



Goa University

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Date: 16.06.2023

(Accredited by NAAC)

GU/Acad -PG/BoS -NEP/2023/102/20

The University has decided to implement the UGC Curriculum and Credit Framework for the Undergraduate Programme (CCFUP) of **Bachelor of Arts in Geography/Bachelor of Arts in Geography (Honours)** under the National Education Policy (NEP) 2020 from the Academic Year 2023-2024 onwards.

CIRCULAR

The approved Syllabus of Semesters I and II of the **Bachelor of Arts in Geography/Bachelor of Arts in Geography (Honours)** Programme is attached.

Principals of Affiliated Colleges offering the **Bachelor of Arts in Geography/Bachelor of Arts in Geography (Honours)** Programme are requested to take note of the above and bring the contents of this Circular to the notice of all concerned.

(Ashwin Lawande)
Assistant Registrar – Academic-PG

To,

1. The Principals of Affiliated Colleges offering the Bachelor of Arts in Geography /Bachelor of Arts in Geography (Honours) Programme.

Copy to:

- 1. The Director, Directorate of Higher Education, Govt. of Goa
- 2. The Dean, D.D. Kosambi School of Social Science and Behavioural Studies, Goa University.
- 3. The Vice-Deans, D.D. Kosambi School of Social Science and Behavioural Studies, Goa University.
- 4. The Chairperson, BoS in Geography.
- 5. The Controller of Examinations, Goa University.
- 6. The Assistant Registrar, UG Examinations, Goa University.
- 7. Directorate of Internal Quality Assurance, Goa University for uploading the Syllabus on the University website.

Goa University

Programme Structure for Semester I to VIII Bachelor of Arts in Geography

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Semester	Major -Core	Minor	MC	AEC	SEC		D	VAC	Total Credits	Exit
<u>Jennester</u>	Iviajoi -core	GOG-111 Geography	_	ALC	GOG-141: Elements of	<u>'</u>	۲	VAC	Credits	LAIL
		of Sustainable	Astronomical		Environmental Impact					
		Development(4)			Assessment (EIA)					
		OR	Geography(3)		(1T+2P)					
	GOG-100:	GOG-112: Geography			(11727)					
	Foundations in	of Climate Change(4)								
	1	GOG-113: Disaster	GOG-132: Major		GOG-142: Introduction					GOG-161:
	Geography & Digital		World							Summer
	_	Management Methods and			to the Principles and Practices of Land Use					
	Geography		Environments(3)							Internship (4)
	(Theory) (3) (Practical)(1)	Techniques(4) OR			Planning and					
	(Practical)(1)	GOG-114:			Management(1T+2P)					
		Fundamentals of								
		Tourism								
II										
	GOG-200 Theory:	Geography(4)	COC 221Thoory		GOG-241:Principles and					
	Principles	GOG-211: Physical Landscape of Goa(4)	GOG-231Theory: Google Earth: Bring		Practices of					
	I -		the World inside the							
	Geomorphology(3) GOG-200 Practical:		Classroom(2)		Composting(1T+2P)					
			GOG-231Practical:							
	Practicals in	Geography(4)								
	Geomorphology(1)		Google Earth: Bring the World inside the							
Ш	GOG 201: Physical									
	GOG-201: Physical		Classroom(1)							

Course Code: GOG-100

Title of the Course: Foundations in Geography

Number of Credits: 3
Effective from AY: 2023-24

Pre-requisites for	Nil		
the Course:			
Course Objectives:	Foundations in Geography is an introductory course that provide students with a comprehensive understanding of the discipline of Geography, its fundamental concepts and principles. This course aims to develop students' spatial thinking skills and geographic literacy by introducing them to the basic concepts of geographic analysis.		
Content:	 Introduction: Introduction & Definitions of Geography; Geography: Whether Science or Social Science; The Changing Nature of Geography; Divisions of Geography and Branches of Geography and its relations with other disciplines; Geography and Nationalism; Evolution of Geography from classical times to modern period; Career Prospects in Geography; 	15 Hours	
	 Geographical Concepts and Approaches: Geography as Inter-disciplinary, Intra-disciplinary and Multi-disciplinary Science; Contemporary Approaches in Geography: Area, Spatial, Locational & Geographic Systems Analysis; Five Themes of Geography; Four Traditions of Geography: Spatial or Locational Tradition, Area Studies or Regional Tradition, Man-Land Tradition, Earth Science Tradition; 	15 Hours	
	 Earth and it's spatial relation: The Universe; Galaxies and Solar system; Origin of the Earth; Geological Time Scale Earth as a planet and celestial positions its shape and size; Rotation and revolution of Earth; Lunar and Solar Eclipses and their types Positions on Map and Globe, Geographical coordinates and its characteristics, World time zones, standard and local time 	15 Hours	
Pedagogy:	Lectures, Group Discussions, Student Seminars, Presentations, Case St Assignments, Blended learning, Gamification, Problem-solving approathrough logic, Experiential learning, Discussion-based teaching, Brains Fieldwork and outdoor learning, Flipped classroom pedagogy, Art Integrating, Cutting Edge, and Cooperative Learning Strategies.	ch torming,	
References/ Readings:	 Blij, H. J. de, & Muller, P. O. (2010). Geography: Realms, Regions, an Concepts. John Wiley & Sons. Clifford, N., Cope, M., & Gillespie, T. W. (2016). Key Concepts in Geography. 		

