THE UNIVERSITY OF HONG KONG

FACULTY OF SCIENCE

Programme Learning Outcomes – Major in Ecology & Biodiversity (Intensive)

1. University Educational Aims

To enable our students to develop their capabilities in:

(1) pursuit of academic/professional excellence, critical intellectual enquiry and life-long learning
(2) tackling novel situations and ill-defined problems
(3) critical self-reflection, greater understanding of others, and upholding personal and professional ethics
(4) intercultural understanding and global citizenship
(5) communication and collaboration
(6) leadership and advocacy for the improvement of the human condition

2. Faculty Learning Outcomes

Students completing the BSc curriculum should be able to:

(1) explain the basic scientific principles and methods
(2) comprehend fundamental concepts in mathematics and the physical, chemical, biological and earth sciences, and understand the interconnectivity among the sciences and other disciplines
(3) apply scientific processes and knowledge in a wide variety of careers and professions
(4) effectively communicate within and across the science disciplines
(5) analyze scientific aspects of complex issues, and recognize and appraise moral and ethical issues within the sciences and related disciplines
(6) integrate acquired discipline-specific knowledge in a science for professional and further academic pursuit in that discipline

3. Programme Learning Outcomes – Major in Ecology & Biodiversity (Intensive)

By the end of this programme, students should be able to:

(1) understand and appreciate the major living and non-living components of the local, regional and global environment, and how they interact; evaluate their role in ecosystem functioning and identify threats to them; and know how these threats can be mitigated
(by means of coursework, laboratory-based, tutorial classes and/or project-based learning in the curriculum)
(2) assess, understand and appreciate the variety of life in Hong Kong's and Southeast Asia's natural habitats, become equipped to assess, study, manage and protect that diversity, and appraise the related moral and ethical issues
(by means of coursework, laboratory-based, tutorial classes and/or project-based learning in the curriculum)
(3) have sufficient experience of the basic techniques of modern ecological science and prepare to learn new ones for specific tasks
(by means of coursework, laboratory-based, tutorial classes and/or project-based learning in the curriculum)
(4) use IT tools appropriately, and access and evaluate materials from libraries, archives and the Internet
(by means of coursework, laboratory-based, tutorial classes and/or project-based learning in the curriculum)
(5) demonstrate original, independent and critical thinking, with mastery of a range of communication skills
(by means of coursework, project-based and presentation opportunities in the curriculum)
(6) have the skill and knowledge to pursue postgraduate ecological research in top-level Universities around the world or to develop a career in nature conservation and environmental education, especially in Hong Kong and southern China
(by means of coursework, tutorial classes, project-based and research-based learning in the curriculum)
(7) be motivated and sufficiently equipped to apply the knowledge solve local, regional and global environmental problems in a changing world.
(by means of coursework, laboratory-based, tutorial classes, capstone learning and/or project-based learning in the curriculum)

4. Mapping of Programme Learning Outcomes to Faculty Learning Outcomes to University Educational Aims

Due to the richness and diversity of the Major, multiple Programme and/or Faculty Learning Outcomes may be used to satisfy the Faculty Learning Outcomes and/or University Educational Aims.

Programme Learning Outcomes – Major in Ecology & Biodiversity (Intensive)	Faculty Learning Outcomes – BSc programme	University Educational Aims
By the end of this programme, students should be able to:	Students completing the BSc curriculum should be able to:	To enable our students to develop their capabilities in:
(1) understand and appreciate the major living and non-living components of the regional and global environment, and how they interact; identify threats to them; and know how these threats can be mitigated (2) understand and appreciate the variety of life in Hong Kong's and Southeast Asia's natural habitats, become equipped to understand, study, manage and protect that diversity, and appraise the related moral and ethical issues (3) have sufficient experience of the basic techniques of modern ecological science and prepare to learn new ones for specific tasks (4) use IT tools appropriately, and access and evaluate materials from libraries, archives and the Internet (6) have the skill and knowledge to pursue postgraduate ecological research or to develop a career in nature conservation and environmental education, especially in Hong Kong and southern China (7) be motivated and sufficiently equipped to apply the knowledge solve local, regional and global environmental problems	(1) explain the basic scientific principles and methods (2) comprehend fundamental concepts in mathematics and the physical, chemical, biological and earth sciences, and understand the interconnectivity among the sciences and other disciplines (3) apply scientific processes and knowledge in a wide variety of careers and professions (5) analyze scientific aspects of complex issues, and recognize and appraise moral and ethical issues within the sciences and related disciplines (6) integrate acquired discipline-specific knowledge in a science for professional and further academic pursuit in that discipline	(1) pursuit of academic/professional excellence, critical intellectual enquiry and life-long learning
(3) have sufficient experience of the basic techniques of modern ecological science and prepare to learn new ones for specific tasks (4) use IT tools appropriately, and access and evaluate materials from libraries, archives and the Internet (5) demonstrate original, independent and critical thinking, with mastery of a range of communication skills (7) be motivated and sufficiently equipped to apply the knowledge solve local, regional and global environmental problems	(2) comprehend fundamental concepts in mathematics and the physical, chemical, biological and earth sciences, and understand the interconnectivity among the sciences and other disciplines (3) apply scientific processes and knowledge in a wide variety of careers and professions (5) analyze scientific aspects of complex issues, and recognize and appraise moral and ethical issues within the sciences and related disciplines	(2) tackling novel situations and ill-defined problems
(2) understand and appreciate the variety of life in Hong Kong's and Southeast Asia's natural habitats, become equipped to understand, study, manage and protect that diversity, and appraise the related moral and ethical issues	(5) analyze scientific aspects of complex issues, and recognize and appraise moral and ethical issues within the sciences and related disciplines	(3) critical self-reflection, greater understanding of others, and upholding personal and professional ethics

Programme Learning Outcomes – Major in Ecology & Biodiversity (Intensive)	Faculty Learning Outcomes – BSc programme	University Educational Aims
By the end of this programme, students should be able to:	Students completing the BSc curriculum should be able to:	To enable our students to develop their capabilities in:
*	*	(4) intercultural understanding and global citizenship
(5) demonstrate original, independent and critical thinking, with mastery of a range of communication skills	(4) effectively communicate within and across the science disciplines	(5) communication and collaboration
(6) have the skill and knowledge to pursue postgraduate ecological research or to develop a career in nature conservation and environmental education, especially in Hong Kong and southern China (7) be motivated and sufficiently equipped to apply the knowledge solve local, regional and global environmental problems	(3) apply scientific processes and knowledge in a wide variety of careers and professions	(6) leadership and advocacy for the improvement of the human condition

* This will be fulfilled by other components of the University curriculum such as the Common Core Curriculum, Internships, Service Learning, Exchange Studies, etc.