

Course Structure for Undergraduate Program
Department of Geography
National Taiwan Normal University

Adaptive to Class of	Common Courses Credit(s)	Required Credit(s)	Elective Credit(s)	Free Elective Credit(s)	Minimum Total Credits for Graduation
115	32.0	34.0	41.0	21.0	128.0

I. General Course: 32.0 credits are required

Course Name	Credit(s)
1 Chinese 4.0 credits are required	
1-1 Chinese Reading and Thinking	2.0
1-2 Chinese Writing and Expression	2.0
2 English 6.0 credits are required, Students who major in Department of English must take the course which course code are ENU0168 and ENU0169 with a passing score for instead	
2-1 English(I)	2.0
2-2 English(II)	2.0
2-3 English(III)	2.0
3 General Education Courses 18.0 credits are required	
3-1 Liberal Arts Course 8.0 credits are required	
3-1-1 Humanities and Arts 2.0 credits are required	
3-1-2 Social Sciences 2.0 credits are required	
3-1-3 Natural Sciences 2.0 credits are required	
3-1-4 Logic and Computing 2.0 credits are required	
3-2 Cross-domain Exploration 4.0 credits are required	
3-2-1 College Common Course	
3-2-2 Cross-domain Professional Discovery Course	
3-2-3 Introduction to University Studies	
3-3 Self-Directed Learning maximum credits are 4.0	
3-3-1 Inquiry Study	
3-3-2 MOOCs	
4 Physical Education 4.0 credits are required, 4 courses are least required	

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

II. Required Courses: 34.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
GEU0233	1 E Introduction to Geography (I)	2.0	2.0	0.0	
GEU0234	2 E Introduction to Geography (II)	2.0	2.0	0.0	
GEU0011	3 Geography of Taiwan	3.0	3.0	0.0	
GEU0167	4 Quantitative Geography	3.0	3.0	0.0	
GEU0001	5 Geomorphology	3.0	3.0	0.0	
GEU0014	6 E Geography of the World	3.0	3.0	0.0	
GEU0136	7 Climatology	3.0	3.0	0.0	
GEU0006	8 Economic Geography	3.0	3.0	0.0	
GEU0017	9 Cartography	3.0	3.0	0.0	
GEU0057	10 E Urban Geography	3.0	3.0	0.0	
GEU0166	11 E Geographic Information System	3.0	3.0	0.0	
GEU0118	12 Geographic Thoughts	3.0	3.0	0.0	

III. Elective Courses: 41.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
GEU0003	1 Hydrology	3.0	3.0	0.0	
GEU0004	2 Soil Geography	2.0	2.0	0.0	
GEU0005	3 Biogeography	3.0	3.0	0.0	
GEU0007	4 Settlement Geography	2.0	2.0	0.0	
GEU0008	5 Social Geography	3.0	3.0	0.0	
GEU0010	6 E Cultural Geography	3.0	3.0	0.0	
GEU0015	7 Regional Geography	3.0	3.0	0.0	
GEU0016	8 E Statistics for Geography	3.0	3.0	0.0	
GEU0022	9 Fluvial and Coastal Geomorphology	3.0	3.0	0.0	
GEU0024	10 Geomorphology of Taiwan	3.0	3.0	0.0	
GEU0029	11 Climatology of World	3.0	3.0	0.0	
GEU0033	12 Climatology of Taiwan	3.0	3.0	0.0	
GEU0039	13 Climate Change	3.0	3.0	0.0	
GEU0046	14 Geology	3.0	3.0	0.0	
GEU0047	15 Meteorology	3.0	3.0	0.0	

