



School of Mathematics & Sciences
LINCOLN MEMORIAL UNIVERSITY

Bachelor of Science
Chemical Physics Secondary Education
Four Year Curriculum Plan

The following is a suggested four year plan of study for freshmen entering LMU during the 2017 academic year. Transfer students should contact the department chair to determine how their credits will apply. This plan is to be used in conjunction with the university catalog & advice of the faculty advisor. Courses on the plan may be taken in semesters other than those listed based upon availability & course placement. This plan meets LMU's Liberal Art Common Core requirements, major requirements & 300/400 level course requirements. For more information refer to the Undergraduate Course Catalog or your advisor.

First Year

Fall

CHEM 111 General Chemistry I w/Lab	4
MATH 150 Calculus I	4
ENGL 101 Composition 1	3
EDUC 210 Instructional Tech. & Learning Res.	3
UACT 100 Strategies for College Success	2
LNCH 100 Lincoln's Life & Legacy	1
TOTAL	17

Spring

CHEM 112 General Chemistry II w/Lab	4
MATH 250 Calculus II	4
ENGL 102 Composition 2	3
PSYC 221 Child & Adolescent Development	3
Elective	3
TOTAL	17

Second Year

Fall

PHYS 211 General Physics I w/Lab	4
PHYS 215 Applic. of Calculus to Gen. Physics	1
HIST 121 or 131	3
CHEM 221 Organic Chemistry I w/Lab	4
EDUC 290 The Reflective Teacher	3
TOTAL	15

Spring

PHYS 212 General Physics II w/Lab	4
PHYS 216 Applic. of Calculus to Gen. Physics	1
HIST 122 or 132	3
CHEM 222 Organic Chemistry II w/Lab	4
SPED 270 Teaching the Exceptional Learner	2
EDUC 360 Sec. Instruct. Methods & Strategies	2
TOTAL	16

Third Year

Fall

CHEM 331 Quant. & Instrumental Analy. I	4
SPED 320 K-12 Differentiated Learning	3
ENGL 240, 250, or 260	3
PSYC 370 Educational Psychology	3
PHYS 320 Modern Physics	3
TOTAL	16

Spring

CHEM 397 Junior Science Seminar	1
COMM 200 Fund. of Speech Communication	3
Elective	3
EDUC 370 Measurement & Evaluation	3
Fine Art Requirement	3
LNCN 300 American Citizenship	1
Soc./Behav. Science Requirement	3
TOTAL	17

Fourth Year

Fall

PHYS 350 Introduction to Electronics	3
STEM 460 Meth. of Sec. Math. & Nat. Sci. Instr.	3
EDUC 480 Classroom Management	2
EDUC 390 Diversity in Today's Classroom	2
Fine Art /Humanities/Ethics Requirement	3
Soc./Behav. Science Requirement	3
CHEM 497 Senior Science Seminar	1
TOTAL	17

Spring

EDUC 497 Enhanced Clinical Pract./Seminar	12
TOTAL	12

Total Hours 127

PHYS 215 Applications of Calculus to General Physics (1 cr. hr.)

An extension to PHYS 211 developing the same concepts (mechanics, waves and thermal physics) from a calculus based approach. Both differential and integral calculus will be used to solve problems as well as including a more rigorous treatment of vectors. Prerequisite: PHYS 211 with the lab, MATH 150.

PHYS 216 Applications of Calculus to General Physics II (1 cr.hr.)

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optics) from a calculus-based approach. Both differential and integral calculus will be used to solve problems, as well as including a more rigorous treatment of vectors. Prerequisite: PHYS 212 with the lab, MATH 250.

PHYS 320 Modern Physics (3 cr. hrs.)

An introduction to the concepts of modern physics. Topics include relativistic dynamics, quantum mechanics, statistical physics, particle physics and solid state physics. Prerequisites: PHYS 212, PHYS 216.

PHYS 360 Introduction to Electronics (3 cr. hrs)

An introductory course to serve as a survey of electronics, particularly as applicable to UACT 100 2 acquisition and instrumentation interfacing. Prerequisite: PHYS 212 laboratory work. Topics include basic electronic components, circuits, op-amps, data