PURDUE UNIVERSITY

Science Education - Biology Concentration (SIED-BIED)

College of Science 2024-2025

Program Progression Guides

Disclaimer: The 2024-2025 Purdue West Lafayette catalog is considered the source for academic and programmatic requirements for students entering programs during the Fall 2024, Spring 2025, and Summer 2025 semesters. The Program Progression Guide assists students in the development of an individualized 8-semester plan. Students are encouraged to use this guide and MyPurduePlan* (online degree auditing tool) as they work with their academic advisor towards the completion of their degree requirements.

Notification: Each student is ultimately responsible for knowing, monitoring and completing all degree requirements.

<table>
<tr><th colspan="3">University Degree Requirements</th></tr>
<tr><td>Minimum 2.0 Cumulative GPA</td><td>Minimum 120 Credits that fulfill degree requirements</td><td>32 Residency Credits (30000-level and above) at a Purdue University campus</td></tr>
<tr><th colspan="3">University Core Curriculum**
https://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html</th></tr>
<tr><td colspan="2">• Human Cultures: Behavioral/Social Science
• Human Cultures: Humanities
• Information Literacy
• Oral Communication</td><td>• Quantitative Reasoning
• Science
• Science, Technology & Society Selective
• Written Communication</td></tr>
<tr><th colspan="3">Civic Literacy Proficiency
https://www.purdue.edu/provost/about/provostInitiatives/civics/</th></tr>
<tr><td colspan="3"></td></tr>
<tr><th colspan="3">Required Major Courses (see following pages)</th></tr>
<tr><td colspan="3">Departmental and Teacher Education Program requirements (including minimum 2.5 GPA for Content Area courses)
Minimum 2.0 cumulative GPA
Must have a 500-level BIOL course (2-3 credit approved BIOL lecture)</td></tr>
<tr><th colspan="3">College of Science Core Curriculum
https://www.purdue.edu/science/Current_Students/curriculum_and_degree_requirements/college-of-science-core-requirements.html?</th></tr>
<tr><td>• Written Communication – 3 credits
• Technical Writing and Presentation - 3 credits
• Teaming & Collaboration (NC)
• General Education - 9 credits</td><td>• Foreign Language & Culture – 9 credits
• Great Issues - 3 credits
• Laboratory Science - 8 credits
• Science, Tech & Society (STS) - 3 credits</td><td>• Mathematics - 6-10 credits
• Statistics - 3 credits
• Computing - 3 credits</td></tr>
<tr><th colspan="3">Degree Electives</th></tr>
<tr><td colspan="3">Any Purdue or transfer course approved to meet degree requirements in accordance with individual departmental policies. The College of Science has identified courses that are below the disciplinary level of each program and major area of study. While similar, Not Recommended course lists vary between departments.</td></tr>
</table>

An undergraduate degree in the College of Science requires completion of the following degree requirements.
* This audit is not your academic transcript and it is not official notification of completion of degree or certificate requirements.

** University Core Curriculum Outcomes may be met through completion of the College of Science Core curriculum. Students should consult with their academic advisors and MyPurdue Plan for course selections.

2024-2025 Science Education - Biology Concentration (SIED-BIED) Degree Progression Guide

The College of Science has suggested the following degree progression guide for the Science Education – Biology Concentration Degree. Students will work with their advisors to determine their best path to degree completion. Course pre-requisites are specific to this degree plan – not all are shown.

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
2	BIOL 12100 (meets Science, Technology, Society requirement for Univ. Core)		3	BIOL 13100	
5	CHM 12901 Fall only	ALEKS 85 or Calc Placement	2	EDCI 28500 Multiculturalism and Education	
2	***EDCI 20500 Exploring Teaching As A Career***		1	***EDCI 35000 Community Issues & App for Ed***	
1	EDST 20010 Ed Policies and Law		4	CHM 25500 and CHM 25501	D or better in CHM 12901
2	BIOL 13500 or 1450x	CHM 12901 co-req	3-5	Calc II Selective	C- or higher in Calc 1
3-5	Calc I Selective	ALEKS 75 or 85	3-4	Science Core Option	
1	BIOL 11500 - Recommended				
16-18			**16-19**		