- Das Gupta and Kapoor. (2004) Principles of Physical geography. S. Chand, New Delhi
- D. K. (2017). Geography: A Visual Encyclopaedia. DK.
- Dikshit R.D. (2000) Geographical Thought A Contextual History of Ideas, P.
 Hall of India Pvt.
- Fouberg, E. H., Murphy, A. B., & Blij, H. J. de. (2016). Human Geography:
 People, Place, and Culture. John Wiley & Sons.
- Getis, A., Bjelland, M., Getis, V. A., & Fellmann, J. D. (2015). Introduction to Geography. McGraw-Hill Education.
- Goh Cheng Leong: Certificate Physical and Human Geography, Oxford University Press, New Delhi.
- Harvey, David. (1969). Explanation in Geography. Edward Arnold.
- Harvey, David. (1972). Explanation in Geography, Edward Arnold, London.
- Hussain, Majid (1984): Evolution of Geographical Thought, Rawat Publications, Jaipur.
- Knox, P. L., & Marston, S. A. (2019). Human Geography: Places and Regions in Global Context. Pearson Education.
- Lunn, J. (2017). Geography: A Beginner's Guide. One world Publications.
- Matthews, J. A., & Herbert, D. T. (2015). Geography: A Very Short Introduction. Oxford University Press.
- McKnight, T. L., & Hess, D. (2013). Physical Geography: A Landscape Appreciation. Prentice Hall.
- Perpillou A (1977). Human Geography, Longman Press, London.
- Rubenstein, J. M. (2017). The Cultural Landscape: An Introduction to Human Geography. Pearson Education.
- Savindra Singh (2015). Environmental Geography, Pravalika Publication, Allahabad
- Strahler, A., & Strahler, A. H. (2016). Introduction to Physical Geography. John Wiley & Sons.
- Waugh, D. (2011). Geography: An Integrated Approach. Nelson Thornes.

Course Outcomes:

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

- Analyse the historical roots of geography and its basic concepts.
- **Identify** the inter-disciplinary, intra-disciplinary, and multi-disciplinary nature of Geography
- **Apply** the five themes of geography to analyse real-world issues and events.
- **Examine** the evolution of Geography from ancient to modern times and the contemporary approaches in Geography.
- Understand the Earth and its spatial relations to Universe, galaxies, solar system, and the positions of celestial bodies
- **Evaluate** the geological time scale and its significance in the study of the Earth's history and evolution.

