

Course Structure for Ph. D Program
Department of Geography
National Taiwan Normal University

Adaptive to Class of	Required Credit(s)	Elective Credit(s)	Free Elective Credit(s)	Minimum Total Credits for Graduation
107	8.0	16.0	0.0	24.0

I. Required Courses: 8.0 credits are required

Course Category Code	Course Code	Course Name	Credit(s)	Credit Unit		Note
				Lecture Hour	Lab/Practice Hour	
500	GED0080	1 Seminar on Geography	1.0	1.0	0.0	This course must be retaken with a passing score for 4 times
500	GED0081	2 Field Work in Geography	1.0	1.0	0.0	This course must be retaken with a passing score for 4 times

II. Elective Courses: 16.0 credits are required

Seminar on Geographical Studies (Students need to take 8 credit hours of this course. However, these credits will not be counted for graduation.)

Course Category Code	Course Code	Course Name	Credit(s)	Credit Unit		Note
				Lecture Hour	Lab/Practice Hour	
		1 Requirement for graduation				
450	GEC8079	1-1 Seminar on Geographical Studies	2.0	2.0	0.0	This course must be retaken with a passing score for 4 times
		2 General electives 16.0 credits are required				
	GEC0002	2-1 Landscape and Land Use Planning	2.0	2.0	0.0	
	GEC0003	2-2 Theory and Practice in Geography Education	2.0	2.0	0.0	
	GEC0009	2-3 Studied in Geography of Taiwan	2.0	2.0	0.0	
	GEC0011	2-4 Studies in Settlement Geography	2.0	2.0	0.0	
	GEC0013	2-5 Studies in Tourism and Recreation Geography	2.0	2.0	0.0	
	GEC0015	2-6 Studies in Landscape	2.0	2.0	0.0	
	GEC0017	2-7 Application of Computer Network in Geography	2.0	2.0	0.0	
	GEC0018	2-8 Studies in Medical Geography	2.0	2.0	0.0	
	GEC0022	2-9 Quantitative Technique in Geography Studies	3.0	3.0	0.0	
	GEC0023	2-10 Digital Elevation Model Analysis	2.0	2.0	0.0	
	GEC0033	2-11 Studies in Climatology	2.0	2.0	0.0	
	GEC0034	2-12 Studies in Agricultural Geography	2.0	2.0	0.0	
	GEC0035	2-13 Studies in Political Geography	2.0	2.0	0.0	
	GEC0037	2-14 Environmental Pollution and Management	2.0	2.0	0.0	
	GEC0040	2-15 Spatial Quantitative Analysis	2.0	2.0	0.0	
	GEC0041	2-16 Studies in Taiwan Aboriginal Geography	2.0	2.0	0.0	
	GEC0043	2-17 Studies in Human Geography of Taiwan	2.0	2.0	0.0	
	GEC0044	2-18 Topics in Sedimentology	2.0	2.0	0.0	
	GEC0049	2-19 Qualitative Methodologies and Thesis Writing	2.0	2.0	0.0	
	GEC0052	2-20 Geography of Everyday Life	2.0	2.0	0.0	
450	GEC0054	2-21 Urban Governance	2.0	2.0	0.0	
	GEC0057	2-22 Space and Society	2.0	2.0	0.0	
	GEC0058	2-23 Rural Geography and Rural Development	2.0	2.0	0.0	
	GEC0059	2-24 Studies in Feminist Geography	3.0	3.0	0.0	
	GEC0062	2-25 The Theory of Space	2.0	2.0	0.0	
	GEC0063	2-26 Studies in Religious Geography	2.0	2.0	0.0	
	GEC0064	2-27 Studies in Regional Geography	2.0	2.0	0.0	
	GEC0067	2-28 Environmental Monitoring and Assessment	2.0	2.0	0.0	
	GEC0068	2-29 Multivariate Analysis	3.0	3.0	0.0	
	GEC0069	2-30 Spatial Techniques	3.0	3.0	0.0	
	GEC0070	2-31 Spatial Database System	2.0	2.0	0.0	
	GEC0071	2-32 Catchment Environments	2.0	2.0	0.0	
450	GEC0072	2-33 Global Change and Coastal Environment	2.0	2.0	0.0	
450	GEC0076	2-34 Thesis Writing in Geography	3.0	3.0	0.0	
450	GEC7001	2-35 Digital Photogrammetry	3.0	3.0	0.0	
450	GEC7002	2-36 Socio-Economic Geographic Information System	2.0	2.0	0.0	
450	GEC7003	2-37 Actor Network Theory and Post-Structuralist Geography	2.0	2.0	0.0	
450	GEC8001	2-38 Geographies of Consumption	3.0	3.0	0.0	
450	GEC8002	2-39 Studies in Climate Change	3.0	3.0	0.0	
450	GEC8003	2-40 Planning, Design and Management of Urban Environment in Taiwan	2.0	2.0	0.0	
450	GEC8004	2-41 Studies in Food Geography	2.0	2.0	0.0	
	GEC8005	2-42 Topics on Hydrology	3.0	3.0	0.0	

