

## Bachelor of Education, Secondary Education (6-12), Biology

The goal of academic advising is to further enhance the educational mission of the university and create quality, accessible advising partnerships with all students in a positive environment that supports student success. This advising sheet is for tracking purposes toward degree completion and is subject to change. Students also may track their academic progress via STAR Degree Check through STAR GPS at <https://www.star.hawaii.edu/>. Academic Advising appointments may be scheduled by calling 808-689-2689 or toll-free from neighbor islands at 866-299-8656 or by visiting STAR BALANCE at <https://www.star.hawaii.edu/appointment/login.jsp>. Please visit the Advising website for further information <https://westoahu.hawaii.edu/academics/advising/>.

### Graduation Requirements (see the 2025-26 catalog for any additional graduation requirements):

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> 45 Upper Division Credits Minimum | <input type="checkbox"/> 3 Upper Division Writing Intensive Courses | <input type="checkbox"/> 2.0 UHWO GPA          |
| <input type="checkbox"/> 120 Total Credits Minimum         | <input type="checkbox"/> Focus Requirements (OC, HAP, ETH)          | <input type="checkbox"/> 2.0 CONCENTRATION GPA |
| <input type="checkbox"/> 30 UHWO Credits                   |   |  |

*\*Note: Some courses may be applied more than once to fulfill General Education, Educational Foundation, or Teaching Area Requirements. Double-counted courses do not reduce the number of credits required for the concentration. Students are still responsible for meeting the minimum number of credits in the concentration and the overall total credits for graduation.*

### General Education Requirements: 31 credits (15 credits\* see note above)

Credits	Course Alpha / Number / Title
3	Foundations Written Communications (FW) ENG 100 Composition I
0*	Foundations of Quantitative Reasoning (FQ): <b>MATH 103, MATH 115, or higher-level Math</b>
6	Foundations Multicultural Perspectives (FG): (Recommended: HIST 151) 6 credits from two <b>different</b> groups (A, B, C): *Group A: Primarily before 1500 CE (e.g., HIST 151 or ANTH 151) *Group B: Primarily after 1500 CE (e.g., HIST 152 or ANTH 152) *Group C: Pre-history to present
6	Diversification Arts, Humanities & Literature (DA, DH, DL): 6 credits from two different areas
0*	Diversification Social Sciences (DS): <b>PSY 100</b>
0*	Diversification Social Sciences (DS): Different area from above. <b>SPED 304</b>
0*	Diversification Natural Sciences (DB, DP, DY): 3 credits from the biological sciences (DB): <b>BIOL 171</b>
0*	3 credits from the physical sciences (DP): <b>CHEM 161</b>
0*	1 credit of laboratory (DY): <b>BIOL 171L</b>

### Writing Skills Requirement: 3 credits

Credits	Course Alpha / Number / Title
3	ENG 200 Composition II (or equivalent) with a "C-" or higher

### Lower Division Math Requirement: 0 credits

Credits	Course Alpha / Number / Title
0*	MATH 103, MATH 115, or higher-level Math with a C- or higher ( <i>Will satisfy general ed FQ above</i> )

### Educational Foundations: 15 credits

Credits	Course Alpha / Number / Title
3	ETEC 279 Educational Media & Technology
3	SPED 304 Foundations of Inclusive Schooling ( <i>20 hours of service learning required</i> ) ( <i>May be used to fulfill OC requirement if designated at the time of completion</i> ) ( <i>Will satisfy general ed DS above</i> )
3	PSY 100 Survey of Psychology ( <i>Will satisfy general ed DS above</i> )
3	PSY 342 Educational Psychology
3	PSY 343 Adolescent Psychology

**Pre-Professional Teacher Education Courses: 9 credits**

Credits	Course Alpha / Number / Title
3	EDEF 200 Early Field Experience (1 cr) <i>(45 hours in assigned DOE classroom)</i> EDEF 201 Introduction to Teaching as a Career (2 cr) Prerequisite: Placement into ENG 100 or concurrent enrollment in ENG 22.
3	EDEF 310 Education in American Society <i>(20 hours of service learning required)</i> Prerequisite: Sophomore or higher-level standing; completion of EDEF 200 and 201 with "C-" or higher or concurrent enrollment
3	EDEF 345 Introduction to Middle-level & Secondary Education <i>(45 hours in assigned DOE classroom)</i> Prerequisite: completion of EDEF 200 and 201 with "C-" or higher and prior or concurrent enrollment in EDEF 310.

