



NOTIFICATION

It is hereby notified that the Advanced Studies & Research Board (ASRB) vide its Resolution No. ASRB-(Cir)-2025-46 has approved the one new elective course entitled "PH-603 Physics of Climate Change" for Ph.D Programme to be offered at Department of Physics, applicable from Fall-2025, as under:

PH-603 Physics of Climate Change

Climate System Component and Dynamics:

Components: atmosphere, hydrosphere, biosphere, cryosphere, Climate feedback mechanisms and Interaction Pathways, Time scales of climate processes

Earth's Radiation Balance:

Solar radiation, planetary albedo, Blackbody radiation and energy equilibrium, Stefan-Boltzmann law and radiative forcing

Climate Modeling and Simulation:

General Circulation Models (GCMs) and Regional Climate Models (RCMs), Climate data sources, reanalysis, and assimilation, Scenario modeling: RCPs (Focus on climate outcomes), SSPs (Focus on socioeconomic pathways (population, GDP, policies))

Anthropogenic Influences and Forcings:

Greenhouse gas emissions and aerosols, Land use and urbanization effects, Climate Change attribution and detection

Climate Impact and Risk Analysis:

Climate sensitivity and uncertainty qualification, Sea level rise, glacier retreat, extreme weather patterns, Socioeconomic implications and resilience modelling


REGISTRAR

To,
Secretary, ASRB

Copy to:-

- 1- Dean (ASC)
- 2- Chairperson, Department of Physics
- 3- Controller of Examinations

Copy for information to:-

- 1- PS to Vice Chancellor
- 2- PA to Pro-Vice Chancellor
- 3- Director QEC/MR ISO 9000