	GEC8006	2-43 Ecosystem Management	3.0	3.0	0.0
450	GEC8008	2-44 Topics on Hazards and Environmental Transformation	2.0	2.0	0.0
500	GEC8009	2-45 Monsoon Climate	3.0	3.0	0.0
450	GEC8010	2-46 Climate Change Impact Assessment	3.0	3.0	0.0
450	GEC8012	2-47 Resources Analysis and Management	2.0	2.0	0.0
450	GEC8013	2-48 Watershed Assessment and Modeling	3.0	3.0	0.0
450	GEC8014	2-49 Risk Society and Sustainable Development	2.0	2.0	0.0
450	GEC8015	2-50 Gender and Space	2.0	2.0	0.0
450	GEC8017	2-51 Urban Political Economy and Spatial Development	3.0	3.0	0.0
450	GEC8018	2-52 Studies in Space of High-Tech Taiwan	2.0	2.0	0.0
450	GEC8019	2-53 Studies in Geographic Information System	3.0	3.0	0.0
450	GEC8020	2-54 Cyber City Modeling	2.0	2.0	0.0
450	GEC8021	2-55 Geosimulation	3.0	3.0	0.0
450	GEC8022	2-56 Studies in Environmental Administration	2.0	2.0	0.0
450	GEC8023	2-57 Studies in Cultural Geography	2.0	2.0	0.0
450	GEC8024	2-58 Landscape Ecology	2.0	2.0	0.0
450	GEC8025	2-59 Studies in Industrial Ecology	2.0	2.0	0.0
	GED0003	2-60 Methodology of Geography	2.0	2.0	0.0
	GED0004	2-61 Topics in Geomorphology	2.0	2.0	0.0
	GED0006	2-62 Topics in Climatology	2.0	2.0	0.0
	GED0010	2-63 Topics in Soil Geography	2.0	2.0	0.0
	GED0011	2-64 Topics in Biogeography	2.0	2.0	0.0
	GED0014	2-65 Topics in Agricultural Geography	2.0	2.0	0.0
	GED0018	2-66 Topics in Urban Geography	2.0	2.0	0.0
	GED0022	2-67 Topics in Regional Geography	2.0	2.0	0.0
	GED0023	2-68 Topics in Hometown Geography	2.0	2.0	0.0
	GED0025	2-69 Topics in Applied Geography	2.0	2.0	0.0
	GED0027	2-70 Topics in Environmental Conservation	2.0	2.0	0.0
	GED0030	2-71 Topics in Linguistic Geography	2.0	2.0	0.0
	GED0031	2-72 Topics in Hydrogeology	2.0	2.0	0.0
	GED0050	2-73 Topics in Tropical Environments	2.0	2.0	0.0
500	GED0082	2-74 Human Ecology	3.0	3.0	0.0
450	GEC8027	2-75 Studies in Political Ecology	3.0	3.0	0.0
450	GEC8026	2-76 Mitigation of and Adaptation to Climate Change	3.0	3.0	0.0

III. Free Elective Credits: 0.0 credit is required

If a student wants to transfer credits from another department or university for graduation, he or she must first have an approval from the Department of Geography. The maximum number of transferred credits should not exceed one third of the total credits for graduation.