**Teaching Area Biology: 44 credits****Biology: 21 credits**

Credits	Course Alpha / Number / Title
4	BIOL 171/171L Introduction to Biology I (3cr) and Lab (1cr) <i>(Will satisfy general ed DB and DY above)</i>
4	BIOL 172/172L Introduction to Biology II (3cr) and Lab (1cr)
4	BIOL 265/265L Ecology and Evolutionary Biology (3cr) and Lab (1cr)
3	BIOL 340 Genetics, Evolution, and Society (3 cr)
3	BIOL 360 Island Ecosystems (3 cr)
3	BIOL 365 Research Methods in Biology (3 cr)

**Biological Science Electives: 3 credits****Select one course from the following:**

BIOL 384/L Human Skeletal Biology and Lab

BIOL 405 Ethics for Biologists

ZOO 450 Natural History of the Hawaiian Islands

Credits	Course Alpha / Number / Title
3	

**Chemistry: 8 credits**

Credits	Course Alpha / Number / Title
4	CHEM 161/161L General Chemistry I (3cr) and Lab (1cr) <i>(Will satisfy general ed DP above)</i>
4	CHEM 162/162L General Chemistry II (3cr) and Lab (1cr)

**Physical Science: 3 credits****Select one course from the following:**

ASTR 110 Survey of Astronomy

FORS 101 Introduction to Forensics

GEOL 101/101L Dynamic Earth &amp; Lab

GEOL 130 Geological Hazards

GEOL 200 Geologic Inquiry

GEOL 307 Worlds of the Past: Fossils and Their Environments

GEOL 310 The Hawaiian Islands: A Geological Perspective

MET 101/L Introduction to Meteorology

MET 209/L Introduction to Climate Studies &amp; Lab

OCN 201 Science of the Sea

PHYS 100/100L Survey of Physics &amp; Lab

PHYS 131 The Physics of the Sound of Music

PHYS 151/151L College Physics &amp; Lab

Credits	Course Alpha / Number / Title
3	

**Math: 9 credits** (Will satisfy general ed FQ and Lower Division Math requirement above)

**Select two courses from the following:**

MATH 103 College Algebra

MATH 135 Pre-Calculus: Elementary Functions

MATH 140 Pre-Calculus: Trigonometry and Analytic Geometry

MATH 140X Pre-Calculus: Accelerated

MATH 241 Calculus

Credits	Course Alpha / Number / Title
3	
3	

**Select one Statistics course from the following:**

BIOL 310 Statistics for Biologists

MATH 115 Statistics

SSCI 210 Statistical Analysis I

Credits	Course Alpha / Number / Title
3	

### PROFESSIONAL TEACHER EDUCATION CURRICULUM: 18 credits

#### **Admission Requirements - Approval of Application for Professional Teacher Education (APTE):**

1. Submit an Application for Teacher Education (APTE) to the Division of Education by the 1<sup>st</sup> week of the semester preceding anticipated enrollment.
2. Completion of a minimum of 55 credits.
3. Grade of "C-" or higher in the following courses: EDEF 200, EDEF 201, EDEF 310, EDEF 345, ENG 100, ENG 200, MATH 103, PSY 342, PSY 343, and SPED 304.
4. 2.5 Overall GPA; this includes GPA for credits transferred to UHWO.
5. Fingerprinting and criminal background check clearance by the Hawai'i Department of Education.

Credits	Course Alpha / Number / Title
12	<b>BLOCK 1</b> Prerequisite: APTE approval EDEF 404 WI Teaching Culturally and Linguistically Diverse Learners SPED 405 Educating Students with Disabilities EDSE 430 Block 1 Practicum with Seminar (45 hours in assigned DOE classroom) EDUC 410 Reading & Writing Across the Curriculum
6	<b>BLOCK 2</b> Prerequisite: Completion of all Block 1 courses with grades of "C-" or higher EDSE 457 Biological Science Methods EDSE 440 Block 2 Practicum with Seminar (45 hours in assigned DOE classroom)

### PROFESSIONAL STUDENT TEACHING SEMESTER: 15 credits

#### **Student Teaching Application Requirements:** (submit 8 mos. before enrollment in student teaching)

1. Completion of all required Pre-professional & Professional and Professional Teacher Education courses.
2. 2.75 GPA or higher for the Methods Block courses (400-level series).
3. 2.5 overall or higher GPA, with no grade lower than a "C-" for all Education courses.
4. Content knowledge verification, must complete one of the options below:
  - Passing of Praxis II Content Knowledge Test. HTSB website <http://www.ets.org/praxis/hi/requirements>. **OR**
  - Content major consisting of a minimum of 30 credits in the content field of the Bachelor's degree awarded by a regionally accredited institution of higher education **OR**
  - Complete a minimum of 30 credits in the content field from a regionally accredited institution of higher education with a 2.50+ GPA. At least 15 credits must be Upper Division.

Credits	Course Alpha / Number / Title
12	EDSE 490 Student Teaching

Credits	Course Alpha / Number / Title
3	EDSE 492 WI Student Teaching Seminar

**Electives: 1**

\*See your College Success Advisor to determine if elective credits are needed.

Credits	Course Alpha / Number / Title
1	

The Faculty contact for Secondary Biology is Dr. Richard Jones Email: rmjones7@hawaii.edu; Phone (808) 689-2340.