

Ananda Chandra College, Jalpaiguri

Notification for Add on Course

04.02.2025

The department of **Geography** of our college has arranged an Add on Course entitled "**Surveying & Mapping**" to be started from 3<sup>rd</sup> week of February, 2025. The interested students can enroll themselves to participate in the course. The following are the key points of the course and application details:

1. Duration of the course: 32-34 Hours
2. Class schedule: 2 to 3 classes per week of [each class 2 hours, 3.30 PM to 5.30 PM]
3. Who can register/ enroll as participants: Total 30 as per following

Course /Semester	Strength (Tentative)
Geography Major 4 <sup>th</sup> Semester	15
Geography Honours 6 <sup>th</sup> Semester	05
Others [4 <sup>th</sup> Sem & 6 <sup>th</sup> Sem other than Geography]	10

4. Registration fees: Rs. 150/- per student
5. Registration link: <https://forms.gle/pfw5BfUorxQkd3jw8>
6. List of sorted candidates will be published in the Department notice board on 08.02.2025
7. Date of submission of fees in the department: 11.02.2025
8. List of publication of final list: 12.02.2025

*Bipul Chandra Saha*  
04-02-2025  
Course Coordinator  
Department of Geography

*[Signature]*  
4.2.25  
Principal  
Ananda Chandra College  
Principal  
Ananda Chandra College  
Jalpaiguri

## **Add on Course in Geography “Surveying & Mapping”**

### **1. About the course and topic**

Add-on courses are short-term training programs that are designed to supplement the core curriculum of a degree program. These courses are usually offered as certificate or diploma courses, and they provide students with additional skills and knowledge that are relevant to their field of study. Surveying is the art of determining the relative positions of different objects on the surface of the earth by measuring the horizontal distances between them, and by preparing a map to any suitable scale. The art of Surveying is helpful to prepare topographical maps, to prepare contour maps, to prepare a plan or outline of field, construction etc. Survey maps include details of different objectives, such as roads, railways, irrigation canals etc.

### **2. Course objective**

The main objective of this course is to make the students understand to handle the survey instruments. The learners will learn the conventional survey instruments which are helpful to prepare map for a small area conveniently. In the age of modern Remote Sensing & GIS, the basic map making tools are gradually losing their importance, but for small area mapping and accuracy, the traditional survey instruments are very helpful. This course is designed especially for the undergraduate students of Geography to provide practical knowledge of preparing maps using the survey instruments by collecting data from the field.

### **3. Learning outcome**

The learning outcome of this course may be outlined as follows:

- a. Students will learn to handle the survey instruments
- b. Students will be capable to collect field data from the field for mapping.
- c. Students will learn the logical reasoning behind this survey techniques.
- d. Students will able to prepare the maps of small areas accurately.

### **4. Proposed resource persons**

Dr. Ranjan Roy, Professor, Department of Geography & Applied Geography, NBU  
Dr. Debarshi Ghosh, Department of Geography, Dhupguri Girls' College  
Dr. Bipul Chandra Sarkar, Department of Geography, A. C. College  
Mr. Chiranjib Sarkar, Department of Geography, A. C. College  
Dr. Ershad Ali, Department of Geography, A. C. College  
Mr. Subrata Kundu Paul, Department of Geography, A. C. College

### **5. Course content**

Unit	Topics	Class
1	<b>Basics of surveying:</b> Definition, objects, principles and classification of surveying and levelling; role of surveying in making maps.	2 hrs-Th.
2	<b>Compass Surveying:</b> Traversing by Prismatic Compass, problems of fore and back bearings, correction of bearings and closing errors; Uses of chains to spot the objects; Preparation of maps.	4 hrs-Th. 4 hrs-Pr.
3	<b>Plane Table surveying:</b> Principle and accessories, traversing by plane table, drawing of planes/ maps; Advantages & disadvantages of plane tabling	2 hrs-Th 4 hrs-Pr
4	<b>Contouring by Dumpy Level:</b> Procedure of data collection, Rise and fall method, Collimation method, computation missing data table; methods of contouring, Interpolation of contours, Preparation of Contour maps.	4 hrs-Th 4 hrs-Pr
4.	<b>Theodolite Traversing:</b> Measurement of horizontal angles, traversing by Theodolite, Computation of latitude & Departure; Balancing of Traverse, Omitted measurement	4 hrs-Th 4 hrs-Pr

## 6. Assessment & Grading

After completion of the course, an examination of 25 marks will be taken with 25 short and multiple-choice question sets. Another Practical Examination of 25 marks will be conducted to test the learners' ability to judge the understanding level on instruments.

Successful candidates will be awarded certificates with eligible grades following the standard norms.