Course Code: GOG-111

Title of the Course: Geography of Sustainable Development

Number of Credits: 4
Effective from AY: 2023-24

Effective from AY: 2023-24					
Pre-requisites for	Nil				
the Course:					
Course	This course provides an overview of sustainable development from a				
Objectives:	geographical perspective. It covers key concepts and themes in sustainable				
	development, such as economic growth, environmental protection, social				
	equity, and political governance. The course also examines the challenges and				
	opportunities of sustainable development in different regions and countries,				
	and the role of geography in promoting sustainable development.				
Content:	Introduction to Sustainable Development	15 Hours			
	Definition and history of sustainable development				
	Key principles and concepts of sustainable development				
	 Sustainability challenges and opportunities 				
	The Millennium Development Goals				
	 Sustainable Development Goals: National Strategies and 				
	International Experiences				
	Geography and Sustainable Development	15 Hours			
	Geographical perspectives on sustainable development				
	Spatial analysis and sustainable development				
	 Regional and local approaches to sustainable development 				
	Economic Dimension of Sustainable Development	15 Hours			
	Economic growth and development				
	 Sustainable economic models and strategies 				
	Globalization and sustainable development				
	Environmental Dimension of Sustainable Development				
	Environmental protection and conservation				
	Natural resource management and sustainability				
	Climate change and sustainable development				
	Social Dimension of Sustainable Development	15 Hours			
	Social equity and justice				
	Poverty and inequality				
	Health, education, and human development				
	Political Dimension of Sustainable Development				
	Governance and institutions				
	Participatory democracy and citizen engagement				
	 International cooperation and sustainable development 				
Pedagogy:	Lectures, Group Discussions, Student Seminars, Presentations,	Case Studies,			
	Assignments, Blended learning, Gamification, Problem-solving	approach			
	through logic, Experiential learning, Discussion-based teaching,				
	Brainstorming, Fieldwork and outdoor learning, Flipped classroom pedagogy,				
	Art Integrated Learning, Cutting Edge, and Cooperative Learning Strategies.				
References/	 Agyeman, Julian, Robert D. Bullard and Bob Evans (Eds.) (200 	03) Just			
Readings:	Sustainabilities: Development in an Unequal World. London: Earthscan.				
	(Introduction and conclusion.).				
	(microduction and conclusion.).				

Ayers, Jessica and David Dodman (2010) "Climate change adaptation and development I: the state of the debate". Progress in Development Studies 10 (2): 161-168. Baker, Susan (2006) Sustainable Development. Milton Park, Abingdon, Oxon; New York, N.Y.: Routledge. (Chapter 2, "The concept of sustainable development"). Biermann, F., & Pattberg, P. (Eds.). (2012). Global environmental governance reconsidered. MIT Press. Brosius, Peter (1997) "Endangered forest, endangered people: Environmentalist representations of indigenous knowledge", Human Ecology 25: 47-69. Lohman, Larry (2003) "Re-imagining the population debate". Corner House Briefing 28. Martínez-Alier, Joan et al (2010) "Sustainable de-growth: Mapping the context, criticisms and future prospects of an emergent paradigm" Ecological Economics 69: 1741-1747. Merchant, Carolyn (Ed.) (1994) Ecology. Atlantic Highlands, N.J: Humanities Press. (Introduction, pp 1-25.) Osorio, Leonardo et al (2005) "Debates on sustainable development: towards a holistic view of reality". Environment, Development and Sustainability 7: 501-518. 9. Robbins, Paul (2004) Political Ecology: A Critical Introduction. Blackwell Publishing Sachs, J. (2015). The age of sustainable development. Columbia University Press. United Nations Development Programme. (2019). Human Development Report 2019: Beyond income, beyond averages, beyond today: Inequalities in human development in the 21st century. UNDP. By the end of this course, students will be able to: Course Outcomes: **Understand** the concept and principles of sustainable development Analyze the economic, environmental, and social dimensions of sustainable development **Examine** the role of geography in sustainable development **Evaluate** the challenges and opportunities of sustainable development in different regions and countries

Develop critical thinking and analytical skills to address sustainability issues

Course Code: GOG-131

Title of the Course: Astronomical Geography

Number of Credits: 3
Effective from AY: 2023-24

Pre-requisites for	Nil	
the Course:		
Course Objectives:	Astronomical Geography is an introductory course that comprehensive overview of the science of astronomy in relation to the course covers the historical development of astronomy coordinates and time, the electromagnetic spectrum, is spectroscopy, the Solar System, stars and stellar evolution, cosmology, as well as special topics such as exoplanets, dark energy and gravitational waves. Throughout the course, stude opportunities to engage in hands-on activities and observations	my, celestial maging and galaxies and matter, dark nts will have
Content:	sky. Introduction to Astronomy	15 Hours
Content.	 What is astronomy? Relationship of Astronomy with Geography Historical development of astronomy with relation to Geography The Solar System The Sun and its properties The planets and their properties Dwarf planets, asteroids, comets and constellations 	13 Hours
	Stars and Stellar Evolution	15 Hours
	 Types of stars Stellar properties and life cycle Star clusters and their properties Galaxies and Cosmology Types of galaxies Formation and evolution of galaxies The Big Bang and the expanding universe Exoplanets and the search for life Dark matter and dark energy 	
	 Introduction to the night sky Celestial coordinates and time Observing the Sky: The naked eye and telescopes during Summer and Winter seasons Field Diary on Sky Observations 	15 Hours
Pedagogy:	Lectures, Group Discussions, Student Seminars, Presentations, Cast Assignments, Blended learning, Gamification, Problem-solving app through logic, Experiential learning, Discussion-based teaching, Br Fieldwork and outdoor learning, Flipped classroom pedagogy, Art Learning, Cutting Edge, and Cooperative Learning Strategies.	oroach ainstorming,
References/	 Hawking, Stephen. A Brief History of Time. Bantam Books, 1998 	3.
Readings:	 Sagan, Carl. Cosmos. Random House, 1980. Greene, Brian. The Elegant Universe. Vintage Books, 2000. Rey, H.A. The Stars: A New Way to See Them. Houghton Mifflin Tyson, Neil deGrasse. Astrophysics for People in a Hurry. W.W. I Company, 2017. 	

