

Course Structure for Ph. D Program
The Graduate Institute of Sustainability Management and Environmental Education
National Taiwan Normal University

Adaptive to Class of	Required Credit(s)	Elective Credit(s)	Free Elective Credit(s)	Minimum Total Credits for Graduation
112	8.0	14.0	0.0	22.0
	8.0	14.0	0.0	22.0

Note: The first alphabet "E" on the course name refers to the course in English as a medium of instruction

I. Required Courses: 8.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
EEC8069	1 E Seminar (I)	2.0	2.0	0.0	
EEC8070	2 E Seminar (II)	2.0	2.0	0.0	
EEC8071	3 E Seminar (III)	2.0	2.0	0.0	
EEC8072	4 E Seminar (IV)	2.0	2.0	0.0	

II. Elective Courses: 0.0 credit is required

III. Courses Offered to Students in Different Divisions

A-1. Required Course for , 0.0 credit is required

A-2. Elective Course for , 14.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
EEC8022	1 E Studies in Environmental Education	3.0	3.0	0.0	
EEC8048	2 E Environmental Science	3.0	3.0	0.0	
EEC8056	3 E Research Methodology	3.0	3.0	0.0	
EEC8065	4 E Research on Sustainability Management	3.0	3.0	0.0	
EEC8068	5 Practicum in Sustainability Management and Environmental Education	2.0	0.0	4.0	
EEC0003	6 Planning and Management of Sustainable Campus	3.0	3.0	0.0	
EEC0004	7 Nature and Culture Resources Conservation	3.0	3.0	0.0	
EEC0006	8 Issues and Strategies on Local Sustainable Development	3.0	3.0	0.0	
EEC0008	9 Methods for Habitat Ecology	3.0	3.0	0.0	
EEC0009	10 International Collaboration of Environmental Education Study	3.0	3.0	0.0	
EEC0012	11 Special Topics on Ecotourism and Ecoeducation	2.0	2.0	0.0	
EEC0013	12 Special Topics on Ecoinformation	2.0	2.0	0.0	
EEC0014	13 Special Topics on Ecoculture Education	2.0	2.0	0.0	
EEC0016	14 Environmental Interpretation	3.0	3.0	0.0	
EEC0017	15 Community Environmental Education	3.0	3.0	0.0	
EEC0018	16 Principles and Practices of Environmental Learning Center	3.0	3.0	0.0	
EEC0019	17 Qualitative Research Methodology of Environmental Education	3.0	3.0	0.0	
EEC0020	18 Special Topics on Natural Ecological Conservation	2.0	2.0	0.0	
EEC0022	19 Special Topics on Sustainable Development	2.0	2.0	0.0	
EEC0023	20 Special Topics on Global Environment Issues	2.0	2.0	0.0	
EEC0026	21 Special Topics on Environmental Values Education	2.0	2.0	0.0	
EEC0027	22 Special Topics on Environmental Science	2.0	2.0	0.0	
EEC0029	23 Planning of Environmental Education System	3.0	3.0	0.0	
EEC0035	24 E Philosophy of Recreation and Leisure	3.0	3.0	0.0	
EEC0036	25 Environmental Sociology	3.0	3.0	0.0	
EEC0037	26 Environmental Change and Civilization	3.0	3.0	0.0	
EEC0040	27 Ocean Policies and International Island Societies	3.0	3.0	0.0	
EEC8001	28 Environmental Discourse, Communication, and Academic Thesis Writing	3.0	3.0	0.0	
EEC8002	29 Environmental Ethics	3.0	3.0	0.0	
EEC8003	30 E Wetlands Environmental Education	3.0	3.0	0.0	
EEC8004	31 The Theory and Practice of Planning and Design for Sustainability	3.0	3.0	0.0	
EEC8005	32 Environmental Behavior Science	3.0	3.0	0.0	
EEC8006	33 Environmental Education Philosophy	3.0	3.0	0.0	
EEC8007	34 Idea and Principle of Eco-philosophy	3.0	3.0	0.0	
EEC8008	35 Issues and Trends in Environmental Education	3.0	3.0	0.0	
EEC8009	36 Critical Analysis on Ecological Issues	3.0	3.0	0.0	
EEC8010	37 E Sustainability Sciences	3.0	3.0	0.0	

