

This program sheet is effective for all students starting at IUB beginning summer 2019.



# INDIANA UNIVERSITY

SCHOOL OF EDUCATION  
Office of Teacher Education  
Bloomington

## B.S. EDUCATION: SCIENCE (PHYSICS)

This Bachelor of Science in Education degree enables you to teach Middle School/Junior High or High School students. Course requirements for this program are valid at IUB as reflected in the School of Education Bulletin. A four-year college plan requires completion of 15 credits each semester. A 2.5 GPA overall is required for retention and graduation. A total of 120 credits are required for graduation.

May 2019

### PREREQUISITES FOR ADMISSION TO THE TEP

Competitive enrollment. Meeting minimum requirements does not guarantee enrollment in authorized courses.

- Complete the basic skills testing requirement by using any of the following options:
  - Qualifying scores on CASA  
Reading 220, Math 220, Writing 220
  - SAT combined MA+VE score of at least 1100 if test taken prior to March 1, 2016
  - SAT combined MA+VE score of at least 1170 if test taken on or after March 1, 2016
  - ACT composite score of at least 24  
Sum of EN + MA + RE + SR scores divided by 4 = 24
- 2.5 GPA overall.
- 21 credits and a 2.5 GPA in the content field with at least 15 credits completed and 6 credits in progress. Grade of C minus (C-) or higher is required in each content field course.
- Completion of or enrollment in prerequisites: Grade of C or higher is required in each EDUC course.

Course		Credits
• EDUC-G 203	Communication for Youth Serving Professionals (S&H)	3
• EDUC-M 300	Teaching in a Pluralistic Society (P: English Comp.) (D)	3
• EDUC-P 312	Learning Theory into Practice (P: Soph. status)	3
• EDUC-P 313	Adolescents in a Learning Community (P: Soph. status)	3
• EDUC-W 200	Using Computers in Education (IF)	3

- Apply to TEP by October 1 to enroll in Spring term Block I and EDUC-K 306.
- Access TEP Application at: <https://education.indiana.edu/>

### I. IUB & SCHOOL OF EDUCATION GENERAL EDUCATION REQUIREMENTS

<https://gened.indiana.edu/approved-courses/index.html>

Careful selection and completion of courses with a grade of "C" or higher may allow double counting within General Education, Professional Education and/or Content Field. If you earn a grade lower than a C, please consult with an academic advisor.

#### English Composition (EC) (Select one) 0-3 credits Grade of C or higher required

CMLT-C 110	Writing the World	3
ENG-W 131	Reading, Writing & Inquiry I OR	3
ENG-W 131EX	Elementary Composition-Exempt	0
ENG-W 170	Intro to Argumentative Writing-Projects in Reading & Writing	3

#### Intensive Writing Course (IW) (Select one) 3 credits

EDUC-H 205	Intro to Educational Thought (P: English Comp.) (S&H)	3
EDUC-H 340	Education & American Culture (P: Soph. status)	3

#### Mathematical Modeling (MM) 3-4 credits

Complete at least 1 course for at least 3 credits.

- \_\_\_\_\_

#### Arts & Humanities (A&H) 6 credits

Complete at least 2 courses for a total of at least 6 credits.

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- \_\_\_\_\_

#### Social & Historical Studies (S&H) 6 credits

Complete at least 2 courses for a total of at least 6 credits.

- \_\_\_\_\_
- \_\_\_\_\_

#### Natural & Mathematical Sciences (N&M) 5+ credits Complete ONE of the following options.

**Option I:** Complete at least 2 courses for a total of at least 5 credits. At least 1 of these courses must be a Natural Science ( \* ) course.

- \_\_\_\_\_
- \_\_\_\_\_

**Option II:** Complete a 5 credit science course.

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(The class taken to fulfill the Mathematical Modeling requirement cannot be counted towards the 5+ credits needed to fulfill the N&M requirement.)

#### World Languages (WL)/World Cultures (WC) 6 credits Complete ONE of the following options.

**Option I: Language Study (WL):** Complete the study of an approved single language through the second semester of the second-year level of college-level coursework.

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- \_\_\_\_\_

**Option II: World Culture (WC):** Complete at least 2 courses for a total of at least 6 credits.

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- \_\_\_\_\_

**Option III: International Experience (IE):** Complete an approved study abroad program or internship of at least 6 credits & at least 6 weeks abroad in duration.

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#### Information Fluency (IF) 3 credits

EDUC-W 200	Using Computers in Education	3
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#### Diversity in the U. S. (D) 3 credits

EDUC-M 300	Teaching in a Pluralistic Society (P: English Comp.)	3
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#### Enriching Educational Experiences (EEE) 12 credits

EDUC-M 480	Student Teaching: Secondary (12 weeks)	12
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**II. PROFESSIONAL EDUCATION****51 credits/2.5 GPA**

A grade of C or higher is required in each EDUC course.  
The following courses must be successfully completed before student teaching.

