

M.A./M.Sc. (Two Years Degree Program)	
Fourth Semester	
Subject-Geography	
Code of the Course	GEG9113T
Title of the Course	BIO-GEOGRAPHY
Qualification Level of the Course	NHEQF Level 6.5
Credit of the course	4
Type of the course	Discipline Specific Elective Course in Geography
Delivery type of the Course	Lecture (40+20). The 60 hours for content delivery and 20 hours of diagnostic assessment, formative assessment, and subject/class activity, problem solving.
Prerequisites	This course on the Bio-Geography assumes' that the students are familiar with the basic knowledge of vegetation, wild life and environmental issues. (Graduation level awareness).
Co-requisites	Basic knowledge of Geography
Objectives of the course	<ul style="list-style-type: none"> • To critically understand the concept of Nature, Ecology, and Development of Plants and Animals. • To understand the dispersal and migration of animals. • To emphasize on conservation and management of the environment (wildlife and forest).
Learning outcomes	<ul style="list-style-type: none"> • Learn the concept of Nature, Ecology, and Development of Plants and Animals. • Understand the distribution of plants and animals. • Know about conservation and management of wildlife and forests.
Syllabus	
UNIT - I	<p>Introduction: Meaning, Nature and scope, approaches of Bio-Geography, Recent trends and development in Bio-Geography.</p> <p>परिचय: जैव-भूगोल का अर्थ, प्रकृति और विषय-क्षेत्र, उपागम, जैव-भूगोल में नवीनतम प्रवृत्ति और विकास।</p>

<p>UNIT - II</p>	<p>Worldwide pattern and distribution of Plants, Ecological classification of plants, factors affecting the distribution of plants, phytogeographical regions of India.</p> <p>पौधों का वैश्विक प्रतिरूप और वितरण, पौधों का पारिस्थितिक वर्गीकरण, पौधों के वितरण को प्रभावित करने वाले कारक, भारत के पादप-भौगोलिक क्षेत्र।</p>
<p>UNIT - III</p>	<p>Pattern and distribution of Animals worldwide, Zoo-geographical regions, dispersal and migration of animals, barriers, and distinctions.</p> <p>जंतुओं का वैश्विक प्रतिरूप और वितरण, जीव-भौगोलिक प्रदेश, जंतुओं का विसरण और प्रवास, बाधाएँ और विशिष्टता।</p>
<p>UNIT - IV</p>	<p>Ecology, Ecological balance, Bio-geochemical cycles, ecological succession - mono-climax and Poly- climax.</p> <p>पारिस्थितिकी, पारिस्थितिकी संतुलन, जैव भूरासायनिक चक्र, पारिस्थितिक अनुक्रम- एकल चरम संकल्पना और बहुल चरम संकल्पना।</p>
<p>UNIT - V</p>	<p>Conservation and Management of forest resources and wildlife, the effect of climate change and natural hazards on biological diversity, Biodiversity in India, legislation, and institutions.</p> <p>वन संसाधनों और वन्य जीवों का संरक्षण और प्रबंधन, जलवायु परिवर्तन और प्राकृतिक आपदा का जैविक विविधता पर प्रभाव, भारत में जैव विविधता, कानून और संस्थान।</p>
<p>Suggested Readings</p>	
<p>Text Books</p>	<ul style="list-style-type: none"> • Cox, C.B. and Moore, P.D., (1993): Biogeography: An Ecological and Evolutionary Approach, 5th Edition. Blackwell, Oxford. • Dansereau, P., (1957): Biogeography: An Ecological Perspective, Ronald Press, New York. • Good, R., (1953): Geography of the Flowering Plants, Longman, Green & Co. London. • Haggett, R.J., (1998): Fundamentals of Biogeography, Routledge, London. • Illies, J., (1974): Introduction to Zoogeography, translated by W.D. Williams, Macmillan, London. • Jeffries, M.J., (1997): Biodiversity and Conservation, Routledge, London. • Pielou, E.C., (1979): Biogeography, John Wiley and Sons, New York. • Pimm, S.L., (1991): Balance of Nature-Ecological Issues in the Conservation of Species and Communities. University Press, Chicago. • Shimvell, D.W, (1971): Description and Classification of Vegetation, University of Washington Press, Seattle • Walter, H., (1993): Vegetation of the Earth in Relation to Climate and the Eco physiological Conditions, English University Press Limited, London. • Wilson, E.O., (1992): Diversity of Life, Massachusetts Harvard University Press. Cambridge. • जीवमंडल एवं जैव-भूगोल (2021) - डॉ. राजेश कुमार मिश्रा, जैन प्रकाशन मंदिर • जैव-भूगोल(2019) - डॉ. संतोष कुमार दांगी, साहित्यिक भवन प्रकाशन-आगरा • जैव-भूगोल (2015) - डॉ. सर्विंदर सिंह, इलाहाबाद प्रकाशन

<p>Reference Books</p>	<ul style="list-style-type: none"> • Anjuneyuly, Y. 2004: Introduction to Environmental Science. B.S. Publications, Hyderabad • Anjuneyuly, Y. 2002: Environmental Impact Assessment Methodologies. B.S. Publications, Hyderabad • Clarke, J.I. Curson, P. Kayastha, S.L. and Nag, P. (eds.) 1991: Population and Disaster. Basil Blackwell, U.S.A. • Cox, C.B. Moore, P.D.-2010: Biogeography- An Ecological and Evolutionary Approach John Wiley and Sons, U.S.A. • Huggett, R.J. 1998: Fundamental of Biogeography. Routledge, London, • Ladle, R.J. And Whittaker, R.J. 2011: Conservation Biology. Blackwell Publications Co., USA. • Mathur, H.S. 1988: Essentials of Biogeography. Pointer Publishers, Jaipur. • Macdonald, Geen, 2002: Biogeography: Introduction to Space-Time and Life. John Wiley, New York. • Odum, E.P. 1975: Ecology, Rowman, and Littlefield. Lanhan U.S.A. • Robinson, H. 1982: Biogeography. Else, Mc. Donald, and Evans London. • Singh, A.K., Kamra, V.K. and Singh, J. 1986: Forest Resource: Economy and Environment, Concept Publishing Company, New Delhi.
<p>Suggested E-resources</p>	<ul style="list-style-type: none"> • https://biologydictionary.net/biogeography/ • https://www.nature.com/subjects/biogeography