My Degree Map TROY UNIVERSITY

College of Education Recommended Academic Plan Biology Education - Program Year 2013-2014

1 st Semester/Term 1-2	Hours	2 nd Semester/Term 3-4	
Troy 1101 University Orientation	1	ENG 1102/04 Comp/Mod English II	
ENG 1101/03 Comp/Mod English I#			4
MTH 1125 Calculus I#	4	AREA IV, Group 2 course option**	3
AREA II, Group 4 course option**	3	ART 1133* or MUS 1131*or DRA 2200	2
ART 1133* or MUS 1131* or DRA 2200	2	IS 2241 Computer Concepts/Applications	3
AREA IV, Group 2 course option**	3		
TOTAL	16	TOTAL	15
3 rd Semester/Term 1-2	Hours	4 th Semester/Term 3-4	Hours
AREA II, Group 3 literature course option	3	MTH 2210 Applied Stats	3
CHM 1142/lab Gen Chem I/lab	4	COM 2241 Fundamentals of Speech	3
History Course from AREA IV	3	CHM 1143/lab Gen Chem II/lab	4
BIO 1101/lab Organismal Bio/lab	4	BIO 2220/lab Prin Cell Bio/lab	4
AREA IV, Group 2 course option**	3	BIO 3310 Professional Educator	
TOTAL	17	TOTAL	17
5 th Semester/Term 1-2	Hours	6 th Semester/Term 3-4	Hours
5 th Semester/Term 1-2 AREA V Physics course/lab	Hours 4	6 th Semester/Term 3-4 AREA V Physics course/lab	Hours 4
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AREA V Physics course/lab	4	AREA V Physics course/lab	4
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab PSY 3303 Educational Psychology	4 4 4 3	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab	4
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab	4 4 4	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab BIO 3320/lab Genetics/lab	4 4 4
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab PSY 3303 Educational Psychology	4 4 4 3	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab BIO 3320/lab Genetics/lab	4 4 4
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab PSY 3303 Educational Psychology SPE 3340 Diverse Learners TOTAL	4 4 4 3 3	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab BIO 3320/lab Genetics/lab EDU 3305 Microcomputers in Education TOTAL	4 4 4 3
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab PSY 3303 Educational Psychology SPE 3340 Diverse Learners	4 4 4 3 3	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab BIO 3320/lab Genetics/lab EDU 3305 Microcomputers in Education	4 4 4 3
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab PSY 3303 Educational Psychology SPE 3340 Diverse Learners TOTAL 7 th Semester/Term 1-2 Approved biology/lab elective	4 4 4 3 3 18	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab BIO 3320/lab Genetics/lab EDU 3305 Microcomputers in Education TOTAL 8 th Semester/Term 3-4 Approved biology/lab elective	4 4 4 3 15
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab PSY 3303 Educational Psychology SPE 3340 Diverse Learners TOTAL 7 th Semester/Term 1-2 Approved biology/lab elective Approved biology/lab elective	4 4 4 3 3 18 Hours 4	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab BIO 3320/lab Genetics/lab EDU 3305 Microcomputers in Education TOTAL 8 th Semester/Term 3-4 Approved biology/lab elective Approved biology/lab elective	4 4 4 3 15 Hours 4 4
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab PSY 3303 Educational Psychology SPE 3340 Diverse Learners TOTAL 7 th Semester/Term 1-2 Approved biology/lab elective Approved biology/lab elective Approved biology/lab elective	4 4 3 3 18 Hours 4 4	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab BIO 3320/lab Genetics/lab EDU 3305 Microcomputers in Education TOTAL 8 th Semester/Term 3-4 Approved biology/lab elective Approved biology/lab elective BIO 4481 Methods/Mat Sec Teacher	4 4 3 15 Hours 4 4 3
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab PSY 3303 Educational Psychology SPE 3340 Diverse Learners TOTAL 7 th Semester/Term 1-2 Approved biology/lab elective Approved biology/lab elective	4 4 4 3 3 18 Hours 4 4 4 3	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab BIO 3320/lab Genetics/lab EDU 3305 Microcomputers in Education TOTAL 8th Semester/Term 3-4 Approved biology/lab elective Approved biology/lab elective BIO 4481 Methods/Mat Sec Teacher EDU 4471 Curriculum/Instruct Delivery	4 4 4 3 15 Hours 4 4 3 3
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab PSY 3303 Educational Psychology SPE 3340 Diverse Learners TOTAL 7 th Semester/Term 1-2 Approved biology/lab elective Approved biology/lab elective Approved biology/lab elective	4 4 3 3 18 Hours 4 4	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab BIO 3320/lab Genetics/lab EDU 3305 Microcomputers in Education TOTAL 8 th Semester/Term 3-4 Approved biology/lab elective Approved biology/lab elective BIO 4481 Methods/Mat Sec Teacher	4 4 3 15 Hours 4 4 3
AREA V Physics course/lab BIO 2229/lab Gen Ecology/lab CHM 3342/lab Organic Chem I/lab PSY 3303 Educational Psychology SPE 3340 Diverse Learners TOTAL 7 th Semester/Term 1-2 Approved biology/lab elective Approved biology/lab elective SED 4000 Classroom Management	4 4 4 3 3 18 Hours 4 4 4 3	AREA V Physics course/lab CHM 3343/lab Organic Chem II/lab BIO 3320/lab Genetics/lab EDU 3305 Microcomputers in Education TOTAL 8th Semester/Term 3-4 Approved biology/lab elective Approved biology/lab elective BIO 4481 Methods/Mat Sec Teacher EDU 4471 Curriculum/Instruct Delivery	4 4 4 3 15 Hours 4 4 3 3

9 th Semester/Term 1-2	Hours
SED 4454 Intern Seminar Secondary	3
BIO 4474 Internship Biology Education	9
TOTAL	12
TOTAL HOURS REQUIRED FOR DEGREE	145

^{*}Indicates an international scope class (6 hours required).

