Due to state-mandated changes in teacher licensure, this plan of study applies to all candidates completing their program July 1, 2013 or after. Candidates who do not undertake student teaching by Spring 2013 will be required to meet these requirements. As such, some student may find they need additional credit hours not listed on their original advising sheets.

Indiana University South Bend - School of Education

Secondary Physics

Student's Name: _____ **University ID Number:** _____

This advising sheet is designed to supplement information found in the Indiana University South Bend Bulletin. It details the specific requirements for *Secondary Physics Education*.

Final responsibility for fulfilling program requirements rests with the student.

If general education, content preparation, and professional education hours do not total the minimum 124 credits required for graduation, additional electives will be necessary. It is strongly advised that upon acceptance into the School of Education, students schedule an appointment with an advisor to clarify all program requirements and continue to meet regularly to discuss academic progress. Many courses have prerequisites – consult the university bulletin for information.

GENERAL EDUCATION (39 credits with 15 credits fulfilled by professional education and content preparation courses)

Note: Please be aware that an overall GPA of 2.75 is required for admission into the Teacher Education Program (TEP) and for student teaching; candidates are also required to meet the prevailing minimum GPA for state certification.

I. Fundamental Literacies (19 cr. with 9 cr. fulfilled by professional education and content preparation courses)					
Requirement	**Course**	**Course Title**	**Credits**	**Semester**	**Grade**
A. Writing	ENG-W 131	Elementary Composition	3		
B. Critical Thinking	ENG-W 270	Argumentative Writing	3		
C. Oral Communication	EDUC-BE 201	F201 Exploring the Personal Demands of Teaching: Lab	Fulfilled by professional education courses		
		F202 Exploring the Personal Demands of Teaching: Field			
	EDUC-BE 314	M314 General Methods: Sr. High/Jr. High/Middle School			
		R301 Audio Visual Production of Materials			
D. Visual Literacy	EDUC-W 200	Using Computers in Education	Fulfilled by professional education courses		
E. Quantitative Reasoning	Fulfilled by content preparation coursework requirements				
F. Information Literacy	COAS-Q 110	Intro to Information Literacy	1		
G. Computer Literacy	CSCI-A 106	Introduction to Computing	3		

II. Common Core (12 cr. with 3 cr. fulfilled by professional education courses.)					
Requirement	**Course**	**Course Title**	**Credits**	**Semester**	**Grade**
A. The Natural World	GEOL-N 190 or AST-N 190	Variable Topic Sections	3		
B. Hum. Beh. and Social Inst.	EDUC-P 250	Educational Psychology	Fulfilled by professional education courses		
C. Literary and Intellect. Trad.	ENG-T191 or ENG-T192	Variable topic sections	3		
D. Art, Aest., and Creativity	FINA-A 190	Variable topic sections	3		

III. Contemporary Social Values (8 cr. with 3 cr. fulfilled by professional education courses.)					
Requirement	**Course**	**Course Title**	**Credits**	**Semester**	**Grade**
A. Non-Western Cultures	ANTH-E 105	Culture and Society	3		
B. Diversity in U.S. Society	EDUC-H 340	Education and American Culture	Fulfilled by professional education courses		
C. Health and Wellness	HPER	Any approved course or courses that fulfill this requirement	2		

General Education I, II, III	24 Credits
Physics, other science, and math	59-60 Credits
Professional Education	43 Credits
Total	**126-127 Credits**

Note: Please be aware that an overall GPA of 2.75 is required for admission into the Teacher Education Program (TEP) and for student teaching; candidates are also required to meet the prevailing minimum GPA for state certification. All courses with a grade of 'C-' or lower must be retaken.

Physics Education Major (59-60 cr.)

These are the content course requirements for those seeking licensure in Secondary Physics Education at the Senior High/Junior High/Middle School level under Indiana's *Rules for Educator Preparation and Accountability (REPA)*. Students should meet with advisors to determine additional general education requirements. Many courses have prerequisites—consult the University Bulletin for information.

Physics and Other Science (46-47 cr.)

