FIRST-YEAR OF MASTER OF ARTS
MAJOR GEOGRAPHY REVISED SYLLABUS
ACCORDING TO CBCS NEP2020

COURSE TITLE: CLIMATOLOGY
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. TatyasahebAthalye 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	:	Master of Arts
Name of the Department	:	Geography
Name of the Class	:	First Year
Semester	:	First
No. of Credits	:	04
Title of the Course	:	Climatology
Course Code	:	A502GET
Name of the Vertical in adherence to NEP 2020	:	Major
Eligibility for Admission	:	UG Degree in Geography
Passing Marks	:	40%
Mode of Assessment	:	Formative and Summative
Level	:	PG
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 First Year of Master of Arts in Geography

(With effect from the academic year 2023-2024)

SEMESTER-I **Paper No.–II**

Course Title: Climatology **No. of Credits - 04**

Type of Vertical: Major **COURSE CODE:** A502GET

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	Fundamental Concepts related to Climatology.
CLO-02	Understand	Understand the fundamentals of Climatology
CLO-03	Apply	
CLO-04	Analyse	Analyse the weather and Climate, Atmospheric Processes.
CLO-05	Evaluate	Evaluate the Humidity and Precipitation.
CLO-06	Create	

Syllabus for First year Master of Arts in Geography

(With effect from the academic year 2023-2024)

SEMESTER-I **Paper No. I**

Course Title: Climatology **No. of Credits - 04**

Type of Vertical: Major **COURSE CODE:** A502GET

Topic No.	Content	Credits	No. of Lectures
1	**Climatology and Atmosphere** o Nature and scope of Climatology o Relationship of Climatology with Meteorology o Structure and composition of Atmosphere o Weather elements and climatic controls	01	15
2	**Insolation and Temperature** o Insolation and heat balance of the Earth o Temperature - Vertical, horizontal and seasonal variations o Processes of heat energy transport o Inversion of temperature	01	15
3	**Atmospheric pressure and Circulation** o Atmospheric pressure – vertical and horizontal distribution o General Circulation of atmosphere o Types of winds – Geotropic, Gradient, and local winds o Modern views about space wind system, Tri-cellular meridional circulation, Jet stream o Origin of Monsoon: classical and recent views	01	15
4	**Humidity and Precipitation** o Air masses: Origin, classification, types o Fronts: frontogenesis and frontolysis – classification of fronts o Extra-tropical cyclones: formation and impacts o Climatic Classification: Koppen and Thornthwaite	01	15
	Total	04	60

Required Previous Knowledge

No previous Knowledge is necessary to learn the course.

Access to the Course

The course is available for all the students admitted for Master of Arts.

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. Barry, R.S. & Chorley, R.J. (1971): Atmosphere, Weather and Climate, ELBS, Methuen & Co. Ltd., U.S.A.
2. Griffiths, J.F.(1966): Applied Climatology-An Introduction, Oxford University Press, London.
3. Lal, D.S.(1997):Climatology, Sharda Pustak Bhawan, Allahabad.
4. Mather, J. R.(1974): Climatology: Fundamentals and Applications, McGraw Hill Book Co. New York.
5. McBoyle, G.(1973): Climate in Review, Houghton Mifflin Co., Boston.
6. Subrahmanyam, V.P.(ed)(1983): Contribution to Indian Geography, Heritage Publishers,
7. New Delhi, a) Vol. III - General Climatology b) Vol. IV- Applied Climatology
8. Harp, H.J. and Trinidade, O.D. (eds) (1990): Climate and Development, Springer Verlag, U.S.A.
9. Oliver, J.E. and Hidose, J.J. (1984): Climatology - An Introduction, Charles and Merrill, U.S.A.
10. Robinson, P.J. and Hendersen-Sellers, A.(1999): Contemporary Climatology, Pearson Education, London