

## CORE COURSES: LECTURE

<b>Course Number</b>	<b>Course Name</b>	<b>Course Description</b>	<b>Credit</b>
Env. Sci. 201	Fundamentals of Environmental Science I	Fundamental knowledge of the earth's environment in terms of the properties, structures and process of interrelationship of the atmosphere, lithosphere, hydrosphere, and the biosphere	3 units
Env. Sci. 202	Fundamentals of Environmental Science II	Tropical ecosystems such as marine, estuarine, lakes and rivers, forest, island and urban ecosystems	3 units
Env. Sci. 211	Computational Methods in Environmental Science	Mathematical, statistical and computer methods in environmental science	3 units
Env. Sci. 212	Environmental Problems and Issues	Current and prospective environmental problems and issues of critical concern in the context of sustainable development and other management development strategies	3 units
Env. Sci. 282	Env'l Planning, Risk, and Impact Assessment	Framework and techniques of environmental planning, risk, and Impact assessment; the Philippine Environmental Impact Statement (EIS) system	3 units

## CORE COURSES: FIELD/LAB

<b>Course Number</b>	<b>Course Name</b>	<b>Course Description</b>	<b>Credit</b>
Env. Sci. 225.1	Terrestrial Ecology Sampling Techniques		1 unit
Env. Sci.226.1	Aquatic Ecology Sampling Techniques		1 unit
Env. Sci. 232.1	Water Quality Sampling Techniques		1 unit
Env. Sci. 263.1	Air Quality Sampling Techniques		1 unit
Env. Sci. 265.1	Remote Sensing Techniques		1 unit

Env. Sci. 271.1	Photonic Techniques		1 unit
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## SPECIALIZATION COURSES

<b>Course Number</b>	<b>Course Name</b>	<b>Course Description</b>	<b>Credit</b>
Env. Sci. 221	Environmental Biology	Biological aspects of environmental science	3 units
Env. Sci. 227	Quantitative Ecology	Biological modeling at the population, community and ecosystem levels; quantitative analysis of ecological patterns in time and space	3 units
Env. Sci. 228	Environmental Biotechnology	The applications of biotechnology in environmental monitoring, assessment, and management	3 units
Env. Sci. 233	Environmental Toxicology	Xenobiotics in the environment; their sources, pharmacodynamics, mode of action and detoxification	3 units
Env. Sci. 241	Geological Hazards	Study of common geological hazards and their environmental effects	3 units
Env. Sci. 262	Water Quality Modeling	Principles and techniques of modeling water quality in aquatic systems	3 units
Env. Sci. 265	Applications of Remote Sensing to Environmental Science	Applications of remote sensing techniques to environmental monitoring, assessment and planning	3 units
Env. Sci. 271	Principles of Photonic Techniques for Environmental Science	Light as probe for nondestructive analysis; optical signal processing and image analysis	3 units
Env. Sci. 296	Graduate Seminar		1 unit
Env. Sci. 297	Special Topics in Environmental Science		1 to 3 units
Env. Sci. 299	Independent Master's Study		3 units
Env. Sci. 300	Master's Thesis		6 units

Env. Sci. 399	Independent Doctoral Study		3 units
Env. Sci. 400	Doctoral Dissertation		12 units

## EXISTING COURSES IN THE COLLEGE OF SCIENCE

<b>Course Number</b>	<b>Course Name</b>	<b>Course Description</b>	<b>Credit</b>
Bio. 260	Advanced Ecology	Principles and concepts underlying ecosystem structure and function in natural environments	3 units
Bio. 262	Freshwater Ecology	Composition and dynamics of freshwater communities	3 units
Bio. 263	Terrestrial Ecology	Composition and dynamics of terrestrial communities	3 units
Chem. 203	Environmental Chemistry	Chemistry applied to the study of the environment, its pollution, and control	3 units
Chem. 203.1	Environmental Chemistry Laboratory	The chemical analysis of soil, water, and air samples	2 units
Chem. 224	Aquatic Chemistry	The composition, properties and processes in natural aquatic systems	3 units
Geol. 217	Hydrogeology	Principles and practice of groundwater exploration and development	3 units
Geol. 274	Environmental Geology	The application of geologic principles and concepts in environmental and resource assessment and management	3 units
Meteo. 203	Analytical Methods Meteorology and Oceanography	Mathematical and numerical methods in meteorology and oceanography; principles of statistical analysis; computer programming	3 units
Meteo. 213	Climatology	Theory of climate; relative transfer; energy balance; feedback systems; photochemistry of climatologically active gases; climate variability and change	3 units

		data analysis	
Meteo. 283	Air Pollution Meteorology	Atmospheric disturbances; diffusion theory; estimation of diffusion from meteorological data; air pollution	3 units
MS 226	Marine Pollution Chemistry	Sources, sinks and fate of various types of pollutants in the marine environment	3 units
MS 250	Marine Ecology	Fundamental ecological principles as applied to the marine environment	3 units
MS 280	Management of Marine Resources	Biological and economic concepts for developing and managing the living resources of the sea	3 units

### **EXISTING COURSES IN OTHER COLLEGES**

<b>Course Number</b>	<b>Course Name</b>	<b>Course Description</b>	<b>Credit</b>
Econ. 275	Natural Resource and Environmental Economics	Analysis of problems in the development and management of exhaustible and renewable resources; environmental problems and policies	3 units
Econ. 276	Special Topics in Natural Resource and Environmental Economics		3 units
Econ. 296	Urban and Regional Economics	City structure and city systems; urban growth models; location theory; regional income theory and regional interdependence	3 units

EnE. 203 formerly EnE 201	Introduction to Environmental Engineering	Overview of the environmental engineering profession and its coverage which includes air, water, soil, and groundwater pollution sources and its control, laws, and regulations. This course also tackles global issues such as climate change and disaster risk reduction management and its implications to environment engineering	4 units
Law 175	Law and Environment	A seminar course dealing with the present-day issues of land use, energy, pollution and human settlements	2 units
Plan 203	Land use Planning	Land use planning, resource use, and development and infrastructure planning	3 units
Plan 222	Resource use and Development	Effects of resource use and development on social, technical, and economic problems	3 units
Plan 231	Site Planning	Detailed site analysis and planning	3 units
Socio. 366	Man and his Environment	Psychological, sociological, and anthropological aspects in the design and management of man's environment	3 units
Socio. 367	Man and his Environment II	Political, economic, and philosophical aspects in the design and management of man's environment	3 units