- Greene, Brian. The Fabric of the Cosmos. Vintage Books, 2004.
- Kuhn, Thomas S. The Structure of Scientific Revolutions. University of Chicago Press, 1962.
- Tyson, Neil deGrasse. Death by Black Hole: And Other Cosmic Quandaries. W.W. Norton & Company, 2007.
- Kaku, Michio. The Physics of the Impossible. Doubleday, 2008.
- Hawking, Stephen. The Universe in a Nutshell. Bantam Books, 2001. Online Resources:
- NASA. "Astronomy Picture of the Day." NASA, https://apod.nasa.gov/apod/astropix.html.
- Sky & Telescope Magazine. Sky & Telescope Magazine, https://skyandtelescope.org/.
- Space.com. Space.com, https://www.space.com/.
- Astronomy Magazine. Astronomy Magazine, https://astronomy.com/.
- Hubble Space Telescope. Hubble Space Telescope, https://www.spacetelescope.org/.
- European Space Agency. European Space Agency, https://www.esa.int/.
- American Astronomical Society. American Astronomical Society, https://aas.org/.
- The Virtual Telescope Project. The Virtual Telescope Project, https://www.virtualtelescope.eu/.
- Stellarium. Stellarium, https://stellarium.org/.

Slooh. Slooh, https://www.slooh.com/.

Course Outcomes:

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

- Define and describe fundamental concepts in astronomy such as celestial coordinates, electromagnetic spectrum, types of stars, types of galaxies, and the Big Bang theory
- Identify and observe celestial objects and events, including planets, stars, and constellations
- Explain the properties and behavior of objects in our Solar System, including the Sun, planets, asteroids, and comets
- Describe the life cycle of stars, their properties and classification, and the role of star clusters in the evolution of the universe
- Explain the formation, evolution, and properties of galaxies, and their role in the structure of the universe
- Discuss the methods and findings of exoplanet research and the search for life beyond our Solar System
- Understand the role of dark matter, dark energy, and gravitational waves in our understanding of the universe.

Course Code: GOG-141

Title of the Course: Elements of Environmental Impact Assessment (EIA)

Number of Credits: 1+2=3 Effective from AY: 2023-24

Prerequisites for	Nil	
the course:		
Objectives:	The course provides an introduction to Environmental Impact Assessment (EIA) processes and procedures. It covers the principles and concepts of EIA, including the identification of potential environmental impacts, the evaluation of their significance, and the formulation of mitigation measures.	
Contents:	 Introduction to Environmental Impact Assessment Definition, principles, and objectives of EIA Types of EIA (screening, scoping, baseline study, impact assessment, mitigation, monitoring, and auditing) International frameworks and conventions (e.g., NEPA, SEA, EIA Directive, Aarhus Convention) EIA Process The EIA process and its stages (initiation, screening, scoping, impact assessment, mitigation, review, and decision-making) Key stakeholders and their roles (proponent, government agencies, public, NGOs, experts) Examples of EIA process in different sectors (e.g., energy, mining, infrastructure) Legal and Institutional Frameworks National and international laws and regulations governing EIA 	15 Hours
	 Practical Component 1: Quality assessment of soil using field kit: pH and Organic Carbon and interpretation of the data. Interpretation of air quality using data from Goa Pollution Control Board Preparation of the report 	30 Hours
	 Practical Component 2: Preparation of questionnaire for perception survey on environmental problems. Preparation of check-list for Environmental Impact Assessment of an urban / industrial project Survey to be carried out of any urban or industrial project. Tabulation of the data Structure and contents of an EIA report Preparation of the report Review and assessment of an EIA report 	30 Hours
Pedagogy:	Lectures, Group Discussions, Student Seminars, Presentations, Case Studies, Assignments, Blended learning, Gamification, Problem-solving approach through logic, Experiential learning, Discussion-based teaching, Brainstorming, Fieldwork and outdoor learning, Flipped classroom pedagogy, Art	

