM 1211/L F Sp Su)		4
CHEM 2310 (CHEM 1211/L & 1212/L) F Sp		4
PHYS 1111K (MATH 1112) F Sp Sum or PHYS 2211K (MATH 2261 PRE OR CO-REQUISITE) F Sp		4
PHYS 1112K (PHYS 1112K) F Sp or PHYS 2212K (PHYS 2211K) F Sp		1
MATH 2261 (spilled from D)		1

¹Excess hours applied to Required Major Courses.

Required Major Courses (38-39 hours)		
Course	Grade	Hrs
BIOL 2251		4
CHEM 1210 F Sp		1
CHEM 2210 (CHEM 1210) F Sp		1
CHEM 3401 (CHEM 1212/L) F Sp		4
CHEM 3402 (CHEM 3401) Sp Su		4
CHEM 3510 (CHEM 1212/L) F Sp Sum-MM		4
CHEM 3601 (CHEM 3402) Sp Su		3
CHEM 3601L (CHEM 3601) F Sp		2
CHEM 3801 or 3802 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K.) 3801-F; 3802 Sp		4
Upper-Division Mathematics, Computer Science, or Science Electives ^{1,2}		7-8
CHEM 4210 (Senior Year) F Sp		1
Excess hours from Core Area F		3

¹ May only include up to 4 hours of CHEM 4910

² Students seeking a PharmD degree must verify that their course selection satisfies both VSU graduation and PharmD entrance requirements.

Must make a C or better in major courses and math. Courses are recommended based on admission standards of many pharmacy schools in Georgia. Check PharmD program admissions requirements to make sure that you enroll in the correct elective courses that satisfy their pre-requisites.

General Electives (6-9 hrs)		
Course	Grade	Hrs
BIOL 2252		4
¹		

¹ COMM 1100, BIOL 2260, and MATH 1401 recommended. Students seeking a PharmD degree must verify that their course selection satisfies both VSU graduation and PharmD entrance requirements.

Foreign Language (6 hrs; 3 hrs may count in Area C)		
Course	Grade	Hrs
		3
		0-3

Upper-Division Electives (9-10 hrs)		
Course	Grade	Hrs
¹		

¹ Students seeking a PharmD degree must verify that their course selection satisfies both VSU graduation and PharmD entrance requirements.

Bachelor's Degree in Chemistry, Teaching Option

Every successful scientist can name a teacher who inspired them. That teacher could be you! A VSU Bachelor's degree in Chemistry provides you with a well-rounded education in Chemistry in the classroom and the laboratory. The Teaching option adds education classes which prepare you for pursuing teacher certification and a Master of Arts in Teaching (MAT) degree that you can earn at VSU also.



Teaching is a rewarding career that is always in demand, especially for Chemistry and other science disciplines. Make a difference every day in the lives of your students by sharing with them your knowledge and passion for Chemistry.

Typical Four-Year Degree Program

Year 1 Fall	Hrs.
CHEM 1211 and 1211L	4
CHEM 1210 (take fall or spring)	1
MATH 1113 or 1112	3
ENGL 1101	3
POLS 1101	3
Total hours	14

Year 1 Spring	Hrs.
CHEM 1212 and 1212L	4
MATH 2261	4
ENGL 1102	3
HIST 2111 or 2112	3
Total hours	14

Year 2 Fall	Hrs.
CHEM 3401	4
MATH 2262	4
CHEM 2310	4
Core or elective	3
Total hours	15

Year 2 Spring	Hrs.
CHEM 3402	4
BIOL 1107/1107L	4
CHEM 2210 (take fall or spring)	1
Core or elective	7
Total hours	16

Year 3 Fall	Hrs.
CHEM 3601	3
BIOL 1108/1108L or elective	4
PHYS 1111K or 2211K	4
CHEM 3510	4
Total hours	15

Year 3 Spring	Hrs.
CHEM 3601L	2
PHYS 1112K or 2212K	4
Core or elective	9
Total hours	15

Year 4 Fall	Hrs.
CHEM 3801 or elective	4
Core or elective	12
Total hours	16

Year 4 Spring	Hrs.
CHEM 3802 or elective	4
CHEM 4210	1
Core or elective	10
Total hours	15

Education electives include such topics as contemporary issues in education, socio-cultural perspectives, and serving students with diverse needs.



