

CORE COURSES

Course Number	Course Name	Course Description	Credit
Meteo 201	Synoptic Meteorology	Mesoscale to planetary scale weather systems of the general circulation with emphasis in synoptic scale systems	4 units
Meteo 211	Climatology	Climate and climate systems including integration of dynamic, physical, biogeochemical, and anthropogenic bases of climate and climate systems	3 units
Meteo 221	Physical Meteorology	Fundamentals of physical atmospheric processes with emphasis in the thermodynamics of the atmosphere and principles of radiative transfer	4 units
Meteo 231 (Prereq: 221)	Dynamic Meteorology	Fundamentals of fluid dynamics, physical laws of conservations of mass, momentum, and energy applied to various horizontal and vertical scale motions; circulation and vorticity	4 units

REQUIRED COURSE

Course Number	Course Name	Course Description	Credit
Meteo 296	Graduate Seminar		1 unit
Meteo 395	Advanced Studies in Meteorology		4 units

ELECTIVE COURSES

Course Number	Course Name	Course Description	Credit
Meteo 203	Methods of Analytical Meteorology and Oceanography	Mathematical and numerical methods in meteorology and oceanography; principles of statistical analysis; computer programming	3 units
Meteo 204 (Prereq: 201, 231)	Tropical Meteorology	Low latitude dynamics; survey of tropical disturbances; development, structure and movement of tropical cyclones	3 units

Meteo 205	Atmospheric Science for Teachers	A qualitative course in meteorology designed for science teachers	3 units
Meteo 206 (Prereq: 201)	Hydrometeorology	Integration of hydrology and meteorology focusing on precipitation, surface flow, and groundwater flow, and their observation, analysis, modeling, and forecasting	3 units
Meteo 212 (Prereq: 211)	Climate Monitoring and Prediction	Analysis of climate data, its application and utility in global climate models; climate monitoring principles; statistical and dynamical techniques; climate modeling and parameterization; coupling and interactions	3 units
Meteo 213 (Prereq: 211)	Agrometeorology	Implications of meteorological processes to agriculture including soil and heat balance, hydrological cycle, small-scale climate, agrometeorological management at microscale and topscale, and operational agrometeorology	3 units
Meteo 222 (Prereq: 221)	Satellite Meteorology	Principles and applications of remote sensing technology to meteorology; nature of radiation, absorption, emission, reflection and scattering; radiative transfer equation, surface temperature, cloud detection; satellite observations; data acquisition, handling and processing; interpretation of satellite data	3 units
Meteo 223 (Prereq: 201)	Radar Meteorology	Principles and applications of radar to meteorology; radar systems; radar data acquisition, handling and processing; integration of radar principles to synoptic and dynamic processes in the atmosphere	3 units
Meteo 224	Air Pollution Meteorology	Interrelationships between meteorology and air pollution; role of contaminants I climate change and stratosphere ozone depletion; dispersion; dispersion modeling; legislations and mitigations	3 units
Meteor 232 (Prereq: 231)	Advance Dynamic Meteorology	Fluid dynamics applied to atmospheric flows over synoptic scale motions,	3 units

		mesoscale and general circulations, and tropical and middle atmosphere dynamics	
Meteo 233	Geophysical Fluid Dynamics	Kinematics of fluid flow on a rotating sphere such as fundamental dynamics, barotropic and vortex dynamics, rotating shallow-water and wave dynamics, baroclinic and jet dynamics, and boundary-layer and wind-gyre dynamics	3 units
Meteo 297	Special Topics		3 units
Meteo 234 (Prereq: 221, 231)	Numerical Weather Prediction	Examination, evaluation and application of numerical models for weather diagnosis and forecasting	3 units
Meteo 225 (Prereq: 221)	Cloud and Precipitation Physics	Dynamics and microphysical processes of cloud and rain formation, modeling and parameterization, and cloud modification	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	Environmental Planning, Risk, and Assessment	Framework and techniques of environmental planning, risk, and Impact assessment; the Philippine Environmental Impact Statement (EIS) system	3 units
Meteo 321	Research Problems in Weather	Advanced applications of weather research	2 units
Meteo 331	Research Problems in Climate	Advanced applications of climate research	2 units
Meteo 341	Research Problems in Environmental Meteorology	Advanced applications of environmental meteorology research	2 units

THESIS

Course Number	Course Name	Course Description	Credit
Meteo 300	Master's Thesis		6 units
Meteo 396	Research Seminar		1 unit
Meteo 399	Independent Doctoral Study		3 units
Meteo 400	Ph.D. Dissertation		12 units