Programme Outcomes, Programme Specific Outcomes and Course Outcomes for Ph. D Coursework

Programme Name: Ph. D Coursework
Duration of the Course: Six Months

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Department of Geography & Applied Geography
University of North Bengal
Raja Rammohunpur
District: Darjiling
West Bengal - 734013

NAME OF THE PROGRAMME: Ph. D COURSE WORK
DEPARTMENT OF GEOGRAPHY & APPLIED GEOGRAPHY
UNIVERSITY OF NORTH BENGAL

PROGRAMME OUTCOMES

- Instill confidence to carry out individual research work.
- Foster confidence among students enabling them to be able to interact with the respondents while collecting primary data by developing effective communications skills.
- Develop critical thinking and skills to analyze problems related to their research themes.
- Prepare objective scientific approach to be able to address research problems in Applied Geography and allied fields.
- Ensure that the lessons are self-directed and lead to life long learnings.

PROGRAMME SPECIFIC OUTCOMES

- Students acquire a greater understanding of the physical, socio-economic and demographic dimensions of geography and develop the capability of observation through field experience to identify the socio-environmental problem of the study area
- Provide hands on training to use GIS/RS software; statistical software and GPS.
- The Ability Enhancement Course strives to develop communication powers for attending Seminars, workshops and writing scientific research papers for journals and books.
- The students will be able to write effective reports and the dissertations prepared by students will enable them to carry their further research work.
- Develop sensitivity towards societal responsibility and sustainable development.
- Make them competent in applying their knowledge gained in different job sector.

COURSE OUTCOMES
Ph. D COURSEWORK
DEPARTMENT OF GEOGRAPHY & APPLIED GEOGRAPHY
UNIVERSITY OF NORTH BENGAL

COURSE CODE	COURSE NAME	COURSE OUTCOMES
MGAG 101	**RESEARCH METHODOLOGY**	**KNOWLEDGE GAINED**: • Gain concepts about the Research Methodology with focus on its meaning, objectives, significance, design; methods of data collection; sampling techniques; referencing format **SKILL GAINED**: • Gain knowledge about how to progress with the research in a systematic and scientific manner • Formulate hypothesis for research • Conduct field survey in a systematic manner **COMPETENCY DEVELOPED**: • Progress with the research work in a systematic and scientific manner • Have an in-depth knowledge about how to collect primary and secondary data • Formulate research design in a comprehensive manner through which the students can progress with their work and complete their dissertation within the stipulated time frame
MGAG-102	**QUANTITATIVE TECHNIQUES**	**KNOWLEDGE GAINED:** • Learn all the relevant techniques and methods for analyzing the data quantitatively through basic descriptive statistics to bivariate analysis; multivariate analysis both on analog and digital platform **SKILLS GAINED:** • Apply the apt techniques for carrying out their research work • Have the ability to assess the data manually or by using software **COMPETENCY DEVELOPED:** • Know the proper test required to validate the hypothesis • Use proper methods to quantify the primary and secondary data

MGAG-103	**METHODS AND APPLICATION OF GIS**	**KNOWLEDGE GAINED:** • Aims to develop the students theoretical bases, principles and application of GIS • Hands on training to prepare thematic maps and digital image processing **SKILLS GAINED:** • Apply the knowledge of GIS in making thematic maps with the help of open source software as well using the licensed software Global Mapper, Map Info, Arc GIS and ERDAS provided by the department **COMPETENCY DEVELOPED:** • Handle the software on their own for their respective field of research
MGAG-104	**TECHNIQUES AND APPLICATIONS OF REMOTE SENSING, AIR PHOTO AND GPS**	**KNOWLEDGE GAINED:** • Acquire theoretical knowledge about principles of Remote Sensing and its application in different physical and cultural domain of Geography; interpretation of Aerial photographs in making of land use and land cover mapping and data acquisition and application of GPS **SKILLS GAINED:** • Apply the knowledge of RS and Aerial Photographs in determining the change detection of urban growth, watershed, tourism development, flood assessment and vulnerability zonation, estimating the forest cover, preventing of natural disaster, route alignment and transport network, ground water management and relevant themes • Apply the knowledge of GPS in determining point data in connection with ground truth verification and accuracy assessment **COMPETENCY DEVELOPED:** • Handle the software on their own for their respective field of research; use GPS to explore the actual position of any point within the area of study and interpret the aerial photograph as per the requirement