# Program Map: BSED in Secondary Education (6-12) Biology Education (121-124 credits) College of Education

Name: SID: Advisor:
Start Date: Catalog Date: Expected Graduation Date:

	Fall Courses			Spring Courses			Notes
	Course	Name	Hours	Course	Name	Hours	Notes
	Area A	Composition I	3	Area A	Composition II	3	Prepare for GACE Program
	ENGL 1101	Pre-requisite: None		ENGL 1102	Pre-requisite: ENGL 1101		Admission Exams **
	Area A	College Algebra or test score	3	MATH 1113	Pre-Calculus	3	
⊑	MATH 1111*	Pre-requisite: None			Pre-requisite: MATH 1111		** You are exempt from
2	Area D	Principles of Biology I	3	BIOL 1108**	Principles of Biology II	3	GACE Program Admission
	BIOL 1107	Pre-requisite: None			Pre-requisite: BIOL 1107/1107L		Exams by having a
, h	Area D	Principles of Biology I Lab	1	BIOL 1108L**	Principles of Biology II Lab	1	combination ACT score of 43
á	BIOL1107L	Co-requisite: BIOL 1107			Co-requisite BIOL 1108		or a combination SAT score of 1000.
Freshman	Area F	Technology in Teaching & Learning	3	Area F	Reading and Writing Strategies	3	1000.
	EDUC 2000	Pre-requisite: None		EDUC 2100	Pre-requisite: None		
	Area F	First Year Experience for Future	2	Area F	Investigating Critical &	3	
	EDUC 1103	Educators		EDUC 2110	Contemporary Issues in Education		
		Pre-requisite: None			Pre-requisite: None		_
	Fall Milestones		Total		Spring Milestones	Total	_
			15			16	

	Fall Courses			Spring Courses			Notes
	Course	Name	Hours	Course	Name	Hours	Notes
	PHYS 1111K	Introductory Physics I	4	Area D	Survey US History to Post Civil or	3	Secure Tort Liability
				HIST 2111 or	Survey US History Post Civ-Present		Insurance
		Pre-requisite: MATH 1113		HIST 2112	Pre-requisite: None		
d)	Area D	Principles of Chemistry I	3	CHEM 1212	Principles of Chemistry II	3	Secure Assessment Account
Ĭ	CHEM 1211	Pre-requisite: NONE			Pre-requisite: CHEM 1211/1211L		
2	Area D	Principles of Chemistry I Lab	1	CHEM 1212L	Principles of Chemistry II Lab	1	Complete Georgia Professional Standards Commission (GaPSC) Pre- Service Certification and Background Check Apply for Admission to the
Щ	CHEM 1211L	Co-requisite: CHEM 1211			Co-requisite: CHEM 1212		
Sophomore	Area B	Critical Thinking & Communication	3	Area E	Elective	3	
ם	HUMN 1201	Pre-requisite: None			Pre-requisite: None		
0	Area E	Human Growth & Development	3	Area F	Exploring Teaching and Learning	3	
<b>O</b> 2	PSYC 2103	Pre-requisite: None		EDUC 2130	Pre-requisite: None		
	Area F	Exploring Socio-Cultural Influences	3	BIED 2201	Biology Literacy for Diverse Learners	3	Teacher Education Program
	EDUC 2120	in Teaching & Learning					(TEP)
		Pre-requisite: None			Pre-requisite: None		(ILI)
	Fall Milestones		Total	Spring Milestones		Total	
	Take GACE Program Admission Exams		17	Retake GACE Program Admission Exams, if needed.		16	