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
EEC8011	38 Alternative Paradigms for Environmental Education Research	3.0	3.0	0.0	
EEC8012	39 E Methods for Eco-information Analysis	3.0	3.0	0.0	
EEC8013	40 Methods for Environmental Education Program Evaluation	3.0	3.0	0.0	
EEC8014	41 Special Topics on Environmental Education and Environmental Issues	2.0	2.0	0.0	
EEC8015	42 Special Topics on Islands Sustainable Development	2.0	2.0	0.0	
EEC8016	43 Special Topics on Human Dimensions of Environmental Change	2.0	2.0	0.0	
EEC8017	44 Pedagogy of Environmental Education	3.0	3.0	0.0	
EEC8018	45 Special Topics on Environmental Interpretation	2.0	2.0	0.0	
EEC8019	46 Environmental Discourse and Academic Writing	3.0	3.0	0.0	
EEC8020	47 Environmental Philosophy	3.0	3.0	0.0	
EEC8021	48 Corporate Management and Sustainable Development	3.0	3.0	0.0	
EEC8023	49 Environmental Ecology	3.0	3.0	0.0	
EEC8025	50 Curriculum Design in Environmental Education	3.0	3.0	0.0	
EEC8026	51 Teaching Practice of Ecological and Environmental Education	2.0	2.0	0.0	
EEC8027	52 Environmental Communication	3.0	3.0	0.0	
EEC8028	53 Environmental Policies and Management	2.0	2.0	0.0	
EEC8029	54 River Environmental Education	3.0	3.0	0.0	
EEC8030	55 Special Topics in Formal Environmental Education	2.0	2.0	0.0	
EEC8031	56 Special Topics in Non-formal Environmental Education	2.0	2.0	0.0	
EEC8032	57 Special Topics in Environmental Conservation	2.0	2.0	0.0	
EEC8033	58 Special Topics in Conservation Biology	2.0	2.0	0.0	
EEC8034	59 Special Topics in Environmental Ethics	2.0	2.0	0.0	
EEC8035	60 Special Topics in Outdoor Environmental Education	2.0	2.0	0.0	
EEC8036	61 Administration of Environmental Education	3.0	3.0	0.0	
EEC8037	62 Teaching Materials and Methods of Ecology	2.0	2.0	0.0	
EEC8038	63 Eco-photography and Environmental Education	3.0	3.0	0.0	
EEC8039	64 Island Environment and Development	3.0	3.0	0.0	
EEC8040	65 Eco-Environmental Impact Assessment (EEIA)	3.0	3.0	0.0	
EEC8041	66 National Parks and Nature Reserves: Theories and Practice	3.0	3.0	0.0	
EEC8042	67 Environmental Education in Museums	3.0	3.0	0.0	
EEC8043	68 Ecological Engineering Methods and Environmental Education	3.0	3.0	0.0	
EEC8044	69 Environmental Economics	3.0	3.0	0.0	
EEC8045	70 Disaster Prevention and Mitigation Education	3.0	3.0	0.0	
EEC8046	71 Practices and Analysis of Green Industries	3.0	3.0	0.0	
EEC8047	72 Interpretation and Recreation Resource Management	3.0	3.0	0.0	
EEC8049	73 E Environmental Information and Spatial Visualization	3.0	3.0	0.0	
EEC8050	74 E International Environmental Communication	3.0	3.0	0.0	
EEC8051	75 E Environmental Systems Analysis	3.0	3.0	0.0	
EEC8052	76 Climate Change Education for Sustainable Development	3.0	3.0	0.0	
EEC8053	77 E Climate Change and Disaster Risk in Asia-Pacific	3.0	3.0	0.0	
EEC8054	78 Environmental Data Processing and Analysis	3.0	3.0	0.0	
EEC8055	79 Theories and Practices of Circular Economy	3.0	3.0	0.0	
EEC8057	80 Carbon Management	3.0	3.0	0.0	
EEC8058	81 Regional Planning and Management toward Sustainability	3.0	3.0	0.0	
EEC8059	82 E Conservation Psychology	3.0	3.0	0.0	
EEC8060	83 Outdoor Education	3.0	3.0	0.0	
EEC8061	84 Pedagogy and Teaching Material in Environmental Education	3.0	3.0	0.0	
EEC8062	85 Sustainable Finance	3.0	3.0	0.0	
EEC8063	86 Case Studies in Sustainability Management	3.0	3.0	0.0	
EEC8064	87 Analysis and Application of Sustainability-Related Financial Reporting	3.0	3.0	0.0	
EEC8066	88 E Climate Change and Society Studies	3.0	3.0	0.0	

B-1. Required Course for , 0.0 credit is required

B-2. Elective Course for , 14.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
EEC8022	1 E Studies in Environmental Education	3.0	3.0	0.0	
EEC8048	2 E Environmental Science	3.0	3.0	0.0	

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
EEC8056	3 E Research Methodology	3.0	3.0	0.0	
EEC8065	4 E Research on Sustainability Management	3.0	3.0	0.0	
EEC0035	5 E Philosophy of Recreation and Leisure	3.0	3.0	0.0	
EEC8003	6 E Wetlands Environmental Education	3.0	3.0	0.0	
EEC8010	7 E Sustainability Sciences	3.0	3.0	0.0	
EEC8012	8 E Methods for Eco-information Analysis	3.0	3.0	0.0	
EEC8049	9 E Environmental Information and Spatial Visualization	3.0	3.0	0.0	
EEC8050	10 E International Environmental Communication	3.0	3.0	0.0	
EEC8051	11 E Environmental Systems Analysis	3.0	3.0	0.0	
EEC8053	12 E Climate Change and Disaster Risk in Asia-Pacific	3.0	3.0	0.0	
EEC8059	13 E Conservation Psychology	3.0	3.0	0.0	
EEC8066	14 E Climate Change and Society Studies	3.0	3.0	0.0	

IV. Free Elective Credits

A Free Elective Credit for , 0.0 credit is required

B Free Elective Credit for , 0.0 credit is required