Graduation Checklist

Chemistry – B.S. Degree

Teaching Option

This packet can be downloaded at <https://www.valdosta.edu/chemistry/student-advising.php>

Name _____
 Student #870 _____ Cell _____
 Email _____
 Grad Sem/Yr _____ Applied for Grad _____
 Minor _____ Major #2 _____

Courses are listed with prerequisites in parentheses and semesters abbreviated (Fall, Spring, Summer and Maymester).

Core Area A (9 hrs): Essential Skills		
Course	Grade	Hrs
ENGL 1101		3
ENGL 1102		3
MATH 1113 (OR MATH 1111 + 1112) ¹		3

¹ MATH 1111 will count in General Electives and MATH 1112 in Area A, if taken. Submit course sub. form for MATH 1113.

Core Area B (4 hrs): Perspectives		
Course	Grade	Hrs
PERS ¹		2
PERS ¹		2

¹ Each must be from a different area of Perspectives, 21xx, 22xx, ..., 27xx.

Core Area C (6 hrs): Humanities/Fine Arts		
Course	Grade	Hrs
ENGL 2111, 2112 or 2113		3
¹		3

¹ Foreign language preferred (Part of any 2-course for. lang. sequence. If for. lang. not taken in Area C, then complete sequence in General Electives.) or ART 1100; COMM 1100, 1110; DANC 1500; MUSC 1100, 1110, 1120, 1130; MDIA 2000; THEA 1100; PHIL 2010, 2020; REL 2020; WGST 2010; ENGL 2111, 2112, 2113.

Core Area D.2.a (11 hrs): Math & Science		
Course	Grade	Hrs
MATH 2261 ¹ (MATH 1112 or 1113)		3
CHEM 1211 & CHEM 1211L ²		4
BIOL 1107 & 1107L		4

¹ 1 hr. spills to Area F

² Prerequisites: Score 540 SAT MATH or 23 ACT, pass CHEM 1200 with a C or higher, or pass Chemistry Placement Exam; Co or Pre-requisite: MATH 1111 or higher.

Core Area E (12 hrs): Social Sciences		
Course	Grade	Hrs
POLS 1101		3
HIST 2111 or 2112		3
¹		3
¹		3

¹ AFAM/WGST 2020; ANTH 1102; ECON 1500; GEOG 1100, 1101, 1102, 1103; HIST 1011, 1012, 1013; POLS 2101, 2401, 2501; PSYC 2500; SOCI 1101, 1160.

Core Area F (18 hrs.): Major Courses ¹		
Course	Grade	Hrs
MATH 2262 (MATH 2261) F Sp Sum		4
CHEM 1212 & CHEM 1212L (CHEM 1211/L F Sp Su)		4
CHEM 2310 (CHEM 1211/L & 1212/L) F		4
PHYS 1111K (MATH 1112) F Sp Sum or PHYS 2211K (MATH 2261 PRE OR CO-REQUISITE) F Sp		4
PHYS 1112K (PHYS 1112K) F Sp or PHYS 2212K (PHYS 2211K) F Sp		4
MATH 2261 (spilled from D)		1

¹ Excess hours applied to Required Major Courses.

Required Major Courses (38-39 hours)		
Course	Grade	Hrs
Science or Math Elective 2000 or above or BIOL 1108 & 1108L		4
CHEM 1210 F Sp		1
CHEM 2210 (CHEM 1210) F Sp		1
CHEM 3401 (CHEM 1212/L) F Sp		4
CHEM 3402 (CHEM 3401) Sp Su		4
CHEM 3510 (CHEM 1212/L) F Sum-MM		4
CHEM 3601 (CHEM 3402) Sp Su		3
CHEM 3601L (CHEM 3601) F Sp		2
CHEM 3801 or 3802 (MATH 2262, PHYS 1111K/2211K; pre or co-req PHYS 1112K/2212K.) 3801-F; 3802 Sp		4
Upper-Division Mathematics, Computer Science, Science ¹		7-8
CHEM 4210 (Senior Year) F Sp		1
Excess hours from Core Area F		3

¹ May only include up to 4 hours of CHEM 4910

General Electives (6-9 hrs)		
Course	Grade	Hrs
¹		

¹ EDUC 2110 and either EDUC 2120 or 2130 recommended.

Foreign Language (6 hrs; 3 hrs may count in Area C)		
Course	Grade	Hrs
		3
		0-3

Upper-Division Electives (9-10 hrs)		
Course	Grade	Hrs
¹		

¹ SPEC 3000 recommended.

Must make a C or better in major courses and math