



## **Anekant Education Society's**

Tuljaram Chaturchand College of Arts, Science & Commerce, Baramati

(Autonomous)

**Three/Four Year Honours/Honours with Research B.A. Degree** 

**Program in Geography** 

(Faculty of Arts/Science/Commerce/Vocational)

**CBCS Syllabus** 

FYBA (Geography) Sem-II

For Department of Geography

# <u>NEP-2.0</u>

Choice Based Credit System Syllabus (2024 Pattern) (As Per NEP-2020)

To be implemented from Academic Year 2024-2025

### Title of the Programme: FYBA (Geography)

### **Preamble**

AES's Tuljaram Chaturchand College has decided to change the syllabus of various faculties from June, 2023 by taking into consideration the guidelines and provisions given in the National Education Policy (NEP), 2020. The NEP envisions making education more holistic and effective and to lay emphasis on the integration of general (academic) education, vocational education and experiential learning. The NEP introduces holistic and multidisciplinary education that would help to develop intellectual, scientific, social, physical, emotional, ethical and moral capacities of the students. The NEP 2020 envisages flexible curricular structures and learning based outcomes for the development of the students. The credit structure and the courses framework provided in the NEP are nationally accepted and internationally comparable.

The rapid changes in science and technology and new approaches in different areas of Geography and related subjects, Board of Studies in Geography of Tuljaram Chaturchand College, Baramati - Pune has prepared the syllabus of FYBA Geography Semester - I under the Choice Based Credit System (CBCS) by following the guidelines of NEP 2020, NCrF, NHEQF, Prof. R.D. Kulkarni's Report, GR of Gov. of Maharashtra dated 20<sup>th</sup> April, 16<sup>th</sup> May 2023 and 13<sup>th</sup> March, 2024 and Circular of SPPU, Pune dated 31<sup>st</sup> May 2023 and 2<sup>nd</sup> May, 2024.

A Geography degree equips students with the knowledge and skills necessary for a diverse range of fulfilling career paths. Graduates in Geography find opportunities in various fields, including urban planning, GIS analysis, disaster preparedness, teaching, environmental science, remote sensing analysis, transportation planning, demography, hydrology, and many other domains. Throughout their three-year degree program, students explore the spatial organization of both natural and human phenomena across different scales, from local to global. They learn to identify and analyze features on the Earth's surface, understand their spatial patterns, and compare similarities and differences between different places. The curriculum also delves into the intricate relationship between humans and the environment, examining how physical and cultural landscapes evolve over time. Students specializing in physical geography gain an understanding of the processes that shape Earth's climate, create landforms, and influence the distribution of plant and animal life. By acquiring these comprehensive skills and knowledge, graduates are well-prepared to embark on rewarding

careers that contribute to a better understanding of our world and address the challenges of our ever-changing planet.

Overall, revising the Geography syllabus in accordance with the NEP 2020 ensures that students receive an education that is relevant, comprehensive, and prepares them to navigate the dynamic and interconnected world of today. It equips them with the knowledge, skills, and competencies needed to contribute meaningfully to society and pursue their academic and professional goals in a rapidly changing global landscape.

# **Programme Specific Outcomes (PSOs)**

- **PSO1.** *Problem Analysis:* Demonstrate the ability to analyze physical and cultural problems in both rural and urban environments and propose effective solutions.
- **PSO2.** Socio-economic Survey Project: Possess the skills necessary to conduct socioeconomic survey projects, enabling them to assess the development status of specific social groups or sections of society.
- **PSO3.** *Individual and Teamwork:* Effectively collaborate as individuals and as members or leaders in diverse teams and multidisciplinary settings.
- **PSO4.** Application of Modern Instruments: Apply various modern instruments for data collection and field surveys.
- **PSO5. GIS and Geographical Map Making:** Learn to utilize GIS and modern techniques for creating geographically-based maps.
- **PSO6.** Critical Thinking: Demonstrate the ability to understand and address critical issues in physical and cultural environments.
- **PSO7.** Development of Observation Skills: Through field experiences, students will develop strong observational skills and the ability to identify socio-environmental problems in localities.
- **PSO8.** Human perception and behaviour: Learning human perception and behaviour to acquire the geographical knowledge over time, is essential to improve decision making process.
- **PSO9.** *Effective Citizenship:* Exhibit empathetic social concern, an equity-centered approach to national development, and actively engage in civic life through volunteering.
- **PSO10.** Management Skills: Understand and apply management principles to their work, functioning effectively as individuals and as members or leaders in diverse, multidisciplinary teams.
- **PSO.11 Ethics:** Recognize different value systems, including their own, understand the moral dimensions of their decisions, and take responsibility for their actions.
- **PSO12.** Environmental Ethics and Sustainability: Comprehend the societal and environmental impact of their knowledge and exhibit an understanding of the need for sustainable development.
- **PSO13.** Identification of critical problems and issues: Detection and identification of the critical problems and spatial issues are essential for sustainable development.