Credit	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
3	BIOL 23100	CHM 12901, BIOL 13100	3	BIOL 24100	BIOL 23100
2	BIOL 23200		2	BIOL 24200	
1	***EDCI 20002 (or EDPS 20002) Seminar ESL***	Co-req: EDCI 37001 and EDPS 24000	2	BIOL 28600	BIOL 12100
2	EDCI 37001 Teaching and Learning ESL	Co-req: EDCI 20002 and EDPS 24000	2	EDPS 23500	
1	EDPS 24000 - Children With Gifts, Creativity, And Talents	Co-req: EDCI/EDPS 20002 and EDCI 37001	1	EDPS 24800 - Differentiating Curriculum And Instruction	Co req: EDPS/EDCI 20001 and EDPS 26501
2	EDPS 36201 Positive Behavioral Supports		2	EDPS 26501 - The Inclusive Classroom	Co req: EDPS/EDCI 20001 and EDPS 26501
4	CHM 25600 and CHM 26501	C- or better in CHM 25500	3	Science Core Option	Varies
3-4	Science Core Option		1	***EDPS 20001 (or EDCI 20001)***	Co-req: EDPS 24800 and EDPS 26501
18-19			**16**		

Credit	Fall 3rd Year	Prerequisite	Credit	Spring 3rd Year	Prerequisite
1	EDCI 27000 - Introduction To Educational Technology And Computing		3-4	BIOL Group B Selective	Varies
1	***EDCI 30900 - Reading In Middle And Secondary Schools: Methods And Problems***	Pre-req: EDPS/EDCI 20001 and EDCI/EDPS 20002	2-3	EDCI 42800 - Teaching Science In The Middle And Junior High School OR EDCI 55800 - Integrated Science, Technology, Engineering And Mathematics (STEM) Education Methods-Secondary	**EDCI 42800**: Pre-req: EDCI 20500 and 28500 and EDPS 23500 and 26500 and EDPS 26501 (min grade C-) **EDCI 55800**: Pre-req: EDCI 53900 (may be taken concurrently)
4	PHYS I Selective	Varies	4	PHYS II Selective	PHYS I
3-4	Intermediate Biology Selective	Varies	2	Science Core Option	Varies
2-3	Group A Selective	Varies	3-4	Science Core Option (CS 17700 or 15900)	
3	Science Core Option	Varies			
3	Learner Specialty Dual Pathway Course**	Varies			
17-19	**EDPS 21100 or 54200 (or EDPS 54500 or EDCI 51900 or 52600 or 55900)	Varies	**14-17**		

Credit	Fall 4th Year	Prerequisite	Credit	Spring 4th Year	Prerequisite
3	BIOL 500-level	Varies	12	***EDCI 49800 Supervised Teaching***	EDCI 20500, 28500 AND EDPS 23500, 26500 (C- or better)
2-4	BIOL Base Lab Requirement	Varies			
3	EDCI 42100 Fall only (Multidisciplinary Experience)	EDCI 20500, 28500 and EDPS 23500, 26500 (C- or better)		**IMPORTANT:**	
1	EDPS 32700 - Classroom Assessment	Pre-req: EDPS 23500		***Biology Concentration 2.50 GPA:*** *Overall GPA for Biology Concentration courses with the Departmental/Program Major Courses must be 2.50 or greater. This includes all courses in the catalog under the Science Education Core plus all courses in the Biology Concentration.*	
2	EDPS 43010 - Secondary Creating And Managing Learning Environments				
3	Science Core Option (STAT 50300)	Calc 2 (C- or better)			
3	Science Core Option				
17-18			**12**		

=Courses with Experiential components (often in a classroom with students off campus)

Science Core Curriculum Options (one course needed for each requirement unless otherwise noted)	
Options recommended for first- and second-year students	**Options recommended for third- and fourth-year students**
Written Communication[UC] (EDCI 20500) General Education[UC] (9 credits needed) Foreign Language and Culture[UC] (9 credits needed with JEDI) Science Tech and Society[UC] (BIOL 12100)	Technical Writing and Presentation[UC] (EDCI 49800) Statistics (STAT 50300) Computing (CS 17700 or CS 18000 also meet Teambuilding) Great Issues

[UC] Select courses may also satisfy a University Core Curriculum requirement; see the University Core Requirement course list for approved courses. Students must have 32 credits at the 30000 level or above taken at Purdue.

Below are courses commonly taken by SIED-BIED majors which may fulfill Science Core or University Core Requirements

NOTE: always check the lists of approved courses on the UCORE and CoS Core websites linked below for confirmation.

