1st Year / 2nd Semester

URP 145: Elements of Architecture

2.0 credits; 2 hours/week theory

Introduction to Architecture and Architectural Design. Elements of composition: balance, scale, proportion, etc. Understanding of different architectural historical periods: Ancient, Classical, Roman, Gothic Renaissance, Baroque, Roccoco. Different art movements and their impact. The cultural history of human development in different regions of the world as depicted in architecture. Environmental and regional influences on architecture. Trend of architecture in Bangladesh.

Hum 177: Macro-Economics

3.0 credits; 3 hours/week theory

Introduction: The concept of macro-economics, savings, investment and employment, national income. Theory of Employment: Classical and modern theory of employment. Inflation: Concept of inflation, measures for controlling inflation. Determinants of income and employment: consumption function. Investment function: Types of investment, marginal efficiency of capital. Unemployment and full employment: types of unemployment, unemployment and inflation. Multiplier and Accelerator. Money and Interest: The demand for money - supply of money - alternative theories of demand for money.

URP 113: Fundamentals of Planning

2 credits; 2 hours/week theory

The basic generic concepts of planning: definition of planning, dimensions of planning, spatial versus sectoral planning, the variants of spatial and physical planning. The planning process—the different stages in the continuous and cyclical process. Roles of planners, decision makers and stakeholders in the planning process. Concepts of planning: rational approach, advocacy planning, adaptive planning, systems approach. Planning process in Bangladesh: sectoral and perspective planning at the national level, integrated area development planning at regional level and spatial planning at the local level.

Math 103: Mathematics - II 2.0 credits; 2 hours/week theory

Differential Calculus:

Limit, continuity and differentiability, successive differentiation, maxima and minima of functions of single variable.

Integral calculus:

Integration by substitution and by parts, standard integrals, definite integrals, area under plane curves.

Differential Equation:

Solution of 1st order differential equation by various methods, solutions of general linear equations of 2nd and higher order.

URP 161: Surveying and Cartography 3.0 credits; 3 hours/week theory

Reconnaissance survey; traverse survey; levelling and contouring; land surveying; cartographic surveying; introductions to photogrammetry, remote sensing and global positioning system.

Types of maps; types of maps commonly used in Bangladesh. Measurement scales. Mapping techniques: physical models, photomaps, sketch maps, cartograms. Map analysis and map interpretation. Relative and absolute position methods: Local grids, Geographical grids, Lambert's methods; Universal Transverse Mercator Grid. Land partitioning systems. Map projection techniques: planar, cylindrical, conical, etc.

URP 162: Surveying and Cartography Workshop

3.0 credits; 6 hours/week sessional

3 weeks of field and studio works related to course Plan 161.

URP 196: Introduction to Computer Applications

1.5 credits; 3 hours/week sessional

Overview of PC operating systems (Windows and DOS), creating formatted text documents in word processor, basic spreadsheet operations and functions, creating, editing, updating a database, query and retrieval of data and generation of reports.

URP 108: Communication and Presentation Techniques Studio

3.0 credits; 6 hours/week sessional

Techniques for communicating via different media—oral presentations, reports, posters, broadcasting, film, multimedia, Websites; techniques of visual presentation—figures, diagrams, charts, maps, cartograms, photographic compositions, etc. Students will be required to prepare several presentations on different planning problems.