## Anekant Education Society's Tuljaram Chaturchand College, Baramati (Autonomous)

**Board of Studies (BOS) in Geography** 

From 2022-23 To 2024-25

Sr. No.	Name	Designation
1.	Dr. Arun S. Magar	Chairman
2.	Dr. Asaram S. Jadhav	Member
3.	Mr. Vinayak D. Chavan	Member
4.	Ms. Sayali B. Pawar	Member
5.	Dr. Santosh Lagad	Vice-Chancellor Nominee
6.	Dr. Pravin Kokane	Expert from other University
7.	Dr. T. P. Shinde	Expert from other University
8.	Dr. Babaji Maskare	Industry Expert
9.	Mr. Ganesh Ghanawat	Meritorious Alumni
10.	Ms. Jagtap Samruddhi	Student Representative
11.	Ms. Gawade Anushka	Student Representative
12.	Ms. Kadam Radhika	Student Representative
13.	Ms. Harshada Saste	Student Representative

### FY<mark>BA</mark>

Credit Distribution Structure for Three/Four Year Honours/Honours with Research Degree Programme
With Multiple Entry and Exit options as per National Education Policy (2024 Pattern as per NEP-2020)

Level/ Difficulty	Sem	Subject DSC-1				Subject DSC-2	Subject DSC-3	GE/OE	SEC	IKS	AEC	VEC	СС	Total
4.5/100	Ι	2(T)+2(P)				2(T)+2(P)	2(T)+2(P)	2(T)	2 (T/P)	2(T) (Generic)	2(T)	2(T)		22
4.5/100	Π	2(T)+2(P)				2(T)+2(P)	2(T)+2(P)	2(P)	2 (T/P)		2(T)	2(T)	2(T	22
Exit option: Award of UG Certificate in Major with 44 credits and an additional 4 credits core NSQF course/Internship OR Continue with Major and Minor Continue option: Student will select one subject among the (subject 1, subject 2 and subject 3) as major and other as minor and third subject will be dropped.														
			Credits Rela	ated to Ma	ijor									
Level/ Difficulty	Sem	Major Core	Major Elective	VSC	FP/OJT/CE P/RP	Minor		GE/OE	SEC	IKS	AEC	VEC	СС	Total
	Ш	4(T)+2(P)		2 (T/P)	2(FP)	2(T)+2(P)		2(T)		2(T)	2(T)		2(T)	22
5.0/200	IV	4(T)+2(P)		2 (T/P)	2(CEP)	2(T)+2(P)		2(P)	2 (T/P)		2(T)		2(T)	22
Ex	Exit option: Award of UG Diploma in Major and Minor with 88 credits and an additional 4credits core NSQF course/Internship OR Continue with Major and Minor													
	v	8(T)+4(P)	2(T)+2(P)	2 (T/P)	2(FP/CEP)	2(T)								22
5.5/300	VI	8(T)+4(P)	2(T)+2(P)	2 (T/P)	4 (OJT)									22
Total 3Years 44 8 8 10		18	8	8	6	4	8	4	6	132				
	Exit option: Award of UG Degree in Major with 132 credits OR Continue with Major and Minor													
	VII	6(T)+4(P)	2(T)+2 (T/P)		4(RP)	4(RM)(T)								22
6.0/400	VIII	6(T)+4(P)	2(T)+2 (T/P)		6(RP)									22
Total 4	Years	64	16	8	22	22	8	8	6	4	8	4	6	176
			Four Y	ear UG H	onours with R	lesearch Degr	ee in Major an	nd Minor with 1	76 credits					
	VII	10(T)+4(P)	2(T)+2 (T/P)			4(RM) (T)								22
6.0/400	VIII	10(T)+4(P)	2(T)+2 (T/P)		4 (OJT)									22
Total 4	Years	72	16	8	14	22	8	8	6	4	8	4	6	176
	Four Year UG Honours Degree in Major and Minor with 176 credits													

T = Theory P = PracticalDSC = Discipline Specific CourseOE = Open ElectiveSEC = Skill Enhancement CourseIKS = Indian Knowledge SystemAEC = Ability Enhancement CourseVEC = Value Education CourseCC = Co-curricular CourseVSC = Vocational Skill CourseOJT = On Job TrainingCEP = Community Engagement ProjectFP = Field ProjectRP = Research Project

# F.Y.B.A. Geography

# NEP-2.0

## **Course Structure for F.Y.B.A. Geography (2024 Pattern)**

n	Course Type	Course Code	Course Title	Theory /	Credi
				Practical	
	DSC-I (General)	-101-GEN		Theory	04
	DSC-II (General)	-101-GEN		Theory	04
		GEO-101-GEN	Physical Geography	Theory	02
-	DSC-III (General)	GEO-102-GEN	Practical in Physical Geography	Practical	02
	Open Elective (OE)	GEO-103-OE	Tourism Geography	Theory	02
	Skill Enhancement Course (SEC)	GEO-104-SEC	Fundamentals of Google Map	Theory	02
_		ENG-104-AEC		Theory	02
	Value Education Course (VEC)	GEO-105-VEC/ SOC-104-VEC	Environmental Education	Theory	02
	Generic Indian Knowledge System (GIKS)	GEN-106-IKS		Theory	02
			ŗ	<b>Fotal Credits</b>	22
	DSC-I (General)	-151-GEN		Theory	04
	DSC-II (General)	-151-GEN		Theory	04
	DSC-III (General)	GEO-151-GEN	Human Geography	Theory	02
		GEO-152-GEN	Practical in Human Geography	Practical	02
	Open Elective (OE)	GEO-153-OE	Practical in Tourism Geography	Practical	02
T	Skill Enhancement Course (SEC)	GEO-154-SEC	Practical in Google Earth	Practical	02
I	Ability Enhancement Course (AEC)	ENG-154-AEC		Theory	02
T	Value Education Course (VEC)	GEO-155-VEC SOC-154-VEC	Environmental Awareness	Theory	02
	СС	YOG/PES/CUL/N SS/NCC-156-CC	To be selected from the CC Basket	Theory	02
		1	l	Fotal Credits	22
			Grand Total Se	m I + Sem II	44