**21 credits**

EDUC-G 203	<i>Communication for Youth Serving Professionals</i>	3
	<b>(S&amp;H)</b>	
EDUC-M 300	<i>Teaching in a Pluralistic Society</i>	3
	<i>(P: English Comp.)</i>	<b>(D)</b>
EDUC-P 312	<i>Learning Theory into Practice</i>	3
	<i>(P: Soph. status)</i>	
EDUC-P 313	<i>Adolescents in a Learning Community</i>	3
	<i>(P: Soph. status)</i>	
EDUC-W 200	<i>Using Computers in Education</i>	3
	<b>(IF)</b>	
EDUC-A 308	<i>Legal and Ethical Issues for Teachers</i>	3
	<i>(P: Soph. status)</i>	
EDUC-H 205	<i>Intro to Educational Thought</i>	3
	<i>(P: English Comp.)</i>	
	<b>(S&amp;H) (IW) OR</b>	
EDUC-H 340	<i>Education &amp; American Culture</i>	3
	<i>(P: Soph. status)</i>	<b>(IW)</b>

**Admission to the Teacher Education Program (TEP) is required in order to enroll in the following courses: 30 credits**

EDUC-K 306	<i>Teaching Students with Special Needs: Secondary Classrooms</i>	3
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Courses must be taken in prescribed blocks. Successful completion (C or higher) of all courses in each block is a prerequisite for the next block and student teaching.

Block I and Block II must be completed in sequence from one semester to the next. Students may add an additional semester(s) between the completion of Block II and Student Teaching (Block III).

**BLOCK I (Spring only) 8 credits**

EDUC-M 346	<i>Exploring Secondary School Science Teaching</i>	3
EDUC-M 303	<i>Field Experience I</i>	2
EDUC-M 469	<i>Content Area Literacy</i>	3

**BLOCK II (Fall only) 6 credits**

EDUC-M 446	<i>Methods of Teaching Jr/Middle/Sr High School Science</i>	3
EDUC-M 403	<i>Field Experience II</i>	2
EDUC-S 303	<i>Classroom Management</i>	1

**BLOCK III (Student Teaching) 13 credits**

Students may not enroll in other classes while completing student teaching. Exception: *EDUC-M 202 Job Search Strategies for Educators*

EDUC-M 420	<i>Student Teaching Seminar</i>	1
EDUC-M 480	<i>Student Teaching in the Secondary School (12 weeks) (EEE)</i>	12

**III. PHYSICS CONTENT****54 credits/2.5 GPA**

A grade of C minus (C-) or higher is required in each course.  
Check with the department regarding when courses will be offered.

**Required Science & Mathematics 24 credits**

BIOL-L 111	<i>Foundations of Biology: Diversity, Evolution &amp; Ecology</i>	<b>(N&amp;M) OR</b>	4
BIOL-L 112	<i>Foundations of Biology: Biological Mechanisms</i>	<i>(P: HS or college chemistry)</i>	4
	<b>(N&amp;M)</b>		
CHEM-C 117	<i>Principles of Chemistry &amp; Biochemistry I</i>		3
	<i>(P: CHEM-C 101, CHEM-C 121; or CHEM-C 103; or chemistry and math placement examinations and consent of department)</i>	<b>(N&amp;M)</b>	
EAS-E 103	<i>Earth Sci: Materials &amp; Processes</i>	<b>(N&amp;M) OR</b>	3
EAS-E 104	<i>Evolution of the Earth</i>	<b>(N&amp;M) OR</b>	3
EAS-E 105	<i>Earth: Our Habitable Planet</i>	<b>(N&amp;M)</b>	3
HPSC-X 102	<i>Science Revolutions: Plato to NATO</i>		3
	<b>(S&amp;H) (WC)</b>		
MATH-M/S 211	<i>Calculus I</i>	<b>(N&amp;M) (MM)</b>	4
MATH-M/S 212	<i>Calculus II</i>	<i>(P: MATH-M/S 211)</i>	4
MATH-M/S 343	<i>Introduction to Differential Equations I</i>		3
	<i>(P: MATH-M/S 212)</i>		

**Physics Major 30 credits**

PHYS-P/H 221	<i>Physics I</i>	<i>(C: MATH-M/S 211)</i>	<b>AND</b>	5
PHYS-P/H 222	<i>Physics II</i>	<i>(C: MATH-M/S 212; P: PHYS-P 221)</i>	<b>OR</b>	5
PHYS-P 201	<i>General Physics I</i>	<i>(P: MATH-M 026 or HS equiv.)</i>	<b>(N&amp;M) AND</b>	5
PHYS-P 202	<i>General Physics II</i>	<i>(P: PHYS-P 201 or HS equiv.)</i>	<b>(N&amp;M)</b>	5
PHYS-P 301	<i>Physics III</i>	<i>(P: PHYS-P 222 or PHYS-P 202 with consent of instructor)</i>		3

Complete 17 credits in Physics at the 300-400 level from the Physics department course listing:

- \_\_\_\_\_ 2+
- \_\_\_\_\_ 3
- \_\_\_\_\_ 3
- \_\_\_\_\_ 3
- \_\_\_\_\_ 3
- \_\_\_\_\_ 3

**IV. ELECTIVES (To total 120 credits)**