# Curriculum effective FS 2025

## FRESHMAN YEAR

*First Semester Credit*

Chem 1310-General Chemistry 4

Chem 1319-General Chemistry 1

Chem 1100-Intro to Lab Safety 1

English 1120-Exposition & Argumentation 3

Math 1214-Calculus w/Analytic Geometry I 4

Physics 1101-Introduction to Physics 1

14

*Second Semester Credit*

Chem 1320-General Chemistry 3

Hist (1200, 1300, 1310) or Pol Sc 1200 3

Math 1215-Calculus w/Analytic Geometry II 4

Physics 1135-General Physics I 4

14

## SOPHOMORE YEAR

*First Semester Credit*

English 1160-Writing & Research 3

Math 2222-Calculus w/Analytic Geometry III 4

Physics 2135-General Physics II 4

Comp Sc 1500 - Computational Problem Solving 3

Humanities/Social Science Elective 3

17

*Second Semester Credit*

Math 3304-Elementary Differential Equations 3

Physics 2305-Intro to Modern Physics 3

Physics 2129-Intermediate Physics Lab 3

Physics 2401-Introduction to Theoretical Physics 3

Humanities/Social Science Elective 3

15

## JUNIOR YEAR

*First Semester Credit*

Physics 3201-Physical Mechanics 3

Physics 3119-Advanced Physics Lab I 3

Physics Area Focus Course2 3

Math/Stat Elective1 3

Humanities/Social Science Elective 3

15

*Second Semester Credit*

Physics 3211-Electricity & Magnetism I 3

Physics 3129-Advanced Physics Lab II 3

Math/Stat Elective1 3

Humanities/Social Science Elective 3

Electives 3

15

## SENIOR YEAR

*First Semester Credit*

Physics 4211-Electricity & Magnetism II 3

Physics 4301-Introduction to Quantum Mechanics 3

Physics Area Focus Course2 3

Electives 6

15

*Second Semester Credit*

Physics 4311-Thermal Physics 3

Physics Elective3 (3000 Level) 3

Electives 9

15

## Note:

A minimum of 120 credit hours is required for a Bachelor of Science in physics. No more than two of the required physics and mathematics courses with a grade of “D” may be used to meet graduation requirements.

1 Math/Stat elective: Six hours of mathematics or statistics at the 3000 level (besides 3304) are required. MATH 3108, MATH 5222, MATH 5325, or MATH 5351 are recommended.

2 Physics area focus courses: six hours are required. Students can pick from PHYSICS 4323, PHYSICS 4553, PHYSICS 4333, and PHYSICS 4343.

3 Physics elective: In addition to the specific 3000 and 4000 level physics courses listed (PHYSICS 3119, PHYSICS 3129, PHYSICS 3201, PHYSICS 3211, PHYSICS 4211, PHYSICS 4301, PHYSICS 4311), and in addition to the two physics area focus courses2, one other physics course at the 3000 level or higher is required.

30 hours of electives are required in addition to the math/stat electives1, physics area focus courses2, and physics electives3. These shall include twelve hours of social studies and humanities to fulfill the university’s General Education requirements. 18 hours of free electives may be used to develop an emphasis area.