	Integrated Learning, Cutting Edge, and Cooperative Learning Strategies.	
References/Readin gs	 Anjaneyulu, Y., & Reddy, K. R. K. (2017). Environmental impact assessment: Methodologies and applications. Discovery Publishing House. Canter, L. W. (2017). Environmental impact assessment (4th ed.). CRC Press. Glasson, J., Therivel, R., & Chadwick, A. (2012). Introduction to environmental impact assessment (4th ed.). Routledge. Krishnamurthy, C. V. (2015). Environmental impact assessment: Principles and procedures. SAGE Publications India. Lee, N., Colley, M., & Dale, P. (2006). Environmental assessment in practice. Routledge. Pandey, G. N., & Sharma, B. K. (2012). Environmental impact assessment in India. TERI Press. Petts, J. (2017). Handbook of environmental impact assessment: A guide to best professional practices. Oxford University Press. Ross, S., & Morrison-Saunders, A. (2014). Environmental impact assessment and sustainability assessment: Towards a unified approach. Edward Elgar Publishing. Wood, C. (2003). Environmental impact assessment: a comparative review (2nd ed.). Prentice Hall. Zafar, S. M. (2005). Environmental impact assessment: Theory and practice. A. P. H. Publishing Corporation. 	
CourseOutcomes:	Upon completion of the course, students will be able to:Understand the principles and concepts of EIA	
Outcomes.	Identify and evaluate potential environmental impacts	
	Understand the legal and institutional frameworks	
	governing EIA	
	Apply EIA methodologies to real-world projects	

Assessment and Evaluation of the Course:

The practical component (2 credit)of 50 marks will be assessed in the following manner:

<u>Intra Semester Assessment:</u>

ISA shall have 10 marks.

<u>Semester End Assesment:</u>

• Maintenance of Practical Record/Journal: 5 marks

Report Submission: 10 MarksViva Voce Examination: 5 marks

• Written examination based on the practical syllabus: 20 marks

Course Code: GOG-113

Title of the Course: Application of Disaster Risk Reduction and Mitigation

Number of Credits: 4
Effective from AY: 2023-24

Pre-requisites for	Nil		
the Course:	IVII		
Course Objectives:	The main objective of this paper is to orient the students to apply the fundamental knowledge of disaster risk reduction, management and mitigation in a geographical perspective. It is to develop preparedness amongst the students as the catalyst in the Society.		
Content:	· · · · · · · · · · · · · · · · · · ·		
	Climate Change: Understanding Climate Change; Green House Gases and Global Warming; Global Climatic Assessment- IPCC	15 Hours	
	Impact of Climate Change: Agriculture and Water; Flora and Fauna; Human Health Adaptation and Mitigation: Global Initiatives with Particular Reference to South Asia. National Action Plan on Climate Change; Local Institutions (Urban Local Bodies, Panchayats)	15 Hours	
	Working with the Local Disaster Management Committee in assessing local disasters. Participation in Disaster Drill or Mock Drill: National Disaster Relief Force (NDRF)/ State Disaster Relief Force (SDRF)/ Emergency and Fire Extinguishing Services/Local Taluka Authorities. Preparing a Disaster Management Plan for College/Village/Panchayat/Taluka, or any other place with the help of Emergency and Fire Extinguishing Services or in-house expertise	15 Hour	
Pedagogy:	Lectures, Group Discussions, Student Seminars, Presentations, Case Studies, Assignments, Blended learning, Gamification, Problem-solving approach through logic, Experiential learning, Discussion-based teaching, Brainstorming, Fieldwork and outdoor learning, Flipped classroom pedagogy, Art Integrated Learning, Cutting Edge, and Cooperative Learning Strategies.		
References/ Readings:	 Government of India. (1997) Vulnerability Atlas of India. New Building Materials & Technology Promotion Council, Ministry Development, Government of India. IPCC (2014) Climate Change 2014: Impacts, Adaptation, and New Action and Sectoral Aspects. Contribution of Working the Fifth Assessment Report of the Intergovernmental Panel Change Cambridge University Press, Cambridge, United Kingo New York, NY, USA. 	of Urban /ulnerability. Group II to on Climate	

- Kapur, A. (2010) Vulnerable India: A Geographical Study of Disasters,
 Sage Publication, New Delhi.
- Modh, S. (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disasters, Macmillan, Delhi.
- Singh, R.B. (2005) Risk Assessment and Vulnerability Analysis, IGNOU,
 New Delhi. Chapter 1, 2 and 3
- Singh, R. B. (ed.), (2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publications, New Delhi.
- Sinha, A. (2001). Disaster Management: Lessons Drawn and Strategies for Future, New United Press, New Delhi.
- Stoltman, J.P. et al. (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht.
- Singh Jagbir (2007) "Disaster Management Future Challenges and Oppurtunities", 2007. Publisher- I.K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India (www.ikbooks.com).

