

Current version

DEGREE: BACHELOR OF SCIENCE MAJOR: PHYSICS

CURRICULUM CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-). 3
First Year Experience (see page 68). 0-4
Discovery Learning Experience (see page 68). 3
Three credits in an approved course or courses stressing multi-cultural, ethnic, and/or gender-related course content (see pages 68-70) 3

COLLEGE REQUIREMENTS

Writing: (minimum grade C-). 3
A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester’s Registration Booklet. (See list of courses approved for second writing requirement, pages 93-95.)

BREADTH REQUIREMENTS (See pages 95-100)

A total of eighteen credits from Groups A, B and C is required with a minimum of six credits in each group. 18
The six credits from each group could be from the same area.

Group A: Understanding and appreciation of the creative arts and humanities.

Group B: The study of culture and institutions over time.

Group C: Empirically based study of human beings and their environment.

MAJOR REQUIREMENTS

Within the Department

Ordinarily, no more than four credits from among PHYS 201 and 207 may be counted toward graduation requirements; similarly no more than four from among PHYS 202, 208. Students interested in majoring in Physics who have taken an introductory sequence other than PHYS 207/208 should consult with a member of the Physics faculty to consider the need for additional introductory courses, for which some additional credit toward graduation may be given with permission of the Physics chair.

PHYS 207/208 Fundamentals of Physics I and II. 8
PHYS 309 20th/21st Century Physics. 3
PHYS 310 Introduction to Thermal Physics. 3

PHYS 313 Physical Optics.	4
PHYS 419 Classical Mechanics I.	3
PHYS 424 Quantum Mechanics.	3
PHYS 603 Electricity and Magnetism I.	3
Additional credits of Physics at or above the 400 level.	18
MATH 241/242/243 Analytic Geometry and Calculus A, B and C	12
BISC207 Introductory Biology	4
One of the following:.	6
MATH 302/349 Ordinary Differential Equations and Elementary Linear Algebra	
MATH 341/342 Differential Equations with Linear Algebra	
One of the following:.	4-5
CHEM 103 General Chemistry	4
CHEM 111/119 General Chemistry and Quantitative Chemistry	5
Foreign Language or Computer Science:	0-12

Completion of the intermediate-level course (107 or 112) in a given foreign language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

Or,

Completion of the following Computer Science sequence:

CISC 105 General Computer Science	3
CISC 181 Introduction to Computer Science	3
CISC 220 Data Structures.	3
Additional credits of Computer Science at or above the 260 level	3

ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

CREDITS TO TOTAL A MINIMUM OF. 124

Proposed version

DEGREE: BACHELOR OF SCIENCE MAJOR: PHYSICS

CURRICULUM CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-). 3
First Year Experience (see page 68). 0-4
Discovery Learning Experience (see page 68). 3
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Writing: (minimum grade C-). 3
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Within the Department

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All 200-level PHYS courses used to satisfy prerequisites or graduation requirements must be passed with a minimum grade of C-.

PHYS 169 Perspectives: Physics & Astronomy. 1
PHYS 207/208 Fundamentals of Physics I and II. 8

PHYS 211 Oscillations and Waves.....	3
PHYS 309 20th/21st Century Physics.	3
PHYS 310 Introduction to Thermal Physics.	3
PHYS 313 Physical Optics.	4
PHYS 419 Classical Mechanics I.	3
PHYS 424 Quantum Mechanics.	3
PHYS 603 Electricity and Magnetism I.	3

Additional credits of Physics at or above the 400 level. 15

MATH 241/242/243 Analytic Geometry and Calculus A, B and C	12
BISC207 Introductory Biology	4
One of the following:	6
MATH 302/349 Ordinary Differential Equations and Elementary Linear Algebra	
MATH 341/342 Differential Equations with Linear Algebra	
One of the following:	4-5
CHEM 103 General Chemistry	4
CHEM 111/119 General Chemistry and Quantitative Chemistry	5
Foreign Language or Computer Science:	0-12

Completion of the intermediate-level course (107 or 112) in a given foreign language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

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CREDITS TO TOTAL A MINIMUM OF. 124