	Fall Courses			Spring Courses			NT-4
	Course	Name	Hours	Course	Name	Hours	Notes
	BIOL 3201	Molecular & Cell Biology	3	BIOL 3301	Genetics	3	Secure Tort Liability Insurance
		Pre-requisite: BIOL1108/CHEM1212			Pre-requisite: BIOL 1108/1108L		
	BIOL 3201L	Molecular & Cell Biology Lab	1	BIOL 3301L	Genetics Lab	1	Apply for Student Teaching/
		Co-requisite: BIOL 3201			Co-requisite: BIOL3301		Clinical Practice Placement
	Area C	Elective	3	BIOL 3401	Ecology and Evolutionary Biology	3	
		Pre-requisite: None			Pre-requisite: BIOL 1108/1108L		
Junior	Area D	Computer Applications	3	BIOL 3401L	Ecology and Evolutionary Biology Lab	1	
	CSCI/CISM	Pre-requisite: None			Co-requisite: BIOL 3401		
	1130						
F.	Area E	American Government	3	Area C	Elective	3	
	POLS 1101	Pre-requisite: None			Pre-requisite: None		
	EDUC 3030	Teaching Exceptional Learners	3	BIED 3002	Connections in Secondary Science	3	
		Pre-requisite: Admission to TEP			Pre-requisite: Admission to TEP		
				EDUC 3200	Curriculum and Assessment	3	
					Pre-requisite: Admission to TEP		
	Fall Milestones		Total	Spring Milestones		Total	
	Take GA Educator Ethics: Program Entry Exam (350)		16	Take GACE Content Exams Test I [026] and Test II [027]		17	
				or Combined Test I and II [526]			

		Fall Courses	Fall Courses		Spring Courses	Notes	
	Course	Name	Hours	Course	Name	Hours	Notes
	BIOL 3321	Microbiology	3	EDUC 4475	Student Teaching/Clinical Practice	10	Secure Tort Liability
		Pre-requisite: BIOL 1108 /1108L			Pre-requisite: Admission to TEP		Insurance
					GaPSC Pre-Service Certificate Required		
	BIOL 3321L	Microbiology Lab	1	EDUC 4476	Student Teaching Seminar	2	Apply for Graduation
		Co-requisite: BIOL 1108			Co-requisite: EDUC 4475		
	Area B	Survey African American	2				Complete Exit Counseling
	AFRS 1501	Experience					(Financial Aid)
ì		Pre-requisite: None					
ij	EDUC 3040	Classroom Management and Ethics	3				Complete Evaluation of
Senior		Pre-requisite: None					Cooperating Teacher Survey
Š	BIED 4416	Teaching and Research in Secondary	3				Complete Program Graduate
		Biology Education					Survey
		Pre-requisite: Admission to TEP					Survey
	BIED 4417	Practicum in Teaching Secondary	3				
		Biology Education					
		Co-requisite: EDUC 4416					
		Pre-requisite Admission to TEP					
	Fall Milestones		Total		Spring Milestones	Total	
	Take Georgia Educator Ethics: Program Exit Exam		15	Submit edTPA		12	
	(360)						

### Program Map: BSED in Secondary Education (6-12) Biology Education (121-124 credits) College of Education

#### Core Curriculum (Programmed Preferred Options in Bold)

#### Area B – Institutional Options 5 hrs.

# AFRS 1501 Survey of African-American Experience 2 hrs. HUMN 1201 Critical Thinking & Communication 3 hrs.

Area C - Humanities/Fine Arts, and Ethics 6 hrs.

1. Select one of the following:

ENGL 2111 World Literature I 3 hrs.

ENGL 2112 World Literature II 3 hrs.

ENGL 2121 British Literature I 3 hrs.

ENGL 2122 British Literature II 3 hrs.

ENGL 2131 American Literature I 3 hrs.

ENGL 2132 American Literature II 3 hrs.

ENGL 2222 African American Literature 3 hrs.

ENGL 2222 African American Literature 3 nrs

PHIL 2010 Introduction to Philosophy 3 hrs.

PHIL 2030 Introduction to Ethics 3 hrs.

2. Select one of the following:

ARTS 1101 Introduction to Visual Art 3 hrs.

DNCE 2010 Dance Appreciation 3 hrs.

ENGL 2521 Introduction to Film 3 hrs.

HUMN 2011 Humanities 3 hrs.

MUSC 1101 Introduction to Music 3 hrs.

THEA 2101 Introduction to Theatre 3 hrs.

#### Area D - Natural Sciences, Math, & Technology 11 hrs.

1. Select one of the following:

BIOL 1107 Principles of Biology I 3 hrs.

BIOL 1108 Principles of Biology II 3 hrs.

CHEM 1211 Principles of Chemistry I 3 hrs.

CHEM 1212 Principles of Chemistry II 3 hrs.

CISM 1130 Computer Applications 3 hrs. or

CSCI 1130 Computer Applications 3 hrs.

CSCI 1301 Computer Science I 3 hrs.

ENVS 1140 Environmental Issues 3 hrs.

