

STATE OF ALABAMA DEPARTMENT OF EDUCATION TEACHER EDUCATION AND CERTIFICATION



(Required certification sequence for UABTeach Program for Biomedical Engineering Majors)

Program:

BIOLOGY or GENERAL SCIENCE (6-12)

Total Hours:

*This certification requires a minimum of 120-hours for degree including 21 hours of UAB Teach courses.

CLASS B EDUCATION PROGRAM CHECKLIST

Institution: UNIVERSITY OF ALABAMA AT BIRMINGHAM

Date Approved:

Date Expires: Revisions: 06/09/2022

General Studies Shall include courses and/or experiences in the	humanities,
social studies, mathematics, and science.	•
Humanities:	
EH 101 English Composition I	3
EH 102 English Composition II	3
Literature (See AGSC List)	3-6
Humanities/Fine Arts (See AGSC List)	3-6
Fine Arts (See AGSC List)	3
Social Science:	
History	3
Non-History Social Science	6
Science:	
BY 123 Introductory Biology I with Lab	- 4
CH 115/116 Chemistry I with Lab	4 4 4
CH 117/118 Chemistry II with Lab	4
PH 221 General Physics I and Lab	4
PH 222 General Physics II and Lab	4
Mathematics:	
MA 125 Calculus I <u>OR</u>	
MA 126 Calculus II	4
0.4	
Other:	-
PHL 270 OR HY 275	3

To be eligible for Class B certification in biology or general science, candidates will need to complete all courses on this checklist*, meet Teacher Education Program requirements for biology or general science, <u>AND complete ALL degree requirements for Biomedical Engineering</u>.

*For candidates <u>pursuing general science</u> certification, completion of courses in biology, chemistry, Earth and space sciences, and physics is required.

Prospective and admitted students should NOT begin any coursework without seeking advisement from the UABTeach Advisor/Academic Coach each term. Students who ignore this admonition assume responsibility for their own mistakes.

Professional Studies

These courses must be taken prior to admission to TEP.

EHS 125 Step 1: Inquiry Approaches to Teaching 1

EHS 126 Step 2: Inquiry Approaches to Teaching 1

EHS 325 Knowing and Learning in Science and Mathematics 3

EHS 326 Classroom Interactions 3

These courses require admission to TEP before they can be taken. EHS 327 Problem-Based Instruction 3

Internship:

Students must take EHS 425 and EHS 426 in the same term.

EHS 425 Apprentice Teaching 6

EHS 426 Apprentice Teaching Seminar 1

Teaching Field

Must include at least 30 semester hours in the teaching field with a minimum of 18 hours at the upper division level. (List all courses required for the teaching field.)

See attached requirements on page 2.

Dean of Education: <u>Michelle Robinson</u>

Date: 10/13/2022



Class B Biology (6-12) Program Checklist: 30 /18 Teaching Field Analysis

Lower Division Courses		
BME 210	Engineering Biology	3
BY 123	Introductory Biology and Lab	4
BY 210	Genetics	3
CE 210 ME 215 EGR 150	Statics <u>OR</u> Dynamics <u>OR</u> Computer Methods in Engineering	3 <u>13 Hours</u>
Upper Division Courses		
BME 310	Biomaterials	3
BME 312	Biocomputing	3
BME 313	Bioinstrumentation	3
BME 333	Biomechanics of Solids	3
BY 409	Mammalian Physiology	4
Biomedical Engir	neering Research Methods OR Biomedical Engineering Capstone	3
		19 hours

FOR GENERAL SCIENCE CERTIFICATION (If not included on major checklist)

One Course and Lab Sequence from the Following:

BY 123 Introductory Biology I and Lab

BY 124 Introductory Biology II and Lab

One Course and Lab Sequence from the Following:

CH 115/116 General Chemistry I and Lab

CH 117/118 General Chemistry II and Lab

One Course and Lab Sequence from the Following:

PH 202 College Physics and Lab

PH 221 General Physics I and Lab

PH 222 General Physics II and Lab

One Course and Lab Sequence from the Following:

AST 101/111 Astronomy of the Universe and Lab

AST 102/112 Astronomy of Stellar Systems and Lab

ES 101/102 Physical Geology and Lab

ES 103/104 History of the Earth and Lab