FIRST-YEAR OF BACHELOR OF ARTS
OPEN ELECTIVE COURSE FOR THE BASKET
REVISED SYLLABUS ACCORDING TO CBCS NEP2020

COURSE TITLE: INTRODUCTION TO CARTOGRAPHIC SKILLS
SEMESTER-I, W.E.F. 2023-2024

RECOMMENDED BY THE BOARD OF STUDIES IN GEOGRAPHY
AND
APPROVED BY THE ACADEMIC COUNCIL

Devrukh Shikshan Prasarak Mandal's
Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh. Tal Sangmeshwar Dist Ratnagiri-415804 Maharashtra India

Academic Council Item No: 03

Name of the Implementing Institute	:	Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh. Tal. Sangmeshwar, Dist. Ratnagiri-415804,
Name of the Parent University	:	University of Mumbai
Name of the Programme	:	Bachelor of Arts
Name of the Department	:	Geography
Name of the Class	:	First Year
Semester	:	First
No. of Credits	:	02
Title of the Course	:	Introduction to Cartographic Skills
Course Code	:	GEOE101
Name of the Vertical in adherence to NEP 2020	:	Open Elective
Eligibility for Admission	:	Any student seeking Admission to the Degree Programme in Science and Commerce Faculty in adherence to the Rules and Regulations of the University of Mumbai and the Government of Maharashtra are eligible to choose the course
Passing Marks	:	40%
Mode of Assessment	:	Formative and Summative
Level	:	UG
Pattern of Marks Distribution for TE and CIA	:	60:40
Status	:	NEP-CBCS
To be implemented from the Academic Year	:	2023-2024
Ordinances /Regulations (if any)		

Syllabus for Open Elective Course on Introduction to Cartographic Skills

(With effect from the academic year 2023-2024)

SEMESTER-I **COURSE CODE: GEOE101**

Course Title: Introduction to Cartographic Skills **No. of Credits - 02**

Type of Vertical: Open Elective Course

Learning Outcomes Based on BLOOM's Taxonomy:

After completing the course, the learner will be able to…		
Course Learning Outcome No.	Blooms Taxonomy	Course Learning Outcome
CLO-01	Remember	Remember the fundamentals of Cartography
CLO-02	Understand	Understand the elements of maps needs to be considered at the time of Preparation of the Map
CLO-03	Apply	Apply language of Graphics for the Preparation of Maps
CLO-04	Analyze	Analyze the maps prepared by others considering the Basic Map Elements
CLO-05	Evaluate	Evaluate the infographics provided through Maps
CLO-06	Create	Create his/her map related to any region considering the standardized parameters

Syllabus for Open Elective Course on Introduction to Cartographic Skills

(With effect from the academic year 2023-2024)

SEMESTER-I **COURSE CODE: GEOE101**

Course Title: Introduction to Cartographic Skills **No. of Credits - 02**

Type of Vertical: Open Elective Course

COURSE CONTENT			
Module No.	**Content**	**No. of Credits**	**No. of Lectures**
1	**Getting Started: Let's Get Mapping** o Cartography as science and art o Get set up with ArcGIS Pro/ArcGIS Online/ QGIS, and exercise data o QGIS to design a small-format, multiscale topographic map, using generalization tools and scale-dependent symbology o Use layouts for composition o Add contextual detail, insets, legends, and marginalia. **Maths for Map Makers** o Explore how coordinate systems, transformations, and projections affect your map's message. o Effects of projections and data classification methods on thematic maps o Design and publish a custom base map in a nonstandard projection to support thematic data. o Build attribute-driven symbology. o Publish a multiscale web map and app.	1	30
2	**The Language of Graphics** o See how generalization, symbology, and colour affect your story o Explore generalization techniques that reduce feature complexity for smaller-scale displays o Create a variety of thematic maps, including choropleth, proportional symbol, value by alpha, and multivariate maps o Change symbology and use transparency in creative ways. **Labels and Composition** o Learn a little about typography, label placement, and map composition. o Set up a palette of label styles for different features and explore options for positioning them around other map details. o Create a layout that includes a range of marginalia. o Use ArcGIS / QGIS expressions to define labels in innovative ways.	1	30
	Total	2	60

Required Previous Knowledge

No previous knowledge is required to learn the subject.

Access to the Course

The course is available for all the students admitted for Bachelor of Commerce and Science.

Required Previous Knowledge

No previous knowledge is necessary to learn the course.

Methods of Assessment:

The assessment pattern would be 60:40, 60% for Semester End Examination (SEE) and 40 % for Continuous Internal Assessment (CIA). The structure of the SEE and CIA would be as recommended by the Board of Studies and approved by the Board of Examination and the Academic Council of the college.

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade on the grading scale, and grade F is a fail. The Board of Examinations of the college reserves the right to change the grading scale.

References:

1. Slocum, Terry A., 1999, Thematic Cartography and Visualization, Prentice-Hall, Upper Saddle Creek, NJ. www.prenhall.com/slocum
2. MacEachren, Alan M. 1994. Some Truth with Maps: A Primer on Symbolization and Design, Resource Publications in Geography, Washington, DC
3. Carter, James, 1984 Computer Mapping (Progress in the '80s), Resource Publications in Geography, Washington, DC: Association of American Geographers.
4. Dent, Borden D., 1999, Cartography: Thematic Map Design, 5th edition, Boston: WCB/McGraw-Hill.
5. Jones, Christopher, 1997, Geographical Information Systems and Computer Cartography, Harlow, U.K., Addison-Wesley Longman.
6. Kraak, Menno-Jan, Ormeling, Ferjan, 1996, Cartography: Visualization of Spatial Data, Addison-Wesley Publishing.
7. Madej, Ed., 2000, Cartographic Design Using Arcview GIS, 1st edition, OnWord Press.
8. Monmonier, Mark, 1996, How to Lie With Maps, 2nd.Edition, Chicago: University of Chicago Press

9. Monmonier, Mark, 1997, Cartographies of Danger, Mapping Hazards in America, Chicago: University of Chicago Press.
10. MacEachren, Alan, M., 1995, How Maps Work, Representation, Visualization, and Design, Guilford Press
11. Robinson, Arthur H., Morrison, Joel L., Muehrcke, Phillip C. and Stephen C. Guptill, 1995, Elements of Cartography, 6th edition, NY: John Wiley & Sons
12. ESRI, Serving Maps on the Internet, Redlands CA: ESRI Press