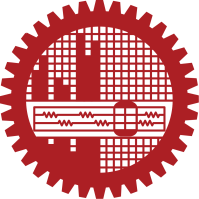
**Department of Urban and Regional Planning (URP)**

**Bangladesh University of Engineering and Technology (BUET)**

**COURSE OUTLINE**

**January 2025**

**PLAN 166:** **Cartography Studio**

**PART A: General Information**

1. Course Number PLAN 166

Course Title Cartography Studio

Credit (Contact) Hours 1.5 (3.0) hours

1. Level and Term (Section) Level- 1, Term- 2

Academic Term January 2025

1. Type of Course Core Course

Offered to the Department of Urban and Regional Planning (URP)

1. Pre-requisite Course(s) None
2. Course Website MS Team titled “**PLAN 166: Jan 2025”**
3. Lecture Schedule Tuesday (2:00-05:00 pm) - Room No URP 304
4. Important Dates For important dates, examination schedules and the latest updates,

please follow the course website/team.

1. Course Teacher(s) **Ms. Meher Afjun Faria**

Lecturer

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**Md. Waliullah**

Lecturer

E-mail: [Waliullah@urp.buet.ac.bd](mailto:Waliullah@urp.buet.ac.bd)

**Ms. Sayeda Laizu Aktar**

Lecturer

E-mail: [sayedalaizu@urp.buet.ac.bd](mailto:sayedalaizu@urp.buet.ac.bd)

**PART B: Course Details**

1. Course Content (As approved by the Academic Council)

Studio works related to cartography: map making and composition, spatial data visualization, and map interpretation.

1. Course Objectives

* To impart hands-on knowledge about map preparation, spatial data presentation, and map interpretation.

1. Knowledge required

Plan 163: Engineering Survey and Cartography.

1. Course Outcomes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CO No. | CO Statement | Corresponding PO(s)\* | Domains and Taxonomy level(s)\*\* | Delivery Method(s) and Activity(-ies) |
| 1 | **Draw** maps with primary and secondary elements | PO (2a, 2b) | C2, P3 | Lectures, interactive discussions |
| 2 | **Present** spatial and aspatial data on a map | PO (2a, 2b) | C2, P3 | Lectures, interactive discussions |
| 3 | **Explain** spatial and aspatial information of maps | PO (2a, 2b) | C2, P3 | Lectures, interactive discussions |

\*PO (1a): Knowledge of planning theory and process; PO (1b): Knowledge regarding the legal and institutional framework of planning

PO (2a): Data collection, management and analysis; PO (2b): Communication, negotiation and leadership; PO (2c): Creativity and aesthetic appreciation; PO (2d): Policy, plan, and project preparation and management; PO (2e): Life-long learning;

PO (3a): Equity and social justice; PO (3b): Professional ethics and responsibility.

\*\*C-Cognitive: C1: Knowledge; C2: Comprehension; C3: Application; C4: Analysis; C5: Synthesis; C6: Evaluation

A-Affective: A1: Receiving; A2: Responding; A3: Valuing; A4: Organizing; A5: Characterizing

P-Psychomotor: P1: Perception; P2: Set; P3: Guided Response; P4: Mechanism; P5: Complex Overt Response; P6: Adaptation; P7: Organization

1. Mapping of Knowledge Profile, Complex Engineering Problem Solving and Complex Engineering Activities

Not Applicable

1. Lecture Plan

| Week | Topics to be covered/Tools taught | CO(s) | Corresponding notional hour for students | Assessment method(s) |
| --- | --- | --- | --- | --- |
| 1 | Introduction to the course | CO 1 | 3 |  |
| 2 | Understanding the different types map elements | CO 1 | 6 | Assignment/ Quiz |
| 3 | Preparation of a map in ‘not to scale’ | CO 1 | 5 | Assignment/ Quiz |
| 4 | Understanding scale: map enlargement and reduction | CO 1 | 8 | Assignment/ Quiz |
| 5 | Map joining | CO 1 | 8 | Assignment/ Quiz |
| 6 | Area calculation of a map | CO 1 | 8 | Assignment/ Quiz |
| 7 | Choropleth map | CO 2 | 8 | Assignment/ Quiz |
| 8 | Isopleth map | CO 2 | 8 | Assignment/ Quiz |
| 09 | Visualization of quantitative spatial data using charts | CO 2 | 7 | Assignment/ Quiz |
| 10 | Map projection | CO 1 | 3 | Assignment/ Quiz |
| 11 | Map interpretation | CO 3 | 7 | Assignment/ Quiz |
| 12 | Review | CO 1 | 3 |  |

1. Assessment Strategy

* Class Participation: Class participation and attendance will be recorded in every class.
* Continuous Assessment: Continuous assessment will be done in the form of assignments and quizzes.

1. Distribution of Marks

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Number of each item | | Corresponding weights | |
| Group | Individual | Group | Individual |
| Assignment 1 | - | 1 | - | 5% |
| Assignment 2 | - | 1 | - | 5% |
| Assignment 3 | - | 1 | - | 5% |
| Assignment 4 | - | 1 | - | 5% |
| Assignment 5 | - | 1 | - | 10% |
| Assignment 6 | - | 1 | - | 10% |
| Assignment 7 | - | 1 | - | 10% |
| Assignment 8 | - | 1 | - | 10% |
| Assignment 9 | - | 1 | - | 10% |
| Assignment 10 |  |  |  | 10% |
| Quiz 1 | - | 1 | - | 5% |
| Final Quiz | - | 1 | - | 15% |
| Total |  |  | 100% | |

1. Textbook/ References

|  |  |
| --- | --- |
| • | Kimerling, A. Jon, Aileen R. Buckley, Phillip C. Muehrcke, and Juliana O. Muehrcke. (2016). Map Use: Reading, Analysis, Interpretation. Eighth edition. Redlands, California: Esri Press. |
| • | Kent, A. J., & Vujakovic, P. (Eds.). (2017). The Routledge handbook of mapping and cartography. Routledge. |