Course Outcomes:

Upon completing this course, students will be able to:

- Understand the threats posed by natural and human-induced disasters, and the importance of disaster risk reduction and mitigation.
- Develop mental preparedness for disasters, and understand the importance of logistics, coordination, and warning signals in disaster management.
- **Analyze** the impact of climate change on agriculture, water, flora, and fauna, and human health.
- Understand the concepts of adaptation and mitigation in the context of global initiatives, with particular reference to South Asia.
- Analyze the National Action Plan on Climate Change, and the role of local institutions such as urban local bodies and panchayats in disaster risk reduction and mitigation.
- Apply their knowledge and skills to prepare a mini project report based on a field-based case study of a disaster, and develop a preparedness plan for their respective college or locality.
 - Overall, the course will equip students with the knowledge and skills to understand the threats posed by disasters and climate change, and to develop effective strategies for disaster risk reduction and mitigation.

Course Code: GOG-114

Title of the Course: Fundamentals of Tourism Geography

Number of Credits: 4
Effective from AY: 2023-24

Pre-requisites for	Nil				
the Course:					
Course Objectives:	This course provides an overview of tourism geography, including the history of tourism, tourist behavior, tourism planning and development, and the				
impacts of tourism on destinations. Students will explore the geog					
	different types of tourism, such as ecotourism, cultural tourism, advetourism, and beach tourism. The course will also cover issues related				
sustainable tourism, such as ecotourism certification, sustainab					
	planning, and community-based tourism.				
Content:	Introduction to Tourism Geography	15 Hours			
	Definition of tourism geography				
	Significance of tourism geography				
	Historical development of tourism				
	Tourist behaviour				
	Geography of Different Types of Tourism	15 Hours			
	Ecotourism				
	Cultural tourism				
	Adventure tourism				
	Beach tourism				
	Community-based tourism				
	Medical Tourism				
	Pilgrimage Tourism				
	Impacts of Tourism on Destinations	15 Hours			
	Economic impacts				
	Social impacts				
	Cultural impacts				
	Environmental impacts				
	Tourism Planning and Development	15 Hours			
	 Tourism planning process 				
	Sustainable tourism planning				
	Stakeholder analysis				
	Sustainable tourism development				
	Ecotourism certification				
	Field Visit and Report (within the State)				
Pedagogy:	Lectures, Group Discussions, Student Seminars, Presentations,	•			
	Assignments, Blended learning, Gamification, Problem-solving approach				
	through logic, Experiential learning, Discussion-based teaching,				
	Brainstorming, Fieldwork and outdoor learning, Flipped classro				
	Art Integrated Learning, Cutting Edge, and Cooperative Learning Strategies.				
References/	 Buckley, R. (2012). Sustainable Tourism: Research and Reali 	ty. Annals of			
Readings:	Tourism Research, 39(2), 528-546.				

- Hall, C. M., & Page, S. J. (2014). The Geography of Tourism and Recreation: Environment, Place, and Space. Routledge.
- Holden, A. (2013). Environment and Tourism. Routledge.
- Lew, A. A., & Cheer, J. M. (1999). Tourism in world cities: Theoretical perspectives (Vol. 2). Psychology Press.
- Page, S. J., & Connell, J. (2014). Tourism: A modern synthesis. Cengage Learning.
- Ritchie, J. R. B., & Crouch, G. I. (2003). The competitive destination: A sustainable tourism perspective. CABI.
- Ryan, C. (2017). Tourism and Leisure: Local Communities and Sustainable Futures. Channel View Publications.
- Tribe, J. (2017). The economics of recreation, leisure and tourism.
 Routledge.
- UNWTO. (2019). UNWTO World Tourism Barometer, Volume 17, January 2019. United Nations World Tourism Organization.
- Weaver, D. B., & Lawton, L. J. (2014). Tourism Management. John Wiley & Sons.
- Weaver, D. B. (2011). Sustainable tourism: Theory and practice. Channel View Publications.
- Williams, A. M., & Hall, C. M. (2002). Tourism and migration: New relationships between production and consumption. Ashgate Publishing, Ltd.