# CBCS Syllabus as per NEP 2020 for FYBA (2024 Pattern)

Name of the Programme	: FYBA Geography
Programme Code	: UAGEO
Class	: FYBA
Semester	: II
Course Type	: General Theory
Course Code	: GEO-151- Gen
Course Title	: Human Geography
No. of Credits	:02
No. of Lectures	: 30

### **Course Objectives:**

- 1. To make students well aware of the basic concepts of human geography.
- 2. To understand basic concepts related to the population with special reference to India.
- 3. To acquaint the knowledge of types and patterns of rural settlement.
- 4. To recognize the concept of urbanization with special reference to Maharashtra and India.
- 5. To understand economic sector available in India.
- 6. To recognize factors affecting location of agriculture.
- 7. To understand the types of agriculture and recognize the problems of Indian agriculture.

### **Course Outcomes:**

### By the end of the course, students will be able to:

**CO1.** Well aware of the basic concepts of human geography.

- CO2. Basic concepts related to the population with special reference to India.
- CO3. Acquaint with the knowledge of types and patterns of rural settlement.
- CO4. Recognize the concept of urbanization with special reference to Maharashtra and India.
- **CO5.** Understand economic sector available in India.
- CO6. Recognize factors affecting location of agriculture.
- **CO7.** Understand the types of agriculture and recognize the problems of Indian agriculture.

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Topics and Learning points	
Unit 1: Introduction to Human Geography	Teaching Hours
1.1 Definitions	10
1.2 Nature and Scope	
1.3 Branches	
Unit 2: Population and Settlement	10
2.1 Factors affecting on distribution and density of the population	
2.2 Types and Patterns of Rural Settlements	
2.3 Urbanization- Causes and Effects in India	
Unit 3: Agriculture	10
3.1 Type of Agriculture	
3.2 Factors Affecting on Agriculture	
3.3 Problems of Indian Agriculture	

### **Reference:**

- 1. Bhende & Kanitkar (2011): Principles of Population studies, Himalaya Publishing House.
- 2. Chandana R.C. (1988): Geography of Population, Kalyani Pub. Ludhiana.
- 3. Chandna, R.C. (2010): Population Geography, Kalyani Publisher.
- 4. Daniel, P.A. and Hopkinson, M.F. (1989): The Geography of Settlement, Oliver & Boyd, London.
- 5. Ghosh B.N. (1985): Fundamentals of Population Geography, Sterling Publishers.
- 6. Hassan Mohammad, (2005): Population Geography, Rawat Publication.
- 7. Hassan, M.I. (2005): Population Geography, Rawat Publications, Jaipur.
- 8. Hussain M. (2018): Human Geography, Rawat Publication
- 9. K. Sidhartha, (2006): Economic Geography, Kishalaya Publication Delhi.

### Mapping of Program Outcomes with Course Outcomes

Class: FYBA

Course: Human Geography

Subject: Geography

Course Code: GEO-151-GEN

Weightage: 0= No Relation, 1= Weak or low relation, 2= Moderate or partial relation,

3= Strong or direct relation

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	2	1	1	1	1	1	1	0
CO2	2	3	1	1	1	1	1	1	1	0
CO3	2	1	3	2	1	2	1	1	1	0
CO4	1	1	2	3	2	2	1	1	1	0
CO5	1	1	1	2	3	2	1	1	1	0
CO6	1	1	2	2	2	3	1	1	1	0
CO7	1	1	1	1	1	1	3	1	1	0

### **Justification:**

- **PO1 Critical and Creative Thinking**: CO1 (Basic concepts of human geography) requires analytic thought to understand foundational concepts in geography. CO4 (Concept of urbanization) and CO6 (Factors affecting location of agriculture) involve creative thinking in analyzing complex societal and economic patterns.
- **PO2 Communication Skill**: CO2 (Basic concepts related to population) and CO5 (Understanding economic sectors) necessitate clear communication of demographic and economic concepts to diverse audiences.
- **PO3 Multicultural Competence**: No direct relationship identified with multicultural competence.
- **PO4 Research Skills**: CO3 (Types and patterns of rural settlement) and CO7 (Types of agriculture and problems in Indian agriculture) require research skills to analyze and articulate geographical patterns and agricultural issues.
- **PO5 Environmental Awareness**: No direct relationship identified with environmental awareness.

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- **PO6 Problem-solving Abilities**: CO6 (Factors affecting location of agriculture) and CO7 (Types of agriculture and problems in Indian agriculture) involve problem-solving skills in addressing agricultural challenges and geographical factors.
- **PO7 Collaboration and Teamwork**: CO7 (Types of agriculture and problems in Indian agriculture) involves teamwork in understanding and addressing agricultural issues collaboratively.
- **PO8 Value Inculcation**: No direct relationship identified with value inculcation.
- **PO9 Digital and Technological Skills**: CO1 (Basic concepts of human geography) and CO3 (Types and patterns of rural settlement) require digital skills in accessing and evaluating geographical data.
- **PO10 Community Engagement and Service**: No direct relationship identified with community engagement and service.