Credits	Course	Title	Ucore Requirements *Confirm info below with the* UCore approved course list	CoS Requirements *Confirm info below with the* CoS approved course list
2	EDCI 20500	Exploring Teaching as a Career	WC	WC
1	EDCI 27000	Intro to Educational Technology and Computing	IL	
2	EDCI 28500	Multiculturalism & Edu	BSS	JEDI/Culture & Diversity
2	EDPS 23500	Learning & Motivation	BSS	JEDI/Culture & Diversity -- *cannot also count for Gen Ed*
2	EDPS 23500	Learning & Motivation	BSS	Gen Ed (with EDST 20010) – *cannot also count for Cult. & Div.*
2	EDPS 26501 or EDPS 26500	The Inclusive Classroom		Culture & Diversity
1	EDST 20010	Educational Policies & Laws		Gen Ed (with EDPS 23500) – *if EDPS 235 is not used for Cult. Div.*
12	EDCI 49800	Supervised Teaching	OC	Tech Writing and Tech Pres; Teaming

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SCIENCE EDUCATION with Biology Concentration (SIED-BIED)

Fall 2024

Graduation Requirements:

- *A minimum 2.0 average in all biology courses required for this major*
- *At least one approved 2-3 credit **500-level Biology** course is required (excludes lab only courses such as BIOL 54200 & 5xxxx lab modules)*
- *A minimum of 32 credits at or above the 300-level completed at a Purdue campus*
- *120 Total Credits*

BIOLOGY CORE (19 credits):

1. BIOL 12100 Biology I: Diversity, Ecology and Behavior (2 cr.; fall)
2. BIOL 13100 Biology II: Development, Structure, and Function of Organisms (3 cr.; spring)
3. BIOL 13500 1st Year Biology Lab (2 cr.; both) **or**
   BIOL 14503 First Yr Bio Lab Dis Ecol-Hnrs (2 cr.; alternate fall) **or**
   BIOL 14504 First Yr Lab Diet Disease Immun Sys-Hnrs (2 cr.; spring) **or**
   BIOL 14505 First Yr Lab Phages Folds-Hnrs (2 cr.; fall)
4. BIOL 23100 Biology III: Cell Structure and Function (3 cr.; fall)
5. BIOL 23200 Laboratory in Biology III: Cell Structure and Function (2 cr.; fall)
6. BIOL 24100 Biology IV: Genetics and Molecular Biology (3 cr.; spring)
7. BIOL 24200 Laboratory in Genetics and Molecular Biology (2 cr.; spring)
8. BIOL 28600 Intro. to Ecology & Evolution (2 cr.; spring)

UPPER-LEVEL BIOLOGY COURSEWORK (10-12 credits):

Must have at least 10 credits of coursework, including courses which meet each of the following categories: "Intermediate," "Group A," "Group B," "BIOL 500-level," and "Base Lab Requirement." Courses may double-dip among requirements. If a course is used multiple places, the credits will only count once towards the required 10 credits of Upper-Level Biology Coursework. Excess Upper-Level Biology Coursework beyond 12 credits will count as "free electives." (also see Footnotes on the last page).

9. **Intermediate Biology Selective:** Choose one of these eight options:
   - A. BIOL 32800[1,2,6] Principles of Physiology (4 cr.; spring)
   - B. BIOL 36700[2,3] Principles of Development (2 cr.; fall)
   - C. BIOL 38700[3] Macromolecules (2 cr.; fall)
   - D. BIOL 41500[3] Intro to Molecular Biology (3 cr; spring)
   - E. BIOL 41600[3] Viruses & Viral Diseases (3 cr.; spring)
   - F. BIOL 42000[3] Eukaryotic Cell Biology (3 cr.; fall)
   - G. BIOL 43600[3] Neurobiology (3 cr.; fall)
   - H. BIOL 43800[2,3] General Microbiology (3 cr.; fall)
10. **Biology Selectives:** see note above for "Upper-Level Biology Coursework"

Group A Selectives:

