

Butler University
College of Education
Teacher Licensing
Curriculum Sheets

License Requirements for students entering Program Fall 2019 and later

Butler University Major: **Middle/Secondary Education**
Butler University Degree: **Bachelor of Science (COE); second major (LAS)***
License: **PHYSICS Teaching Content Area**
Grades: **5-12**
*see LAS advisor for additional requirements

SECTION A. GENERAL EDUCATION REQUIREMENTS

Required Courses

12 hours

FYS First-Year Seminar – Self, Community, and the World (6 credit hours)
(courses must be completed with a grade of “C” or better)

GHS Global and Historical Studies (6 credit hours)

ICR Indianapolis Community Requirement (ED 227S, ED 228S)

BCR Butler Cultural Requirement (8 events prior to graduation)

WAC Writing across the Curriculum (ED434WC)

SAC Speaking across the Curriculum (ED434WC)

6 Areas of Inquiry:

7 hours

1. TI: Text and Ideas - Humanities 3 hours

2. PCA: Perspectives in the Creative Arts – Fine Arts 3 hours

3. SW: Perspectives in the Social World – Social Sciences 0 hours
College of Education students are exempt from this area of inquiry

4. NW: The Natural World [see Content Requirements-Section B]

5. AR: Analytical Reasoning [see Content Requirements-Section B]

6. PWB: Physical Well Being 1 hour

SECTION B. CONTENT AREA COURSES

(courses must be completed with a grade of “C” or better)

Contact: Curriculum Coordinator, College of Education – SCMB 229
4250 Haughey Ave., Indianapolis, IN 46208 317-940-6967

PHYSICS License Requirements for Grades 5-12

55-56 hours

Required Physics Courses: (36 hours)

*Physics courses are typically offered in an every other year sequence due to small class sizes. This requires close collaboration with the faculty advisors in the Physics Department.

PH 201	Introduction to Analytical Physics I (5) Fall
PH 202	Introduction to Analytical Physics II (5) Spring
PH 301	Modern Physics [MA 107 prerequisite] (3) Fall
PH 303	Electromagnetic Waves and Optics (3) Spring
PH 311	Experimental Modern Physics (3) Spring
PH 321	Intermediate Classical Mechanics [MA 208 prereq] (4) Spring
PH 325	Thermodynamics and Statistical Physics [MA 107 prereq] (4) Spring
PH 331	Electromagnetic Theory I [MA 208 prereq] (4) Fall
PH 421	Quantum Theory I [MA 208 prereq] (4) Fall
PH 495	Senior Seminar (1) Fall

Elective Physics Courses – Choose 1 (3-4 hours and offered on an occasional basis)

AS 301	Modern Astronomical Techniques [AS 101 & PH 202 prereq] (3)
AS 311	Astrophysics I [AS 101 & PH 202 prereq] (3)
PH 315	Mathematical Methods for Physics [MA 208 prereq] (4)
PH 351	Analog Electronics (4)
PH 422	Quantum Theory 2 (4)
PH 427	General Relativity and Gravity I (3)
PH 461	Computational Physics (3)
PH 480	Special topics (3)

Required Allied and Science Support Courses (16)

MA 106	Calculus and Analytic Geometry I [meets AR requirement] (4)
MA 107	Calculus and Analytic Geometry II (4)
MA 208	Calculus and Analytic Geometry III (3)
NW 260	COE Earth Systems Science (5)

NOTE: For Physics and Education double major in LAS and COE:
FL 6 hours

*For a Bachelor of Science degree a student must take a minimum of 60 hours in the natural sciences and mathematics.

C. PROFESSIONAL EDUCATION COURSES

45 Hours

(courses must be completed with a grade of “C” or better)

COE CORE I:

ED 199 Exploring Educator Identity (5)

Must Complete COE CORE I classes with a C (2.0) or better and other accepted benchmark indicators before moving into COE CORE II.

Must purchase Taskstream subscription. May purchase subscription each year or one-time multi-year subscription.

COE CORE II:

ED 299 Integrated Foundations of Teacher Education (6)

ED 242 Foundations of Special Education (2) *Required co-enrollment w/ ED 299

At the completion of COE CORE II student must apply to be admitted to Teacher Education/COE CORE III.

COE CORE III Program Specific: (must be admitted to Teacher Education)

ED 227S Introduction to Middle-Secondary Students and Schools(3)

ED 228S Content Area Literacy in Middle-Secondary Curriculum (3)

ED 398 Multilingual Learners and Their Cultural Contexts (3)

ED 498 Methods for Teaching Multilingual Learners (3)

ED 492 Special Education Law (1)

ED 327 Curriculum and Instructional Strategies for Middle Schools (3):

Prerequisites ED 227S and ED 228S – Spring Junior year is optimal.*

***Students planning on student teaching next academic year must attend information sessions and submit specific documents to the College of Education in order to ensure proper and appropriate placement.**

ED 433 Content Area Methods for High School (4) – Fall only

Prerequisite ED 327

COE CORE IV: Student Teaching Courses

ED 434WC Secondary Student Teaching Professional Seminar (2)

ED 423 Student Teaching (5)(Middle Level Student Teaching)

ED 425 Secondary Student Teaching (5) (High School)

D. ELECTIVES

NOTE: 126 hours are required for graduation from the University. At least 40 of the 126 hours needed for graduation must be in upper division courses – courses numbered 300 or above.

E. TESTING REQUIREMENTS

Information will be available through the COE website and the Director of Student Personnel Services in the College of Education SCMB 105: 317-940-9331.

Content tests are required for teaching licensure in the state of Indiana. The tests measure understanding of the content and methods applicable to the specific subject areas.

edTPA for Secondary Sciences (Physics) is required to be submitted to Pearson for national scoring during Phase I of Student Teaching.

F. CPR/HEIMLICH/AED and SUICIDE AWARENESS/PREVENTION

Applicants who receive an ‘initial’ teacher’s license must have successfully completed training in:

1. cardiopulmonary resuscitation that includes a test demonstration on a mannequin;
2. moving a foreign body causing an obstruction in an airway, and Heimlich Maneuver;
3. AED; and
4. suicide awareness/prevention

A copy of your CPR/Heimlich/AED certification is required for original licensure.

A certificate verifying your successful completion of a suicide awareness/prevention module is required for original licensure.

Please note: If you follow this specified plan you will have met the core curriculum course requirements, the Butler University graduation course requirements, and the initial Indiana licensing course requirements.