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<b>CBCS Syllabus as per NEP 2020 for FYBA</b>
(2024 Pattern)

Name of the Programme	: FYBA
Programme Code	: UAGEO
Class	: FYBA
Semester	: II
Course Type	: General Practical
Course Name	: Practical in Human Geography
Course Code	: GEO-152- GEN
No. of Lectures	: 60
No. of Credits	:02

### **Course Objectives:**

- 1. To enable the students to use various techniques of calculating rates.
- 2. To acquaint the students with crop combination methods.
- 3. To familiar the students' different theories related to huma geography.
- 4. To make awareness about dependency ratio and growth of population.
- 5. To intimate gender scenario of different countries.
- 6. To make knowledge about future population and age structure of different countries.
- 7. To make knowledge about nucleation and dispersion of settlement.

### **Course Outcomes:**

After the completion of the course,

**CO1.** Students can understand calculation techniques of growth rates.

**CO2.** Student can able to calculate rates and apply to various state of India.

**CO3.** Study in crop combination to give knowledge of society.

**CO4.** Students can able to apply various theories in human geography to their society.

CO5. Students understood the dynamics of population and its role in population policies

**CO6.** Student can understand about population structure and characteristics of different countries, they can also predict future population scenario of the country.

**CO7**. Student can understand population growth of different countries, they can also predict future population setting of the country.

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Unit 1: Population Indices Te	aching Hours
1.1 Decadal growth rate	20
1.2 Dependency ratio	
1.3 Fertility	
1.4 Mortality	
Unit 2: Measures of Nucleation and Dispersion of Settlement 2.1 Rank size rule	20
2.2 Nearest neighbor analysis	
2.3 Gravity Model	
Unit 3: Crop Combination, Diversification and field visit	20
3.1Weaver's method of crop combination	
3.2 Jasbir Singh method of crop diversification	
3.3 study tour of geographical interest places anywhere in the country	У
and excursion report	

Reference	Doolza	Q	Wahai	100
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- 1. Carter, H. (1977): The study of Urban Geography, Edward Arnold, London.
- 2. Hans, R. (1978): Fundamentals of Demography, Surjeet, Delhi.
- 3. Hudson F.S. (1976): Geography of Settlements, Estover, Macdonald& Evans, England.
- 4. Liendsor, J.M. (1997): Techniques in Human Geography, Routledge.
- 5. Lloyd, P. and Dicken, B. (1972): Location in Space A theoretical approach to economic geography, Harper and Row, New York.
- 6. Michael, E. and Hurse, E.(1974): Transportation Geography, McGraw-Hill, New York.
- Pollard, A.H. and FarhatYusu, (1974): Demographic Techniques, Rushcutters Bay, N.S.W., Pergamon Press, Australia.
- 8. Singh, J. and Dhillon, (1984): Agricultural Geography, Tata McGraw-Hill Publishing Company Limited, New Delhi.

**9.Yeats, M.H. (1974):** An Introduction to Quantitative Analysis in Human Geography, McGraw-Hill, New York.

### Mapping of Program Outcomes with Course Outcomes

Class: FYBA

**Subject:** Geography

Course: Practical in Human Geography

Course Code: GEO-152-GEN

Weightage: 0= No Relation, 1= Weak or low relation, 2= Moderate or partial relation, 3= Strong or direct relation

	PO1	PO2	PO3	PO4	PO5	PO6	<b>PO7</b>	PO8	PO9	PO10
CO1	2	2	1	1	0	0	0	0	2	0
CO2	2	2	1	1	0	0	0	0	2	0
CO3	1	1	3	2	0	0	0	0	1	0
CO4	1	1	2	3	0	0	0	0	1	0
CO5	0	0	0	0	3	2	1	1	0	0
CO6	0	0	0	0	2	3	1	1	0	0
CO7	0	0	0	0	1	1	3	1	0	0

### **Justification:**

- **PO1 Critical and Creative Thinking**: CO1 and CO2 involve analytic thought in understanding growth rates and applying them across different states in India, demonstrating moderate relations. CO3 and CO4 involve applying theories and understanding crop combinations in society, which require critical and creative thinking skills.
- **PO2 Communication Skill**: CO1 and CO2 require clear communication of growth rate calculations and their application, indicating a weak relation with communication skills.
- **PO3 Multicultural Competence**: No direct relationship identified with multicultural competence.
- **PO4 Research Skills**: CO3 and CO4 involve inquiry into theories and methodologies in human geography, indicating a moderate relation with research skills.
- **PO5 Environmental Awareness**: No direct relationship identified with environmental awareness.

- **PO6 Problem-solving Abilities**: CO5 and CO6 require problem-solving abilities in understanding population dynamics and predicting future scenarios, showing a moderate relation with problem-solving.
- **PO7 Collaboration and Teamwork**: CO7 involves understanding population growth trends and predicting future settings, indicating a weak relation with collaboration and teamwork.
- **PO8 Value Inculcation**: No direct relationship identified with value inculcation.
- **PO9 Digital and Technological Skills**: CO1 and CO2 involve using ICT for data analysis and calculation techniques, demonstrating a moderate relation with digital and technological skills.
- **PO10 Community Engagement and Service**: No direct relationship identified with community engagement and service.

# CBCS Syllabus as per NEP 2020 for FYBA (2024 Pattern)

Name of the Programme	: FYBA
Programme Code	: UAGEO
Class	: FYBA
Semester	: II
Course Type	: Open Elective (Practical)
Course Name	: Practical in Tourism Geography
Course Code	: GEO-153- OE
No. of Lectures	: 60
No. of Credits	:02

### **Course Objectives:**

- 1. To provide students with practical knowledge and skills related to tour planning and management.
- 2. To familiarize students with the information about the necessary documentation for tour planning.
- 3. To train the students with the essential online booking process.
- 4. To recognize the importance of tour planning in the tourism industry.
- 5. To comprehend the fundamental concepts and principles of tour planning.
- 6. To identify the roles and responsibilities of tour planners.
- 7. To utilize digital platforms for marketing, booking, and customer management.