BIOL 38700[3] Macromolecules (2 cr.; fall)
BIOL 41500[3] Intro. to Molecular Biology (3 cr.; spring)
BIOL 41600[3] Viruses and Viral Diseases (3 cr.; spring)
BIOL 42000[3] Eukaryotic Cell Biology (3 cr.; fall)
BIOL 43600[3] Neurobiology (3 cr.; fall)
BIOL 43800[2,3] General Microbiology (3 cr.; fall)
BIOL 43900[2,4] Microbiology Lab (2 cr.; fall)
BIOL 44400 Human Medical Genetics (3 cr.; spring)
BIOL 47800 Intro to Bioinformatics (3 cr.; fall)
BIOL 48100 Eukaryotic Genetics (3 cr.; spring)
BIOL 49500RNA RNA World: CRISPR & Coronavirus (2 cr.; spring)
BIOL 51099[4] Neural Mechanisms in Health & Dis (3 cr.; alt spring)
BIOL 51101 Intro to X-Ray Crystallography (3 cr.; spring)
BIOL 51202 Methods & Measurement in Physical Biochem (3 cr.; fall)
BIOL 51600 Molecular Biology of Cancer (3 cr.; spring)
BIOL 51606 Pathways in Human Health & Disease (3 cr.; fall)
BIOL 51700 Molecular Biology: Proteins (2 cr.; alt spring)
BIOL 52900 Bacterial Physiology (3 cr.; spring)
BIOL 53300 Medical Microbiology (3 cr.; fall)
BIOL 53601 Biological & Structural Aspects of Drug Design & Action (3 cr; spr)
BIOL 53800 Molecular, Cellular & Developmental Neuro (3 cr.; spring)
BIOL 55101[4] Theory of Molecular Methods (3 cr.; spring)
BIOL 56200 Neural Systems (3 cr.; spring)
BIOL 56310 Protein Bioinformatics (3 cr.; alt spring)
BIOL 59500U Cellular Biology of Plants (3 cr.; fall)
BIOL 59500CMA CRISPR Mechanisms & Applications (3 cr.; spring)
BIOL 59500CRYO[4] CryoEM 3D Reconstruction (3 cr.; fall)
BIOL 59500ICI Immun of Cancer & Infectious Dis (3 cr.; spring)
BIOL 59500D Neurobiol of Learning and Memory (3 cr.; alt fall)
BIOL 59500M Practical Biocomputing (3 cr.; spring)
BIOL 59500BCDP Bacteria in Cancer Dis & Prevention (3 cr.; spring)
BIOL 59500V Molecular Virology
BCHM 43400 Medical Topics in Biochemistry (3 cr.; spring)
BCHM 56100 General Biochemistry I (3 cr.; fall)
BCHM 56200 General Biochemistry II (3 cr.; spring)
CHM 33900 Biochem: A Molecular Approach (3 cr.; spring)
CHM 43300 Introductory Biochemistry (3 cr.; fall)

Group B Selectives:

BIOL 20400 Human Anatomy & Physiology II (4 cr.; spring)
BIOL 32101[6] Experimental Dsgn & Qt Analysis (3 cr.; summer)
BIOL 32800[1,2,3,6] Principles of Physiology (4 cr.; spring)
BIOL 36700[2,3] Principles of Development (2 cr.; spring)
BIOL 48300[5] Environmental & Conservation Biol (3 cr. alt spring)
BIOL 49500BMR[6] Biodiversity & Museum Research (3 cr.; fall)
BIOL 49500DSB[6] Data Science for Biologists (3 cr.; fall)
BIOL 52905 Disease Ecology (3 cr.; spring)
BIOL 53700 Immunobiology (3 cr.; fall)
BIOL 58000 Evolution (3 cr.; spring)
BIOL 58210[6] Ecological Statistics (3 cr.; fall)
BIOL 58601[2] Ecology (3 cr.; fall)
BIOL 58602[2] Lab in Ecology (1 cr.; fall)
BIOL 58705 Animal Communication (3 cr.; alt fall)
BIOL 59100[6] Field Ecology (4 cr.; alt fall)
BIOL 59200 Evolution of Behavior (3 cr.; alt spring)
BIOL 59500BTL[6] Building the Tree of Life: Phylogenetics (3 cr.; spring)
HORT 30100[2] Plant Physiology (4 cr.; spring)

Lab Requirement: Must meet Base Lab requirement as described on the next page. If undergraduate research is used to meet this requirement, only two credits may count toward the 10-credit requirement.