Course Outcomes:

Upon completing this course, students will be able to:

- To introduce students to the concept of tourism geography and its significance in the study of tourism.
- To provide an overview of the history of tourism and tourist behavior.
- To explore the geography of different types of tourism, such as ecotourism, cultural tourism, adventure tourism, and beach tourism.
- To understand the process of tourism planning and development, including the role of stakeholders and the challenges of sustainable tourism.
- To analyze the impacts of tourism on destinations, including economic, social, cultural, and environmental impacts.
- To examine issues related to sustainable tourism, such as ecotourism certification, sustainable tourism planning, and community-based tourism.

Course Code: GOG-132

Title of the Course: Major World Environments

Number of Credits: 3
Effective from AY: 2023-24

Effective from AY: 202	23-24			
Pre-requisites for	Nil			
the Course:				
Course Objectives:				
Students will examine the physical and biological characteristics of each				
	environment, the adaptations of organisms to these environments, and the			
	human impact on these environments. The course also covers conservation			
	strategies and policies aimed at mitigating human impact on the	se		
	environments.			
Content:	Introduction to Terrestrial Environments	15 Hours		
	Overview of terrestrial environments			
	Physical and biological characteristics of terrestrial			
	environments			
	Ecosystem services provided by terrestrial environments			
	Equatorial Region			
	Monsoon Region			
	Tropical Grasslands Region (Savannas)			
	With reference to			
	Geographical Location and Conditions			
	Physical and biological characteristics			
	Adaptations of organisms to equatorial regions			
	Human impact on the Region			
	Temperate Grasslands Region (Prairies)	15 Hours		
	Arctic Region			
	Hot Desert Region			
	Mediterranean Region			
	With reference to			
	Geographical Location and Conditions			
	Physical and biological characteristics			
	Adaptations of organisms to equatorial regions			
	Human impact on the Region			
	Conservation Strategies	15 Hours		
	Principles of conservation			
	Strategies for sustainable management of natural resources			
	Contemporary Environmental Issues			
	Global environmental change			
Pedagogy:	Lectures, Group Discussions, Student Seminars, Presentations, C			
	Assignments, Blended learning, Gamification, Problem-solving a	pproach		
	through logic, Experiential learning, Discussion-based teaching,			
	Brainstorming, Fieldwork and outdoor learning, Flipped classroo			
	Art Integrated Learning, Cutting Edge, and Cooperative Learning	Strategies.		

References/ Readings:

- Bodenhamer, D. J., Corrigan, J., & Harris, T. M. (Eds.). (2010). The spatial humanities: GIS and the future of humanities scholarship. Indiana University Press.
- Chapman, J. L. (2014). Biomes and ecosystems: An encyclopedia.
 Greenwood Publishing Group.
- Cloke, P., Crang, P., & Goodwin, M. (2014). Introducing Human Geographies. Routledge.
- Cohen, S., & Huffman, M. (2019). The Fundamentals of Human Geography: A Pre-Reader. Routledge.
- Daniels, P., Bradshaw, M., Shaw, D., & Sidaway, J. (2016). An Introduction to Human Geography. Pearson.
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 People, places, and global issues. Wiley.
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Course Outcomes:

Upon completion of this course, students will be able to:

- Describe the physical and biological characteristics of major terrestrial environments, including equatorial, tropical grasslands, temperate grasslands, arctic, hot desert, Mediterranean, and other regions.
- **Understand** the adaptations of organisms to different environments and how they affect ecological processes.
- Analyze the impact of human activities on these environments, including land use changes, pollution, and climate change.
- **Evaluate** conservation strategies and policies aimed at mitigating human impact on these environments.
- Apply critical thinking and problem-solving skills to contemporary environmental issues.

Course Code: GOG-142

Title of the Course: Introduction to the Principles and Practices of Land Use Planning and

Management

Number of Credits: 1+2=3 Effective from AY: 2023-24

Effective from AY: 202	23-24	1
Prerequisites for	Nil	
the course:		
Objectives:	This course is an introduction to the principles and practices of land use planning and management. The course provides an overview of the land use planning process, including goal and objective setting, analysis of alternatives, and selection of appropriate land use strategies. The course also covers the tools and techniques used in land use planning, such as mapping and GIS, zoning, and land use regulations.	
Contents:	Introduction to Land Use Planning and Management Overview of the course Definition of land use planning and management Historical and contemporary perspectives on land use Factors Influencing Land Use Social, economic, environmental, and political considerations Land use patterns and trends Land Use Planning Process Goals and objectives Analysis of alternatives Selection of appropriate land use strategies Land Use Planning Tools and Techniques Mapping and GIS Zoning and land use regulations	15 Hours
	Exercises using Q-GIS or any other Open Source Software for Land Use Planning and Management: Creating a land use map: Use Q-GIS or any other Open Source Software to create a land use map of a specific area. Collect data on the various land use types in the area and classify them accordingly. Use different colors to represent each land use type and create a map legend. Overlay analysis: Conduct an overlay analysis using Q-GIS or any other Open Source Software to identify areas of conflict between land uses. For example, overlaying a map of wetlands with a map of proposed development areas to identify areas of potential environmental impact. Suitability analysis: Use Q-GIS or any other Open Source Software to conduct a suitability analysis for a specific land use, such as	30 Hours