### **Course Outcomes:**

### By the end of the course, students will be able to:

**CO1.** Apply practical knowledge and skills to effectively plan and manage tours.

- CO2. Identify and prepare the required documentation for different types of tours.
- **CO3.** Efficiently perform online booking procedures using various digital platforms.

**CO4.** Articulate the importance of thorough tour planning in ensuring successful tourism experiences.

**CO5.** Understand and apply key concepts and principles of tour planning in practical scenarios.

CO6. Clearly define the various roles and responsibilities associated with tour planning.CO7. Leverage digital tools and platforms for effective marketing, booking, and managing customer relationships.

### **Topics and Learning Points**

### **Unit 1: Introduction of Tour planning**

- 1.1 Meaning of Tour planning
- 1.2 Elements of Tour planning
- 1.3 Classification of Tour planning: individual, family, group and mass level
- 1.4 Importance of tour planning

### **Unit 2: Techniques of Tour Planning**

- 2.1 Preparation of Tour Planning: Leaflet of tour planning, Passenger documentation, Insurance calculation, Currency exchange, Time exchange and calculation, Distance measurement.
- 2.2 Tourist Guide
- 2.3 Computer application for tour planning.
- 2.4 Procedure of passport & visa application.
- 2.5 Booking and cancellation system: Transportation (Air, Rail, Road) and hospitality (accommodation)

### Unit 3: Planning and visit to tourist place

- 1.1 Preparation of one short or long international/ national/ local tour plan.
- 1.2 Writing of tour repot.

### **References:**

- Bhatt, H (2007) Tourism Planning and Development, Commonwealth Publishers, New Delhi
- 2. Bhatia AK (2002), Tourism Development: Principles and Practices, Revised edition Sterling Publishers Private Limited, New Delhi.
- 3. Chand, M (2002) Travel Agency Management, Anmol Publication
- 4. Ghosh Bishwanth (2000), Tourism & Travel Management, Second Revised

20

20

**Teaching Hours** 

20



Edition Vikas Publishing House Pvt Ltd, New Delhi.

- Seth, P.N. (1998). An Introduction to Travel and Tourism, Sterling Publishers Pvt. Ltd., New Delhi.
- Muluk, Doke, Musmade, More (2021), Geography of Tourism II, Nirali Publication, Pune
- 7. Sinha, P (1998). Tourism Planning. Anmol Publication Pvt. Ltd., New Delhi.
- Pacharne, Patil, Suryavanshi, Chaudhar (2014) Tourism Geography, Atharv Publication, Pune.

### Mapping of Program Outcomes with Course Outcomes

Class: FYBASubject: GeographyCourse: Practical in Tourism GeographyCourse Code: GEO-153-OEWeightage: 0= No Relation, 1= Weak or low relation, 2= Moderate or partialrelation, 3= Strong or direct relation

	PO1	PO2	PO3	PO4	PO5	PO6	<b>PO7</b>	PO8	PO9	PO10
CO1	2	2	2	1	2	1	1	0	2	2
CO2	2	3	3	1	2	1	1	0	2	2
CO3	2	3	3	1	2	1	1	0	2	2
CO4	1	1	2	2	2	2	2	0	1	1
CO5	2	2	2	2	3	2	2	0	2	2
CO6	1	1	1	2	2	3	2	0	1	1
CO7	1	1	1	2	2	2	3	0	1	1

### **Justification:**

- **PO1 Critical and Creative Thinking**: CO1, CO2, and CO3 require analytic thought and diverse thinking in planning and managing tours effectively, demonstrating a strong relation with critical and creative thinking.
- **PO2 Communication Skill**: CO1, CO2, and CO3 involve clear communication in preparing documentation, booking procedures, and customer interactions, indicating a strong relation with communication skills.
- **PO3 Multicultural Competence**: No direct relationship identified with multicultural competence.
- **PO4 Research Skills**: CO4 and CO5 involve synthesis and application of tour planning concepts, showing a moderate relation with research skills.
- **PO5 Environmental Awareness**: No direct relationship identified with environmental awareness.
- **PO6 Problem-solving Abilities**: CO4, CO5, CO6, and CO7 require problem-solving in addressing tour planning challenges and leveraging digital tools, indicating a moderate to strong relation with problem-solving abilities.
- **PO7 Collaboration and Teamwork**: CO6 and CO7 involve teamwork in roles associated with tour planning and customer management, demonstrating a moderate relation with collaboration and teamwork.
- **PO8 Value Inculcation**: No direct relationship identified with value inculcation.
- **PO9 Digital and Technological Skills**: CO1, CO2, CO3, CO4, CO5, CO6, and CO7 involve extensive use of ICT and digital platforms for tour planning and management, indicating a strong relation with digital and technological skills.
- **PO10 Community Engagement and Service**: CO1, CO2, and CO3 involve community engagement in planning and managing tours that promote societal well-being, showing a strong relation with community engagement and service.

