

Chemistry Course Requirements - Atmospheric & Environmental Chemistry (A&E) Emphasis (2020-2021)

Whether you want to study the science behind the atmosphere or the impact of humans on the environment, the A&E emphasis allows students to tailor their degree in a way that will make a lasting impact on society and the world.

1st Year Fall **1st Year Spring** **2nd Year Fall** **2nd Year Spring** **3rd Year Fall** **3rd Year Spring** **4th Year Fall** **4th Year Spring**

CHEM 1210¹
Gen Chem I
4 cr. F, S, U
SF

CHEM 1220¹
Gen Chem II
4 cr. F, S, U
SF

CHEM 2310¹
Org Chem I
4 cr. F, S, U

CHEM 2320¹
Org Chem II
4 cr. F, S, U

CHEM 3060
Quantum Chem
4 cr. F, S
QI

CHEM 3070
Thermo
4 cr. F, S
QI

CHEM 57XX⁴
Adv. Lab
2 cr. Half Sem

CHEM 57XX⁴
Adv. Lab
2 cr. Half Sem

CHEM 1215¹
Gen Chem I Lab
1 cr. F, S, U

CHEM 1225¹
Gen Chem I Lab
1 cr. F, S, U

CHEM 2315
Org Chem I Lab
2 cr. F, S, U

CHEM 2325
Org Chem II Lab
2 cr. F, S, U

CHEM 3000
Quant Analysis
4 cr. F, S, U
CWQI

CHEM 3100
Inorganic
5 cr. F, S

MATH 1210²
Calculus I
4 cr. F, S, U
QR

MATH 1220²
Calculus II
4 cr. F, S, U
QR

MATH 2210²
Calculus III
3 cr. F, S, U
QR

WRTG 3014
Sci. Writing
3 cr. F, S, U
CW

ATMOS/ENVST
3XXX⁵
A&E Elective
3-4 cr. F, S, U

CHEM 2000/4000
UG Seminar
1 cr. F, S

ENVST 2100
Intro Env Studies
3 cr. F, S
BF

PHYS 2210³
Physcs for S&E I
4 cr. F, S, U
SF

PHYS 2220³
Physcs for S&E II
4 cr. F, S, U
SF

ATMOS 5000
Intro Atmos Sci
3 cr. F

ATMOS/ENVST
3XXX⁵
A&E Elective
3-4 cr. F, S, U

ATMOS/ENVST
3XXX⁵
A&E Elective
3-4 cr. F, S, U

ATMOS/ENVST
3XXX⁵
A&E Elective
3-4 cr. F, S, U

PHYS 2215
Phys S&E Lab I
1 cr. F, S

PHYS 2225
Phys S&E Lab II
1 cr. F, S

- 1) Honors versions of available. Sequence starts in the Fall. Must apply to be in the class.
- 2) Talk with advisors to see how other calculus sequences could fulfill the calculus requirement.
- 3) Honors versions are PHYS 3210 + 3220.
- 4) 2 upper division labs required. Fall options: CHEM 5710 (org) 1st half, CHEM 5730 (inorg) 2nd half. Spring options: CHEM 5700 (ana) 1st half, CHEM 5720 (phys) 2nd half, CHEM 3200 (radiochem) + NUCL 4000 Spring + Fall.
- 5) In addition to ENVST 2100 and ATMOS 5000, students need at least 14 credits of electives within the Atmospheric Science and/or Environmental Studies departments. Check Degree Audit to see accepted courses. Contact chemistry advisors to determine if a course not listed could fulfill this requirement. CHEM 4800 (research), CHEM 4999 (Honors Thesis), or CHEM 4965 (internship) can waive 2 credits.