

## 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](tel:808-689-2689) or toll-free from neighbor islands at [866-299-8656](tel:866-299-8656).

### Graduation Requirements (see the 2022-23 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                   |                                                                     |                                                |

### General Education Requirements: 31 credits

Credits	Course Alpha / Number / Title
3	Foundations Written Communications (FW) ENG 100 Composition I
3	Foundations Symbolic Reasoning (FS) <b>OR</b> Foundations of Quantitative Reasoning (FQ): MATH 103 or higher
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
3	Diversification Social Sciences (DS): (Recommended: PSY 100)
3	Diversification Social Sciences (DS): Different area from above. (Recommended: SPED 304)
3	Diversification Natural Sciences (DB, DP, DY): 3 credits from the biological sciences (DB):
3	3 credits from the physical sciences (DP): recommended PHYS or CHEM course
1	1 credit of laboratory (DY):

### 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: 0-3 credits

Credits	Course Alpha / Number / Title
0 or 3	MATH 103 with a "C-" or higher (can also satisfy general ed FS/FQ above)

### Educational Foundations: 9-15 credits

Credits	Course Alpha / Number / Title
3	ETEC 279 Educational Media & Technology
3	SPED 304 Foundations of Inclusive Schooling (20 hours of service learning required) (May be used to fulfill OC and DS requirement)
3	PSY 100 Survey of Psychology (can also satisfy general ed DS above)
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) (45 hours in assigned DOE classroom) 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 (20 hours of service learning required) 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 (45 hours in assigned DOE classroom) Prerequisite: completion of EDEF 200 and 201 with "C-" or higher and prior or concurrent enrollment in EDEF 310.

**Teaching Area Biology: 57 credits****\*Max 10 credits may be used to fulfill General Education Requirements****Biology: 21 credits**

Credits	Course Alpha / Number / Title
4	BIOL 171/171L Introduction to Biology I (3cr) and Lab (1cr)
4	BIOL172/172L 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)

**Electives: 3-4 credits of upper division course in Biological Sciences****Select one from the following:**

BIOL 384/L Human Skeletal Biology and Lab

BIOL 405 Ethics for Biologists

ZOO L 450 Natural History of the Hawaiian Islands

Marine Ecology and Evolution \* *In Development*Human Role in Environmental Change \* *In Development*Resource Management and Conservation in Hawaii \* *In Development*Corals and Coral Reefs \* *In Development*

Credits	Course Alpha / Number / Title
3 or 4	

**Chemistry: 8 credits**

Credits	Course Alpha / Number / Title
4	CHEM 161/161L General Chemistry I (3cr) and Lab (1cr)
4	CHEM 162/162L General Chemistry II (3cr) and Lab (1cr)

**Physical Science: 3-4 credits****Select one from the following:**

ASTR 110 Survey of Astronomy (3 cr)

FORS 101 Introduction to Forensics (3 cr)

GEOL 101/101L Dynamic Earth (3cr) and Lab (1cr)

GEOL 130 Geological Hazards (3 cr)

GEOL 205 Geology of the Hawaiian Islands (3 cr)

MET 101/L Introduction to Meteorology

OCN 201 Science of the Sea (3 cr)

PHYS 100/100L Survey of Physics (3cr) and Lab (1cr)

PHYS 151/151L College Physics (3 cr) and Lab (1 cr)

Credits	Course Alpha / Number / Title
3	

**Math: 9 credits****Select two 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 from the following:**

MATH 115 Statistics  
 SSCI 210 Statistical Analysis I  
 BIOL 310 Statistics for Biologists

Credits	Course Alpha / Number / Title
3	

**PROFESSIONAL TEACHER EDUCATION REQUIREMENTS: 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. "C-" or higher in EDEF 200, EDEF 201, EDEF 310, EDEF 345, and SPED 304. "C-" or higher in ENG 100, ENG 200, MATH 103, PSY 342, and PSY 343.
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)

**THE PROFESSIONAL SEMESTER: 15 credits****Student Teaching Application Requirements:** (submit 8 mos. prior to 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
3	EDSE 492 WI Student Teaching Seminar

**Electives: 0-1\***

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

Credits	Course Alpha / Number / Title
1	

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