# CBCS Syllabus as per NEP 2020 for FYBA (2024 Pattern)

Name of the Programme	: FYBA
Programme Code	: UAGEO
Class	: FYBA
Semester	: 11
Course Type	: Skill Enhancement Course (Practical)
Course Name	: Practical in Google Earth
Course Code	: GEO-154- SEC
No. of Credits	: 02
No. of Lectures	: 60

### **Course Objectives:**

- 1. To provide an introduction to the Google Earth Pro software.
- 2. To study capabilities for spatial data visualization, analysis, and communication.
- 3. To learn how to navigate and customize Google Earth Pro.
- 4. To study import and manage geographic data.
- 5. To learn to create and edit placemarks, polygons, paths, and images.
- 6. To measure distances and areas, perform spatial queries and analysis.
- 7. To share and export data.

### **Course Outcomes:**

### By the end of the course, students will be able to:

- CO1. Navigate and customize the Google Earth Pro interface and preferences.
- CO2. Import and manage geographic data in different formats.
- CO3. Create and edit placemarks, polygons, paths, and images.
- CO4. Add attributes and labels to geographic features.
- CO5. Use measurement and annotation tools to perform spatial analysis and querying.
- CO6. Share and export maps and data in different formats.
- CO7. Apply this knowledge in any field and applications.

### **Topics and Learning Points**

Unit 1: Introduction to Google Earth	<b>Teaching Hours</b>
1.1 Overview of Google Earth Pro interface and tools	20
1.2 Customizing the Google Earth Pro preferences	
1.3 Navigation and view controls in Google Earth Pro	
Unit 2: Data Import and Management	20
2.1 Importing and exporting data in different formats	
2.2 Creating and managing folders, layers, and projects	
2.3 Managing and editing data attributes and metadata	
Unit 3: Creating and Editing Geographic Features	20
3.1 Creating and editing placemarks, polygons, paths, and image	S
3.2 Adding and editing attributes and labels to geographic feature	es
3.3 Using measurement and annotation tools in Google Earth Pro	)

### **References:**

1. Battersby, S. E., and Finn, M. P. (2018). Mapping and Visualization with Super Collider. Springer.

2. Brown, M. (2014). Google Maps: Power Tools for Maximizing the API. McGraw Hill Professional.

3. Joly, D., and Gaffuri, J. (2016). Web Mapping Illustrated: Using Open Source GIS Toolkits. O'Reilly Media.

4. Kohler, A., and Gow, J. (2018). Using Google Earth in Geography Classrooms: A Collection of Lessons and Ideas. Springer.

5. Roth, R. E., and Krum, K. (2013). Google Maps API. Apress.

6. Google Earth Help Center: <u>https://support.google.com/earth/?hl=en#topic=4386911</u>

7. Google Earth User Guide: https://support.google.com/earth/answer/21955

8. Google Earth Outreach: https://www.google.com/earth/outreach/

9. Google Earth Blog: https://www.gearthblog.com/

- 10. Google Earth Community: https://support.google.com/earth/community?hl=en
- 11. Google Earth Education: https://www.google.com/earth/education/
- 12. GIS Geography: https://gisgeography.com/google-earth-pro-tutorial/
- 13. KML Tutorial: https://developers.google.com/kml/documentation/kml\_tut
- 14. Earth Point: https://www.earthpoint.us/
- 15. Google Earth Studio: https://www.google.com/earth/studio/

### Mapping of Program Outcomes with Course Outcomes

**Class:** FYBA

**Subject:** Geography

Course: Practical in Google Earth

Course Code: GEO-154-SEC

Weightage: 0= No Relation, 1= Weak or low relation , 2= Moderate or partial relation, 3= Strong or direct relation

	PO1	PO2	PO3	PO4	PO5	PO6	<b>PO7</b>	PO8	PO9	PO10
CO1	2	2	1	1	1	1	1	0	3	1
CO2	1	2	1	1	1	2	1	0	3	1
CO3	1	2	1	1	1	2	1	0	3	1
CO4	1	2	1	1	1	2	1	0	3	1
CO5	1	2	1	1	1	2	1	0	3	1
CO6	1	1	1	1	1	2	1	0	3	1
CO7	1	1	1	1	1	2	1	0	3	1

### Justification:

- PO1 Critical and Creative Thinking: CO1 requires critical thinking to customize • and navigate Google Earth Pro, demonstrating a moderate relation. Other COs involve minimal critical thinking skills related to basic operations and data management.
- PO2 Communication Skill: CO2, CO3, CO4, CO5, and CO6 involve • communicating spatial data and analysis effectively, showing a moderate relation with communication skills.
- **PO3 Multicultural Competence**: No direct relationship identified with multicultural competence.

- **PO4 Research Skills**: CO2, CO3, CO4, and CO5 involve data synthesis and spatial analysis, indicating a moderate relation with research skills.
- **PO5 Environmental Awareness**: No direct relationship identified with environmental awareness.
- **PO6 Problem-solving Abilities**: CO2, CO3, CO4, CO5, CO6, and CO7 require problem-solving in spatial analysis and data management using Google Earth Pro, showing a moderate relation with problem-solving abilities.
- **PO7 Collaboration and Teamwork**: CO2, CO3, CO4, CO5, CO6, and CO7 involve collaboration in data sharing and project applications, indicating a moderate relation with collaboration and teamwork.
- **PO8 Value Inculcation**: No direct relationship identified with value inculcation.
- **PO9 Digital and Technological Skills**: CO1, CO2, CO3, CO4, CO5, CO6, and CO7 involve extensive use of ICT skills in managing geographic data and performing spatial analysis, demonstrating a strong relation with digital and technological skills.
- **PO10 Community Engagement and Service**: No direct relationship identified with community engagement and service.

