

SAVITRIBAI PHULE PUNE UNIVERSITY

Geography T.Y.B.Sc. (Credit System)

Revised Syllabus (From June-2021)

Semester-V

GG 3511: Elementary Surveying

(Skill Enhancement Course)

No. of Credits: 02

No. of Periods: 30

Objectives:

1. To understand various techniques in surveying.
2. To analyse the principles and various methodologies involved in surveying.
3. To generate the drawings using advanced surveying equipment & application software.
4. To sensitize the students with advanced surveying equipment.

Sr. No.	Topic	Learning points	Periods
1	Introduction of surveying	a. Introduction of surveying b. Definition and types of surveying c. Instruments used in surveying d. Methods of surveying e. Importance/Applications of surveying	10
2	Types of Surveying	a. Plane Table surveying - Introduction, Functions and methods b. Prismatic Compass surveying - Introduction, Functions and methods c. Dumpy level surveying- Introduction, Functions and methods d. Theodolite surveying - Introduction, Functions and methods e. Recent surveying instrument – Drone, Total Station , DGPS survey, etc.	10
3	Introduction to Total Station	a. Introduction to Total Station instrument b. Characteristics of Total Station instrument c. Functions performed by Total Station instrument d. Parts of Total Station instruments e. Handling and setting up of a Total Station instrument	10

Reference:

1. Asis Sarkar (2015): Practical Geography, A Systematic Approach, Orient Black Swan
2. Duggal, S.K. (2013): Surveying Vol. 2, McGraw Hill Publication, New York.
3. Kanetkar, T.P. and Kulkarni, S.V. (2010): Surveying and Leveling Vol. II, Pune Vidyarthi Publication, Pune.
4. Maslov, AV., Gordeev, A.V. and Batrakov, Yu.G. (1984): Geodetic surveying, Mir Publishers, Moscow.
5. Rangwala, S.C. (2011): Surveying and Leveling, Charotar Publishing House Pvt. Ltd. Anand, (Gujarat), India.
6. Punmia, B.C., Jain A. and Jain A. (2011): Surveying, Vol. II. and III, Laxmi Publication - New Delhi.
7. Roy S. K. Fundamentals of Surveying CD Program on GPS and GIS by Learning Materials Development Project