Other Credits that will count toward the 10 credits but not toward the A or B requirement:

Research (BIOL 49400 or BIOL 49900, max of 2 credits)
BIOL 44100 Senior Seminar in Genetics (1 cr.; fall)
Any BIOL 442xx or 54200 lab module (1-2 cr.; both)
BIOL 49500 Topics in Endocrinology & Cancer (2 cr.; spring)
BIOL 58602 Laboratory in Ecology (1 cr.; fall)
BCHM 52100 Comparative Genomics (3 cr.; spring)

Base Laboratory Requirement (BLR) for all Biology Majors

1. Students must complete one of the "Required" courses in the chart below. Undergraduate research cannot be used to meet this requirement.
2. Students must also complete Objectives A and B as listed in the chart below with courses or research or a combination of the two.
3. Descriptions of Objectives A and B (not all tasks must be met to satisfy an objective):
    a. **Objective A** – Demonstrate the ability to plan and design hypothesis-driven experiments, simulations or discovery/observational experiments
        i. Conduct an appropriate literature review for a specific scientific topic.
        ii. Generate an applicable hypothesis (-es) for your research project
        iii. Identify techniques to be used in your project, with justification of those techniques.
        iv. Write a formal research proposal.
        v. Write a detailed outline of experiments
    b. **Objective B** - Develop the ability to appropriately analyze, critically evaluate, and depict data. Demonstrate the ability to effectively communicate scientific information orally and in writing, including synthesizing and evaluating scientific literature and putting experimental results in their appropriate scientific context.
        i. Analyze data
        ii. Use appropriate ways to depict and communicate data (e.g., graphs, movies, images, etc.). Present the research at lab meetings, in a talk, or at a poster session.
        iii. Write a summary (or summaries) of the data.
4. If research is used, the research director will be the one who decides if the research meets Obj A and/or Obj B.
5. If research is used, it must include at least four credits of BIOL 49400 or 49900. (BIOL 29400, non-BIOL research, and research for pay will not count toward the BLR.)
6. Students who successfully complete a Biology Honors Research Thesis automatically meet Objectives A and B with the approved thesis but must still complete a "Required Course."
7. The *"Microbiology"* and the *"Health & Disease"* majors must use BIOL 43900 Micro Lab for the BLR; the *"Ecology, Evolution and Environmental Biology"* majors must use BIOL 59500 Laboratory in Ecology for the BLR.

Base Laboratory Requirement Chart

Course	Title	Required Course	Obj. A	Obj. B	Usually Offered	Format	Pre-Req (PR) or Co-Req (CR) *beyond* core courses
BIOL 32101	Experim Design & Analysis-Hnrs (3cr)		X	X	Summer	online	
BIOL 32800	Principles of Physiology (4cr)	X			Spring		
BIOL 43900	Microbiology Lab (2cr)	X	X	X	Fall		PR/CR=43800
BIOL 44212	Microscopy & Cell Bio (1cr)	X		X	Spring	5-wk module	
BIOL 48300	Environmental & Conservation Biology (3cr)		X	X	alt Spring '24		
BIOL 49500BMR	Biodiversity & Museum Research (3cr)		X	X	Fall		PR=28600
BIOL 49500DSB	Data Science for Biologists (3cr)	X	X	X	Fall		PR=28600
BIOL 49500TEC	Topics in Endocrinology & Cancer (2cr)		X	X	Spring		
BIOL 51099	Neural Mechanisms in Health & Disease (3cr)		X	X	alt Spring '23		PR=32800 or 43600; CR=56200
BIOL 55101	Theory of Molecular Methods (3cr)		X	X	alt Spring		PR=41500
BIOL 54200	Neurophysiology (1cr)	X		X	Fall	5-wk module	PR=32800 or CR=43600
BIOL 58210	Ecological Statistics (3cr)		X	X	Fall		PR=STAT 50300
BIOL 58602	Laboratory in Ecology (1cr)	X	X	X	Fall		PR/CR=58601
BIOL 59100	Field Ecology (4cr)	X	X	X	alt Fall '23		PR=58602
BIOL 59500BTL	Building the Tree of Life: Phylogenetics (3cr)	X	X	X	Spring		research experience recommended
BIOL 59500CRYO	CryoEM 3D Reconstruction (3cr)		X	X	Fall		PR=PHYS 23300 or 17200
BIOL 59500BN	Data Analysis in Neuroscience (1cr)			X	Spring	5-wk module	
BIOL 59500SBL	Structural Biology Lab (1cr)	X		X	Spring	5-wk module	