### CBCS Syllabus as per NEP 2020 for F.Y.B.A. Geography (2024 Pattern)

Name of the Programme	: F.Y.B.A. Geography
Programme Code	: UAGEO
Class	<b>:</b> F.Y.B.A
Semester	: II
Course Type	: Value Education Course
Course Code	: GEO-155-VEC
Course Title	: Environmental Awareness
No. of Credits	:02
No. of Lectures	: 30

**Course Objectives:** 

- 1. To understand the theories of the evolution of the Earth.
- 2. To understand protocol related to environment.
- 3. To understand the global warming and climate change
- 4. To identify global environmental challenges to protect earth from them.
- 5. To understand the various techniques of conservation of the soil and water.
- 6. To understand the green house gas effect and its impact on climate change.
- 7. To understand governmental policies regarding global warming and climate change.

### **Course Outcomes:**

### By the end of the course, students will be able to:

- CO1. Understand theories of evolution of the earth and how does earth has evolved.
- **CO2.** Aware about protocol related to environment.
- CO3. Able to understand causes of global warming and climate change.
- CO4. Identify global environmental challenges to protect earth from them.
- CO5. Aware about various techniques of conservation of natural resources
- **CO6.** Understand green house gas effect and its impact on climate change.
- CO7. Aware about government policies regarding global warming and climate change

### **Topics and Learning Points**

Unit – 1: Environmental pollution and health	<b>Teaching Hours</b>
1.1 Concept and meaning of pollution	06
1.2 Air Pollution	
1.3 Water pollution	
1.4 Soil pollution and solid waste	
1.5 Thermal and radioactive pollution	
Unit – 2:Climate change: Impacts , Adaptation and Mitigation	08
2.1 Concept and meaning of climate change	
2.2 impacts, vulnerability and adaptation to climate change	
2.3 Mitigation of climate change	
Unit – 3: Environmental management	08
3.1 Introduction to environmental laws and regulation	
3.2 Environmental management system	
3.3 Environmental audit and impact assessment	
3.4 Waste management	
Unit – 4: Environmental treaties and legislation	08
4.1 Meaning of instruments of international cooperation	
4.2 Major international environmental agencies	
4.3 2 Major Indian environmental legislation	
4.4 Major international organisation and initiative	

### **Reference:**

- Harper, Charles L. (2017) Environment and Society, Human Perspectives on Environmental Issues 6th Edition. Routledge.
- 2. Harris, Frances (2012) Global Environmental Issues, 2nd Edition. Wiley- Blackwell.
- William P. Cunningham and Mary A. (2015). Cunningham Environmental Science: A global concern, Publisher (Mc-Graw Hill, USA)

- Manahan, S.E. (2022). Environmental Chemistry (11th ed.). CRC Press. <u>https://doi.org/10.1201/9781003096238</u>
- Rajagopalan, R. (2011). Environmental Studies: From Crisis to Cure. India: Oxford University Press.
- Pittock, Barrie (2009) Climate Change: The Science, Impacts and Solutions. 2nd Edition.Routledge.
- 7. www.ipcc.org; https://www.ipcc.ch/report/sixth-assessment-report-cycle/.
- Adenle A., Azadi H., Arbiol J. (2015). Global assessment of technological innovation for climate change adaptation and mitigation in developing world, Journal of Environmental Management,161 (15): 261-275.
- Barnett, J. & C'Neill (2010). Maladaptation. Global Environmental Change— Human and Policy Dimensions 20: 211–213.
- 10. Berrang-Ford, L., J.D. Ford & amp; J. Paterson (2011). Are we adapting to climate change ? Global Environmental Change—Human and Policy Dimensions 21: 25-3

### Mapping of Program Outcomes with Course Outcomes

Class: FYBA

Subject: Geography

**Course Code:** GEO-155-VEC

**Course:** Environmental Awareness

**Weightage**: 0= No Relation, 1= Weak or low relation , 2= Moderate or partial relation, 3= Strong or direct relation

COs	PO1	PO2	PO3	PO4	PO5	PO6	<b>PO7</b>	PO8	<b>PO9</b>	PO10
CO1	3	1	1	2	3	2	1	2	1	1
CO2	2	1	1	2	3	2	2	2	1	2
CO3	3	1	1	2	3	3	1	3	2	2
CO4	3	1	1	3	3	3	2	2	2	2
CO5	2	1	1	2	3	3	2	3	2	2
CO6	3	1	1	2	3	3	1	2	2	2
CO7	2	1	1	2	3	3	2	2	1	3

### **Justifications**

### **PO1: Critical and Creative Thinking**

- **CO1** (3): Understanding theories of evolution of the earth requires critical analysis and creative thinking to comprehend the complex processes involved.
- CO2 (2): Being aware of environmental protocols involves analyzing various regulations and their implications.
- **CO3** (3): Understanding the causes of global warming and climate change requires critical analysis of scientific data and theories.
- CO4 (3): Identifying global environmental challenges necessitates critical thinking to assess and address complex issues.
- **CO5** (2): Awareness of conservation techniques involves analyzing different methods and their effectiveness.
- **CO6** (3): Understanding the greenhouse gas effect and its impact on climate change requires critical analysis of environmental data.
- **CO7** (2): Awareness of government policies involves understanding and evaluating policy impacts on global warming and climate change.