2. Select two of the following lab sciences:

BIOL 1107/1107L Principles of Biology I 4 hrs.

BIOL 1108/1108L Principles of Biology II 4 hrs.

CHEM 1211/1211L Principles of Chemistry 4 hrs.

CHEM 1212/1212L Principles of Chemistry 4 hrs.

PHYS 1111K Introductory Physics I 4 hrs.

PHYS 1112K Introductory Physics II 4 hrs.

PHYS 2211K Principles of Physics I 4 hrs.

PHYS 2212K Principles of Physics II 4 hrs.

#### Area E - Social Science 12 hrs.

## POLS 1101 American Government 3 hrs.

Select one of the following:

HIST 2111 U.S. History to the Post-Civil War Period 3 hrs.

HIST 2112 U.S. History from the Post-Civil War to Pre 3 hrs.

Select two of the following:

AFRS 2000 Introduction to Africana Studies 3 hrs.

ANTH 1101 Introduction to Anthropology 3 hrs.

ECON 2105 Principles of Macro-Economics 3 hrs.

GEOG 1101 Introduction to Human Geography 3 hrs. HIST 1111 World Hist to Early Modern Times 3 hrs.

HIST 1112 World History Early Modern Times to Pres 3 hrs.

POLS 2401 Global Issues 3 hrs.

PSYC 1101 Intro to General Psychology 3 hrs.

#### PSYC 2103 Human Growth & Development 3 hrs.

SOCI 1101 Introduction to Sociology 3 hrs.

SOCI 1160 Social Problems 3 hrs.

#### **Distinctive Courses in this Major**

#### **EDUC 3030 Teaching Exceptional Learners 3 credits**

This course is designed to prepare candidates to work collaboratively with families and school personnel to have a positive impact on the educational, social and behavioral development of all students, including those with a full range of disabilities and in a diverse society. The course focuses on knowledge of legislative mandates for serving exceptional students, characteristics of exceptionality, best practice in facilitating teaching and learning, and accountability through assessment of outcomes. There are 60 required field hours in this course. This course cannot be passed without verification of completion of field hours. Admission to TEP required.

#### EDUC 3200 Curriculum and Assessment 3 credits

This course will engage students in the investigation of curriculum, instruction, and assessment development with an emphasis on student learning outcomes. This course will review assessment methods relative to constructing, evaluating and interpreting tests with an understanding on reliability, valid and fair measurements; descriptive and inferential statistics, and state competency testing. Students will cover knowledge management and methods for integrating technology into assessment practice. There are 60 required field hours in this course. This course cannot be passed without verification of completion of field hours. Admission to TEP required.

# BIED 4416 Teaching & Research in Secondary Biology Education 3 credits

This course is an examination and application of curricular issues, learning theories, teaching strategies, instructional materials, and assessment procedures for teaching secondary school biology in the multicultural and diverse classroom of today. The course emphasizes those practices recommended by research in biology education and the Next Generation Science Standards of the National Science Teachers Association (NSTA), which include inquiry and discovery through active learning. The eportfolio is required. Admission to TEP required. Taken with BIED 4417.

# BIED 4417 Practicum in Teaching Secondary Biology Education 3 credits

This course is designed to provide teacher candidates with experience in a supervised school setting where they will show active involvement with mentor teachers in creating and teaching lessons and assessing student learning to guide instruction. Students will learn how to implement meaningful and engaging instruction for secondary students in biology using inquiry and discovery to develop critical thinking, problem solving, and scientific literacy skills. There are 120 required field hours in this course. This course cannot be passed without verification of completion of field hours. Admission to TEP required. Taken with BIED 4416.

## EDUC 4475 Student Teaching/Clinical Practice 10 credits

Student teaching is a **630-hour field-based capstone requirement** for teacher certification and BSED candidates. Requirements for entry, grade level and/or content placement, and teaching experiences at the assigned school adhere to the most recent rules for teacher certification mandated by the GaPSC. **Taken with EDUC 4476.** 

## **EDUC 4476 Student Teaching Seminar 2 credits**

This seminar, taken with EDUC 4475 Student Teaching/Clinical Practice, provides students with structured support to meet final teacher preparation program requirements mandated by the GaPSC for teacher certification. Completion of GACE assessments and submission of the teaching portfolio to edTPA are required to complete this course. Taken with EDUC 4475.