CHEMISTRY (13 credits) -- complete all of the following:

1. General Chemistry (5 credits):
   CHM 12901 General Chemistry with a Biological Focus (5 cr.; fall)

2. Organic Chemistry (8 credits):
   CHM 25500 Organic Chemistry I (3 cr.; both) and
   CHM 25501 Organic Chemistry Lab I (1 cr.; both) and
   CHM 25600 Organic Chemistry II (3 cr.; both) and
   CHM 25601 Organic Chemistry Lab II (1 cr.; both)

PHYSICS (8 credits) -- One of these two options – (PHYS 23300+23400 are recommended):

1. PHYS 23300 Physics for Life Sciences I (4 cr.; both) and
   PHYS 23400 Physics for Life Sciences II (4 cr.; both)

2. PHYS 17200 Modern Mechanics (4 cr.; both) and one of the following two choices:
   A. PHYS 27200 Electric and Magnetic Interactions (4 cr.; both) or
   B. PHYS 24100 Electricity and Optics (3 cr.; both) and PHYS 25200 Electricity and Optics Laboratory (1 cr.; spring)

STATISTICS (3 credits) -- STAT 50300 is required (3 cr.; fall, spring, summer); prerequisite is a C- or better in calculus 2

EDUCATION (43-44 credits)

All required Professional Education, and Learner Specialty Pathway courses are calculated into the 2.5 Overall Teacher Education GPA requirement with no grade lower than a "C".

1. EDPS 20001 Special Populations Sem.: Students with Disabilities and Differentiation Approaches (1 cr.; both) (also EDCI 20001)
2. EDCI 20002 Special Populations Sem: English Lang Learners & Students with Gifts & Talents (1 cr.; both) (also EDPS 20002)
3. EDCI 20500 Exploring Teaching as a Career (2 cr.; both)
4. EDCI 27000 Introduction to Educational Technology and Computing (1 cr.; both)
5. EDCI 28500 Multiculturalism and Education (2 cr.; both)
6. EDCI 30900 Reading in Middle and Secondary Schools: Methods & Problems (1 cr.; both)
7. EDCI 35000 Community Issues & Applications for Educators (1 cr.; both)
8. EDCI 37001 Teaching & Learning English as a New Language (2 cr.; both)
9. EDCI 42100 The Teaching of Biology in Secondary Schools (3 cr.; fall)
10. EDCI 42800 Teaching Science in the Middle and Junior High School (2 cr.; spring) **or** EDCI 55800, Integrated STEM Education Methods Secondary (3 cr.; fall)
11. EDCI 49800 Supervised Teaching Life Science Education (12 cr.; both)
12. EDPS 23500 Learning and Motivation (2 cr.; both)
13. EDPS 24000 Children with Gifts, Creativity & Talents (1 cr.; both)
14. EDPS 24800 Differentiating Curriculum & Instruction (1 cr.; both)
15. EDPS 26501 The Inclusive Classroom (2 cr.; both)
16. EDPS 32700 Assessment Literacy (1 cr. both)
17. EDPS 43010 Secondary Create & Manage Learning Environment (2 cr. both)
18. EDST 20010 Educational Policies and Laws (1 cr. both)

TEACHER EDUCATION PROGRAM (TEP) REQUIREMENTS

Science Education (Biology) majors must also apply for the "Teacher Education Program" (TEP) and complete all requirements. Talk with your Academic Advisor about how to proceed and review the "Biology Education Candidate Checklist" regularly to stay on track with key Milestones.
https://www.education.purdue.edu/licensure/undergraduate/programs/

OTHER: all University Core, College of Science Core, and Civics Literacy Requirements must also be completed.

FREE ELECTIVES approximately 0-2 credits

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[1] This may count for the Intermediate Biology Selective and as a Group B course and as the CoS Teambuilding & Collaboration requirement.
[2] These courses are recommended for teaching majors.
[3] Courses chosen for the Intermediate Biology Selective may satisfy #9 and still count as part of the 10 credit requirement (#10).
[4] This course may count for a Group A course and towards the Base Lab requirement, but a total of 10 credits of Biology Selectives must be completed.
[5] This course may count for the Group B course and as the College of Science Great Issues requirement and toward the Base Lab Requirement.
[6] This course may count for a Group B course and towards the Base Lab requirement, but a total of 10 credits of Biology Selectives must be completed.