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
GEU0050	16 Agricultural Geography	3.0	3.0	0.0	
GEU0053	17 Marketing Geography	2.0	2.0	0.0	
GEU0059	18 Geography of Population	3.0	3.0	0.0	
GEU0060	19 Behavioural Geography	3.0	3.0	0.0	
GEU0061	20 E Geography of Tourism	3.0	3.0	0.0	
GEU0067	21 Geography of Europe	3.0	3.0	0.0	
GEU0068	22 Geography of America	3.0	3.0	0.0	
GEU0069	23 Geography of Asia	3.0	3.0	0.0	
GEU0070	24 Geography of Africa	2.0	2.0	0.0	
GEU0073	25 Remote Sensing	3.0	3.0	0.0	
GEU0074	26 Map Use and Analysis	3.0	3.0	0.0	
GEU0079	27 Geographic Information System Application	3.0	3.0	0.0	
GEU0086	28 E Geo-Ecology	3.0	3.0	0.0	
GEU0101	29 Natural Disasters	3.0	3.0	0.0	
GEU0103	30 Environmental Geography	2.0	2.0	0.0	
GEU0108	31 Oceanography	3.0	3.0	0.0	
GEU0120	32 Geography of China	2.0	2.0	0.0	
GEC9006	33 Python Programming	3.0	3.0	0.0	
GEU0151	34 Soil and Water Conservation	3.0	3.0	0.0	
GEU0152	35 Digital Terrain Analysis	2.0	2.0	0.0	
GEU0154	36 Community Planning	3.0	3.0	0.0	
GEU0160	37 Political Economy of Space	3.0	3.0	0.0	
GEU0170	38 E Natural Resource Conservation	3.0	3.0	0.0	
GEU0176	39 Satellite Image Analysis and Applications	3.0	3.0	0.0	
GEU0178	40 Watershed Management	3.0	3.0	0.0	
GEU0179	41 E The Geography of Everyday Life	3.0	3.0	0.0	
GEU0183	42 E Geography of Development	3.0	3.0	0.0	
GEU0184	43 Surveying	3.0	3.0	0.0	
GEU0186	44 Urban Design and Regeneration	3.0	3.0	0.0	
GEU0187	45 National Park and World Heritage	2.0	2.0	0.0	
GEU0188	46 Site Planning	3.0	3.0	0.0	
GEU0194	47 Ecotourism and Recreation	3.0	3.0	0.0	
GEU0199	48 E Sustainable Tourism Management	3.0	3.0	0.0	
GEU0201	49 Reading the Classics in Human Geography	3.0	3.0	0.0	
GEU0202	50 Approach in Geography	3.0	3.0	0.0	
GEU0203	51 Spatial Decision Support System	2.0	2.0	0.0	
GEU0204	52 Urban Sociology	3.0	3.0	0.0	
GEU0213	53 Studies in Teaching of Introduction to Geography	2.0	2.0	0.0	
GEU0214	54 Studies in Teaching of Regional Geography	2.0	2.0	0.0	
GEU0215	55 Spatial Experience and Observation	3.0	3.0	0.0	
GEU0216	56 Thinking Geographically in Film	3.0	3.0	0.0	
GEU0217	57 Field Surveying Practice	2.0	0.0	4.0	
GEU0218	58 The Global Positioning System	2.0	2.0	0.0	
GEU0226	59 E Environmental Sustainability	3.0	3.0	0.0	
GEU0227	60 Land Laws and Regulations	3.0	3.0	0.0	
GEU0228	61 Advanced Geographic Information Systems	3.0	3.0	0.0	
GEU0229	62 Project-Based Learning in Geography	3.0	3.0	0.0	
GEU0230	63 Environmental Protection Administration	2.0	2.0	0.0	
GEU0231	64 Evaluation of Geography Education	2.0	2.0	0.0	
GEU0235	65 Environmental Management and Regional Planning Practice	3.0	3.0	0.0	
GEU0236	66 Water Resources Engineering and Planning	3.0	3.0	0.0	
GEU0237	67 Landscape Graphic Drawing	3.0	3.0	0.0	
GEU0238	68 Geography of Railways	2.0	2.0	0.0	
GEU0239	69 Geovisualization	3.0	3.0	0.0	
GEU0240	70 Special Topics in the Inquiry and Practice of Social Studies	2.0	2.0	0.0	
GEU0241	71 Introduction to Social Studies	2.0	2.0	0.0	
GEU0242	72 Indigenous Geography	3.0	3.0	0.0	
GEU0243	73 Urban and Regional Planning	3.0	3.0	0.0	
GEU0244	74 Morphometry and Field Geomorphology	3.0	3.0	0.0	
GEU0256	75 Home Geography	2.0	2.0	0.0	
GEU0246	76 Computer-Aided Geography Instruction	2.0	2.0	0.0	
GEU0247	77 Urban Geographic Information System	3.0	3.0	0.0	
GEU0248	78 Location Analysis and Site Selection	3.0	3.0	0.0	
GEU0249	79 Introduction to Biodiversity and Conservation Biology	3.0	3.0	0.0	
GEU0250	80 Biodiversity in Taiwan	3.0	3.0	0.0	

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
GEU0251	81 Indigenous People for Environmental Conservation	2.0	2.0	0.0	
GEU0252	82 E Population, Culture and Migration in Europe	3.0	3.0	0.0	
GEU0253	83 E Sustainable Development in East Asia	1.0	1.0	0.0	
GEU0254	84 Toponymy	2.0	2.0	0.0	
GEU0255	85 Military and Strategic Geography	3.0	3.0	0.0	
GEC9002	86 E Social Network Analysis	3.0	3.0	0.0	
GEU0257	87 Food Culture Geography	3.0	3.0	0.0	
GEC9001	88 Web Crawler Practice	3.0	3.0	0.0	
GEC9003	89 Environmental DNA	3.0	3.0	0.0	
GEU0258	90 Hakka Homeland and Environment	2.0	2.0	0.0	
GEU0259	91 Hakka Culture and Ethnic Group Development	2.0	2.0	0.0	
GEC9004	92 Medical Geography	3.0	3.0	0.0	
GEC9005	93 Applied Machine Learning	3.0	3.0	0.0	
GEU0260	94 E Earth Observation and Analysis	3.0	3.0	0.0	

IV. Free Elective Credits: 21.0 credits are required