Requirement	Course	Course Title	Credits	Semester	Grade
Each of the following (34 cr.)	BIOL-L 101	Introduction to Biological Sciences I	5		
	CHEM-C 105	Principles of Chemistry I	3		
	CHEM-C 125	Experimental Chemistry I	2		
	CHEM-C 106	Principles of Chemistry II	3		
	CHEM-C 126	Experimental Chemistry II	2		
	PHYS-P 221	Physics 1	5		
	PHYS-P 222	Physics 2	5		
	PHYS-P 323	Physics 3	3		
	PHYS-P 324	Physics 4	3		
	PHYS-P 309	Modern Physics Laboratory	3		
Two of the following courses: (6 cr.)	PHYS-P 331	Theory of Electricity and Magnetism (preferred)	3		
	PHYS-P 340	Thermodynamics and Statistical Mechanics (preferred)	3		
	PHYS-P 441	Analytical Mechanics I	3		
	PHYS-P 453	Introduction to Quantum Mechanics	3		
Two of the following courses: (6-7 cr.)	PHYS-P 303	Digital Electronics	4		
	PHYS-P 334	Fundamentals of Optics	3		
	PHYS-P 321	Techniques of Theoretical Physics	3		
	PHYS-P410	Computing Applications in Physics	3		
	PHYS-P 473	Introduction to String Theory	3		
	AST-A 453	Topical Astrophysics	3		
	GEOL-G 413	Introduction to Geophysics	3		

Mathematics Courses (13 cr.)

Requirement	Course	Course Title	Credits	Semester	Grade
Each of the following courses	MATH-M 215	Analytical Geometry and Calculus I	5		
	MATH-M 216	Analytical Geometry and Calculus II	5		
	MATH-M 343	Introduction to Differential Equations with Appl's	3		

It is strongly suggested that students also take BIOL-L102 Introduction to Biological Science II to further prepare for possible teaching at the middle school/junior high.

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Professional Education (43 cr.)

Note: Please be aware that an overall GPA of 2.75 is required for admission into the Teacher Education Program (TEP) and for student teaching; candidates are also required to meet the prevailing minimum GPA for state certification.

STEP 1: Foundations I (7 cr.)

Course	Course Title	Credits	Semester	Grade
EDUC-F 100	Introduction to Teaching – Strongly suggested 1st semester	1		
EDUC-W 200	Using Computers in Education	3		
EDUC-P 250	Educational Psychology	3		

STEP 2: Foundations II (9 cr.)

Students must successfully complete F100, W200, P250, and pass all sections of the Praxis I (or demonstrate competence in basic reading, writing, and mathematics skills via IN DOE alternate assessments) to be eligible to enroll in the following courses. Registration information on the Praxis I can be obtained at www.ets.org/praxis.

Course	Course Title	Credits	Semester	Grade
*EDUC-BE 201	EDUC-F 201 Exploring the Personal Demands of Teaching: Lab	2		
	EDUC-F 202 Exploring the Personal Demands of Teaching: Field Exper.	1		
*EDUC-BE 314	EDUC-M 314 General Methods in Sr. High/Jr. High/Middle School	3		
	EDUC-R 301 Audio Visual Production of Materials	0		
EDUC-H 340	Education and American Culture	3		

***These courses should be taken concurrently.**

Reminder – you <u>must</u> attend a student teaching application meeting and apply for student teaching during the fall prior to the school year in which you plan to student teach.

<< Students must successfully complete Checkpoint 1 prior to Step 3 >>

STEP 3: Intermediate Methods (9 cr.) Spring Only!

In order to enroll in the following courses, you must be formally admitted to the Teacher Education Program (TEP) and have completed all coursework prerequisites and all foundation courses. Applications and information are available through the Education Student Services Office, Greenlawn 120.

Course	Course Title	Credits	Semester	Grade
*EDUC-M 464	Methods of Teaching Sr. High/Jr. High/Middle School Reading	3		
*EDUC-K 306	Teaching Students with Special Needs in Secondary Classrooms	3		
EDUC-P 407	Psychological Assessment in the School	3		

***These courses should be taken concurrently.**

STEP 4: Advanced Content Methods (6 cr.) Fall Only!

Course	Course Title	Credits	Semester	Grade
*EDUC-BE 446	EDUC-M 446 Methods of Tch Sr. Hi/Jr. Hi/Middle School Science	3		
	EDUC-M 401 Field Experience			
*EDUC-P 475	Adolescent Development and Classroom Management	3		

***These courses should be taken concurrently.**

Students must earn and submit to the Education Student Services Office a passing score on the appropriate Praxis II content area exam and the Praxis II Principles of Learning and Teaching exam prior to the start of Student Teaching. Praxis II exam information is available at www.ets.org/praxis.

<< Students must successfully complete Checkpoint 2 prior to Step 5 >>

STEP 5: Student Teaching (12 Cr.)

Students must successfully complete all coursework, pass required Praxis II exams, and complete graduation application prior to student teaching.

Course	Course Title	Credits	Semester	Grade
EDUC-M 420	The Student Teaching Seminar: Understanding Schools	2		
EDUC-M 480	Student Teaching: Senior High/Jr. High/Middle School	10		

<< Students must successfully complete Checkpoint 3 prior to graduation and licensure >>

Indiana teaching license application information available in the Education Student Services Office, Greenlawn 120.