

Program Learning Outcomes for TCBS

Graduates of the program will be able to:

- Perform, interpret, and communicate scientific research in the interdisciplinary field of conservation biology and environmental science;
- Use advanced technological equipment, perform qualitative and quantitative analysis of complex data.
- Develop skills appropriate for their chosen field of specialization and demonstrate an understanding of the research or natural resource management applications of said specialization.

COURSE	PLO 1: Perform, interpret, and communicate scientific research in the interdisciplinary field of conservation biology and environmental science	PLO 2: Use advanced technological equipment, perform qualitative and quantitative analysis of complex data	PLO 3: Develop skills and applications in natural resource management and policy
CBES 600 Conservatn Biol & Environ Sci	I	I	I
CBES 601 CBES Field & Laboratory Method	I	I	I
CBES 602 Research Seminar in TCBS	I	NA	NA
CBES 603 Natural Resource Mgt Seminar	I	NA	I
CBES 604 Tropical Plant Pathology	D	NA	D
CBES 609 Landscape Ecology	D	NA	D
CBES 610 Environmental Chemistry Analysis	D	D	D
CBES 615 Global Environmental Change	D	NA	D
CBES 620 Research Techniques in Molecular Conservation Biology	D	D	D
CBES 623 Marine Policy	D	NA	D
CBES 633 Biodiversity	D	NA	D
CBES 635 Physical Environment of Ecosystems	D	D	D
CBES 640 Advanced Remote Sensing	D	D	D
CBES 642 Communicating Science in HI Island Schools	D	D	D
CBES 644 Law, Property, and Nature	D	NA	D

CBES 645 Social Science Research Methods Environmental Conservation	D	D	D
CBES 655 Ecological Physiology	D	NA	D
CBES 657 Vegetation of the Hawaiian Islands	D	D	D
CBES 658 Insect Systematics and Ecology	has not been taught D	has not been taught NA	has not been taught D
CBES 660 Molecular Ecology	D	D	D
CBES 663 Fisheries Ecology	D	NA	D
CBES 665 Environmental Toxicology	D	NA	D
CBES 670 Geog Info Sys & Visualization	D	D	D
CBES 675 Conservation Genetics (3)	D	NA	D
CBES 676 Applied Wildlife Pop Ecol	D	D	D
CBES 677 Quantitative Ecology	D	D	D
CBES 680 Adv Stats Analysis & Rsrch Des	M	M	D
CBES 681 Advance Geo-Spatial Techniques	D	D	D
CBES 682 Natural Resource Environmental Economics	D	NA	D
CBES 685 Behavioral Ecology and Evolutionary Analysis	D	NA	D
CBES 687 Speciation	D	NA	D
CBES 689 Organiz Mgmt & Logistics	D	NA	D
CBES 690 Professional Internship	D	D	D
CBES 691 Becoming Environmental Leader	I	I	I
CBES 692 Proposal Writing	D	D	D
CBES 694 Special Topics	NA	NA	NA
CBES 695 Becoming Envrnmntl Communicatr	D	D	D
CBES 696 Emerging Envrnmntl Professionl	M	M	M
CBES 697/698 Experimental Topics	NA	NA	NA

CBES 699 Directed Studies	NA	NA	NA
CBES 700 Thesis Research	M	M	M

PLOs 1 & 2 (Project Proposal)—program in progress to undertake assessment

3—Excellent	Student has designed a robust experiment/project plan that has a highly integrated conceptual basis grounded in in-depth and relevant research in their proposed field of study. All sections of the project proposal are complete, well developed and integrated and the methodology for implementation and analysis is sound.
2—Competent	Student has designed a workable experiment/project plan that has a strong conceptual basis grounded in appropriate and research in their proposed field of study. All sections of the project proposal are complete and includes adequate project management.
1—Needs improvement	Student has attempted to design an experiment/project plan but there may be a mismatch between their conceptual basis and the purpose of the project; key research may be missing with gaps in logic; the proposed plan may also be missing sections and lack adequate project management

PLO3 (Final Project)

3—Excellent	Student project reflects advanced skills and applications in the specified field of specialization. Student project results in innovation in the field or improvements in methodology.
2—Competent	Student project reflects adequate skills and applications in the specified field of specialization. (i.e. project on bird vocalization utilizes telemetry equipment and vocalization software); student project is enhanced by student competency in these specific skills.
1—Needs improvement	Student project lacks skills and applications in the specified field of specialization; project design may need refinement or revision.