 $\# Indicates \ courses \ which \ require \ approved \ placement \ scores.$

Courses in **BOLD** require a grade of C or above.

A minimum of 120 hours is required for all baccalaureate degree programs.

At least 50% of required coursework must be earned at a senior institution.

At least 25% of the credit hours must be completed in residency with Troy University.

At least 12 semester hours of residency must be completed in each major field of study.

A minimum GPA of 2.75 and in each major is required to graduate.

NOTE: Please consult the College of Education or current catalog for other requirements not covered in this document.

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Approved by the AEC 03/14

^{**}A sequence is required in either literature or history.

General Studies: Biology Education (63 Hours)

Complete all 6 subrequirements

A: AREA I:

ENG-1101 Comp and Modern English I	3 hours
ENG-1102 Comp and Modern English II	3 hours

B. AREA II:

- Group 1: Take COM 2241 Fundamentals of Speech 3 hours
- Group 2: Select two courses from *ART 1133, *MUS 1131 Or DRA 2200

4 hours

- Group 3: Take three semester hours from the following:

 *ENG 2205, *ENG 2206, ENG 2211, ENG 2212, 3 hours

 ENG 2244, ENG 2245,
- Group 4: Take three semester hours from the following:

 *CLA 2260, *ENG 2205, *ENG 2206, ENG 2211,
 ENG 2212, ENG 2244, ENG 2245, *FRN 1101,
 *GER 1121, *GRK 1111, IDS 2200, *LAT 1131,
 PHI 2203, PHI 2204, *ANT 2280 or *SPN 1141

C. AREA III:

Take the following courses:

MTH 1125 Calculus I	4 hours
CHM 1142/L General Chemistry with Lab	3/1 hours
BIO 1100/L Principles of Biology/Lab	3/1 hours

D. AREA IV:

- Group 1: Take three hours from the following: HIS 1101, HIS 1102, HIS 1111, HIS 1112, *HIS 1122 or *HIS 1123
- Group 2: Take nine semester hours from the following: 9 hours *ANT 2200, *ECO 2251, *ECO 2252, *GEO 2210, HIS 1101, HIS 1102, HIS 1111, HIS 1112, *HIS 1122, *HIS 1123, IDS 2200, LDR 1100, *POL 2260, POL 2241, PSY 2200, PSY 2210 or SOC 2275

E. AREA V:

Take the following courses:

BIO 1101/L	Organismal Biology/Lab	3/1 hours
CHM 1143/L	General Chemistry II/Lab	3/1 hours
IS 2241	Computer Concepts & Applications	3 hours
TROY 1101	University Orientation	1 hour

F. AREA V Continued:

Take one of the following series:

PHY 2252/L252 and PHY 2253/L253 OR

Biology Education - Program Year 2013-2014 - (43 hours)

A. Biology Major - Take the following courses:

BIO 2220/L	Principles of Cell Biology/Lab	3/1 hours
BIO 2229/L	General Ecology/Lab	3/1 hours
BIO 3320/L	Genetics/Lab	3/1 hours
CHM 3342/L	Organic Chemistry I/Lab	3/1 hours
CHM 3343/L	Organic Chemistry II/Lab	3/1 hours
MTH 2210	Applied Statistics	3 hours

- B. Botany: Take one botany course with the corresponding lab: BIO 3325/L, BIO 3326/L or BIO 4425. 3/1 hours
- C. Zoology: Take one Zoology course with its corresponding lab: BIO 3307/L, BIO 3308/L, BIO 4405/L, BIO 4420, BIO 4432/L, BIO 4445/L, BIO 4446/L, BIO 4447/L, BIO 4448/L, or BIO 4471/L 3/1 hours
- D. Ecology/Environmental: Take one of the following ecology/ Environmental courses with its corresponding lab. BIO 2202/L, BIO 4413/L, BIO 4416/L, BIO 4421/L, or BIO 4479/L 3/1 hours
- E. Physiology/Cell/Molecular: Take one of the following physiology/cell/molecular biology courses with corresponding lab: BIO 3347/L (3/1), BIO 3348/L (3/1), BIO 3372/L (3/1), BIO 3382/L (3/1), BIO 3386/L (3/1) BIO 4414/L (3/1), BIO 4430/L (3/1), BIO 4433/L (3/1), BIO 4451/L (3/1), BIO 4478/L (3/1), BIO 4480/L (3/1), or BIO 4482/L (3/1).
- F. Major Electives: Take one upper-level (3000-4000)
 Adviser-approved biology course and its corresponding lab. Grade of 'C' required in all courses in the major.

 3/1 hours

Education Major – (39 hours)

Minimum grade of 'C' required in all course work in the major.

Take the following courses:

EDU 3305	Microcomputers in Education	3 hours
EDU 3310	The Professional Educator	3 hours
EDU 4471	Curriculum & Instruction Design	3 hours
PSY 3303	Educational Psychology	3 hours
RED 4484	Language & Literacy Learning IV	3 hours
SED 3346	Educational Assessment	3 hours
SED 4400	Classroom Management	3 hours
SPE 3340	Diverse Learners	3 hours
BIO 4481	Methods and Materials	3 hours
SED 4454	Internship Seminar	3 hours

Every reasonable attempt to ensure accuracy has been made. Some courses (such as developmental or pre-requisite courses) are not reflected in this degree map. Completion of degree requirements is based on the specific catalog year for each student.