	analysis to produce a suitability man	
	analysis to produce a suitability map. Exercises using Q-GIS or any other Open Source Software for Land	
	Use Planning and Management:	
	Land use change analysis: Use Q-GIS or any other Open Source Software to analyze changes in land use over time. Compare land use maps from different periods and identify trends and patterns in land use change. Use the results to inform land use planning and management decisions.	
	Zoning map creation: Use Q-GIS or any other Open Source Software to create a zoning map for a specific area. Identify different zones based on land use and create a map legend to represent each zone. Use the map to inform land use planning and management decisions.	30 Hours
	Select a place of your choice and employ the aforementioned exercises using Q-GIS or any other open-source software. Generate a report based on your findings and submit.	
	Lectures, Group Discussions, Student Seminars, Presentations, Case Studies, Assignments, Blended learning, Gamification, Problem-solving approach through logic, Experiential learning, Discussion-based teaching, Brainstorming, Fieldwork and outdoor learning, Flipped classroom pedagogy, Art Integrated Learning, Cutting Edge, and Cooperative Learning Strategies and Computer Assisted Teaching.	
References/Readin gs	government planning. International City/County Management Association. Cervero, R., & Kockelman, K. (1997). Travel demand and the 3Ds: Density, diversity, and design. Transportation Research Part D: Transport and Environment, 2(3), 199-219. Kadian K. S. and P. C. Pande (2017). Land Use Planning and Management: Theory, Principles and Practice. New Delhi: PHI Learning Private Limited. Kumar Mahesh (2015). Land Use Planning and Sustainable Development. New Delhi: Sage Publications India. Rajagopal M. R. and S. Suresh Kumar (2016). Land Use Planning and Management: An Overview. Chennai: Springer India. Singh Avadhesh Kumar and Sudhir Kumar Singh (2018). Land Use Planning and Management. New Delhi: Concept Publishing Company. Sharma Sanjay (2019). Land Use Planning: Emerging Land Use Issues and Challenges. New Delhi: Atlantic Publishers and Distributors.	

- Understand the basic principles and practices of land use planning and management
- Identify the various factors that influence land use, including social, economic, environmental, and political considerations
- Analyze the basic land use planning process, including the identification of goals and objectives, the analysis of alternatives, and the selection of appropriate land use strategies
- Apply basic land use planning tools and techniques, such as mapping and GIS, zoning, and land use regulations

Assessment and Evaluation of the Course:

The practical component (2 credit) of 50 marks will be assessed in the following manner:

Intra Semester Assessment:

ISA shall have 10 marks.

Semester End Assesment:

Maintenance of Practical Record/Journal: 5 marks

• Report Submission : 10 Marks

• Viva Voce Examination: 5 marks

Written examination based on the practical syllabus: 20 marks

Multiple Exit at Second Semester after completing 4 credit Internship with UG Certificate

The Geography program offers exit options for students after Semester II. Students who choose to exit the program after Semester II will be required to complete an internship during the summer vacation for 4 credits.

The internship program is designed to provide students with practical experience in the field of Geography and to prepare them for the challenges of the professional world. Through the internship, students will have the opportunity to develop professional skills such as communication, teamwork, problem solving, and decision-making.

The internship program is an essential component of the curriculum for students who wish to exit the program after Semester II. It is a valuable opportunity for students to gain practical experience, build professional networks, and enhance their employability. The program is also an opportunity for students to apply the theoretical knowledge they have gained in a real-world setting, and to gain a deeper understanding of the practical challenges and opportunities in the field of Geography.

The faculty will provide students with guidance and support throughout the internship program, and will assist them in identifying suitable organizations and projects. Once the internship is completed, the candidate must submit a Certificate of Completion from the organization, Internship Report, and give a presentation to the guiding teacher. The guiding teacher will evaluate the internship report and presentation for 4 credits.