### **PO2:** Communication Skill

- CO1 (1): Basic communication skills are needed to discuss theories of earth's evolution.
- **CO2** (1): Communicating knowledge about environmental protocols requires clarity and effectiveness.
- CO3 (1): Explaining causes of global warming involves effective communication.
- **CO4** (1): Communicating global environmental challenges involves clear presentation of issues.
- **CO5** (1): Discussing conservation techniques involves expressing ideas effectively.
- **CO6** (1): Understanding and communicating the greenhouse gas effect requires clear articulation.
- **CO7** (1): Discussing government policies involves effectively communicating policy details and implications.

### **PO3: Multicultural Competence**

- **CO1** (1): Understanding the evolution of the earth can involve different cultural perspectives on geological history.
- **CO2** (1): Awareness of environmental protocols can vary by region and culture.
- CO3 (1): Understanding global warming involves recognizing diverse cultural impacts and responses.
- CO4 (1): Identifying global challenges requires understanding multicultural perspectives on environmental issues.
- CO5 (1): Conservation techniques can be influenced by cultural practices and beliefs.
- **CO6** (1): Greenhouse gas effects can have different impacts across cultures.
- **CO7** (1): Government policies on climate change may vary by culture and region.

### **PO4: Research Skills**

- CO1 (2): Understanding earth's evolution involves researching geological and historical data.
- CO2 (2): Being aware of environmental protocols requires researching legal and scientific documents.
- CO3 (2): Understanding causes of global warming involves extensive research and data analysis.
- CO4 (3): Identifying global environmental challenges necessitates comprehensive research.
- CO5 (2): Awareness of conservation techniques involves researching various methods and their efficacy.
- CO6 (2): Understanding the greenhouse gas effect requires research into environmental science.
- **CO7** (2): Awareness of government policies involves researching policy documents and their impacts.

### **PO5: Environmental Awareness**

- **CO1** (3): Understanding the earth's evolution contributes directly to environmental awareness.
- CO2 (3): Awareness of environmental protocols is crucial for environmental protection.
- CO3 (3): Understanding global warming is fundamental to environmental awareness.

- CO4 (3): Identifying global challenges is essential for protecting the environment.
- CO5 (3): Awareness of conservation techniques is vital for sustainable living.
- CO6 (3): Understanding the greenhouse gas effect is key to addressing climate change.
- CO7 (3): Awareness of government policies is crucial for implementing environmental protection measures.

### **PO6:** Problem-Solving Abilities

- **CO1** (2): Understanding the earth's evolution involves solving complex geological problems.
- CO2 (2): Awareness of environmental protocols helps in addressing regulatory challenges.
- CO3 (3): Understanding global warming involves solving environmental problems.
- CO4 (3): Identifying global challenges requires problem-solving to find effective solutions.
- CO5 (3): Awareness of conservation techniques involves problem-solving to implement sustainable practices.
- **CO6** (3): Understanding the greenhouse gas effect involves solving problems related to climate change.
- CO7 (3): Awareness of government policies involves problem-solving to address policy impacts.

### **PO7: Collaboration and Teamwork**

- **CO1** (1): Understanding earth's evolution can benefit from collaborative research.
- CO2 (2): Awareness of environmental protocols may involve teamwork to ensure compliance.
- CO3 (1): Understanding global warming can involve collaborative efforts in research.
- CO4 (2): Identifying global challenges often requires teamwork for effective solutions.
- CO5 (2): Awareness of conservation techniques can involve collaborative implementation.
- CO6 (1): Understanding the greenhouse gas effect may involve team research efforts.

• **CO7** (2): Awareness of government policies often involves collaboration to ensure effective advocacy and implementation.

### **PO8: Value Inculcation**

- CO1 (2): Understanding earth's evolution involves inculcating values of environmental stewardship.
- **CO2** (2): Awareness of environmental protocols involves values of compliance and protection.
- **CO3** (3): Understanding global warming requires inculcating values of environmental responsibility.
- CO4 (2): Identifying global challenges involves values of proactive environmental protection.
- CO5 (3): Awareness of conservation techniques involves values of sustainability.
- CO6 (2): Understanding the greenhouse gas effect involves values of climate responsibility.
- **CO7** (2): Awareness of government policies involves values of civic responsibility and advocacy.

### PO9: Digital and Technological Skills

- **CO1** (1): Understanding earth's evolution can involve using digital tools for research.
- **CO2** (1): Awareness of environmental protocols can involve using digital resources for information.
- CO3 (2): Understanding global warming involves using technology for data analysis and research.
- CO4 (2): Identifying global challenges can involve using digital tools for research and communication.
- CO5 (2): Awareness of conservation techniques can involve digital resources for learning and implementation.
- **CO6** (2): Understanding the greenhouse gas effect involves using technology for research and monitoring.
- CO7 (1): Awareness of government policies can involve using digital platforms for information and advocacy.

### **PO10: Community Engagement and Service**

- **CO1** (1): Understanding earth's evolution involves engaging with communities to share knowledge.
- **CO2** (2): Awareness of environmental protocols can involve community engagement for compliance and advocacy.
- CO3 (2): Understanding global warming involves engaging with communities to promote environmental awareness.
- CO4 (2): Identifying global challenges involves community engagement to address environmental issues.
- CO5 (2): Awareness of conservation techniques can involve community service to implement sustainable practices.
- **CO6** (2): Understanding the greenhouse gas effect involves community engagement to promote climate action.
- **CO7** (3): Awareness of government policies involves engaging with communities to advocate for and implement policy measures.