



Government of West Bengal
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1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

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Officer-in-Charge
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Mejia-722143 Dist-Bankura, W.B.

1.3.1 Portion of the course curricula containing crosscutting issues relevant to professional ethics, gender, human values, environment and sustainability and institutional integration [CC - Core Course; DSE – Department Specific Elective; GE- Generic Elective; AECC – Ability Enhancement Compulsory Course]

Issues	Subject	Semester: Course Title (Course Type)	Topics/Subtopic
Professional Ethics			None
Gender	Bengali	<u>Sem-II</u> : Abashyik Bangla (AECC-2)	<u>Unit-3</u> : Stri Jatir Abanati – Begum Rokeya
		<u>Sem-III</u> : Jibanisahitya, patra Sahitya, Bhraman Sahitya (AHBNG-302C-6)	<u>Unit-1</u> : Amar Jiban -Rassundari Devi
		<u>Sem-III</u> : Unish Shataker Kabya O Natak (AHBNG-303C-7)	<u>Unit-1</u> : Birangana Kabya- Madhusudan Dutta (Dushmanter Prati Shakuntala, Somer Prati Tara, Dwarakanather Prati Rukmini, Dashatather Prati Kekayi, Lakshmaner Prati Shurpanakha, Niladhawajer Prati Jana)
		<u>Sem-IV</u> : Rabindrasahitya (AHBNG-404-GE-4)	<u>Unit-2</u> Galpaguchchha (Strir Patra)
		<u>Sem-VI</u> : Adhunik Kabita (AHBNG-604-DSE-4)	<u>Unit-4</u> Kabita Sinhar Nirbachita Kabita (Ishwarke Eve, Prithibi Dekhena, Kono ek Kupamonduker Prati, Shamibrikke Ramani he eka, Ichchhamayir Ichchha hole, Harina Bairi)
		<u>Sem-VI</u> : Bangladesher Sahitya (AHBNG-604-DSE-4)	<u>Unit-3</u> Shahid Kadrir Kabita (Alokita Ganikabrinda)
	English	<u>Sem-III</u> : Contemporary India: Women and Empowerment (GE)	<u>Unit I</u> : Concepts: Social Construction of Gender, Masculinity and Femininity, History of Women's Movements in India (Pre-independence, post-independence) (Women, Nationalism, Partition) <u>Unit II</u> : Begum Rokeya Sakhawat Hossain: <i>Sultana's Dream</i> <u>Unit III</u> : Aanchal Malhotra: The following excerpts from <i>Remnants of Separation</i> : "The Dialect of Stitches and Secrets", "Between This Side and That", Sudha Murthy: <i>Mahasweta</i>
		<u>Sem-III</u> : Contemporary India: Women and Empowerment (Programme Core Course)	<u>Unit I</u> : Concepts: Social Construction of Gender, Masculinity and Femininity, History of Women's Movements in India (Pre-independence, post-independence) (Women, Nationalism, Partition) <u>Unit II</u> : Begum Rokeya Sakhawat Hossain: <i>Sultana's Dream</i> <u>Unit III</u> : Amruta Patil: <i>Kari</i>
		<u>Sem-V</u> : Women's Writing (Honours Core Course)	<u>Unit I</u> : Emily Dickinson: "I cannot live with you", "Because I could not Stop for Death", Sylvia Plath: "Lady Lazarus", Eunice De Souza: "Advice to Women" <u>Unit II</u> : Charlotte Perkins Gilman: "The Yellow Wallpaper", Mahasweta Devi: "Draupadi", translated by Gayatri Chakraborty Spivak, Mary Wollstonecraft: A Vindication of the Rights of Women, Chap. I, pp. 11-

			19
	History	<u>Sem-V</u> : Women's Studies in India. (APHST-503 GE-1)	<u>Module-I</u> : Basic Concepts & Theories: Defining Gender and Sex; Patriarchy – Ideology & Practice; Relationship between Gender, Caste, Class, Religion & Politics; Masculinity and Femininity; Social Constructions of Gender. <u>Module-II</u> : Emergence of Women's Studies in India: Objectives, Importance and Evolution. <u>Module-III</u> : Gender & Social History: Family & Marriage; Women's Question in the 19th Century; Women's Movement in Colonial & Post-colonial India. <u>Module-IV</u> : Gender, Law & Politics: Constitution of India and Women; Laws of Marriage and Divorce; Property Laws; Violence against Women & Preventive Laws. <u>Module-V</u> : Gender, Development & Culture: Issues of Labour & Health; Access to Resources; Gender Audit.
		<u>Sem-VI</u> : Gender and Education in India (APHST-603 GE-1)	<u>Module-I</u> : Historiographical Trends. Concepts of Sex and Gender, Gender Stereotypes, Gender Bias. <u>Module-III</u> : Women & Education for females including Western Medical Education. <u>Module-V</u> : Contours of Female Literacy since 1950.
	Philosophy	<u>SEM-IV</u> [CBCS] SEC: Applied Ethics	Unit-2: Feminism
		<u>SEM-IV</u> [CBCS] Prog. SEC: Applied Ethics	Unit-2: Feminism
	Economics	<u>SEM-VI</u> : DSE 4.1 (UG/ECO/604/DSE-4)	Unit-B: Gender Issues and Development
Human Values	Philosophy	<u>SEM-III</u> [CBCS] Hons.: Western Ethics	Entire paper deals with nature and scope of ethics and moral values
		<u>SEM-IV</u> [CBCS] GE: Western Ethics	Entire paper deals with nature and scope of ethics and moral values
		<u>SEM-IV</u> [CBCS] SEC: Applied Ethics	<u>Unit-4</u> : Moral values of Life
		<u>SEM-IV</u> [CBCS] Prog.: Western Ethics	Entire paper deals with nature and scope of ethics and moral values
		<u>SEM-IV</u> [CBCS] Prog. SEC: Applied Ethics	<u>Unit-4</u> : Moral values of Life
Environment and Sustainability	--	<u>Sem-I</u> : Environmental Studies (AECC-1);	
	Bengali	<u>Sem-VI</u> Kathasahitya (Chhotogalpa) AHBNG-603-DSE-3	<u>Unit-3</u> Manik Bandyopadhyayer Nirbachita Galpa (Nadir Bidroho)
	Economics	<u>Sem- VI</u> (SH/ECO/603/DSE-3)	Environmental Economics
		<u>Sem- IV</u> (SH/ECO/404/GE-4)	Environmental Economics
	Geology	<u>Sem-IV</u> : Natural Hazards and Disaster Management (GE)	<u>Unit-2</u> : Types of Disaster: Natural and Man-made- cyclone, flood, landslide, land subsidence, fire, earthquake, tsunami and volcanic eruption

			<u>Unit-3</u> : Disaster Management, mitigation and preparedness
		<u>Sem-V</u> : Earth and Climate (DSE)	<u>Unit-5</u> : Monsoon
		<u>Sem-VI</u> : Oceanography and Marine Science (DSE)	<u>Unit-4</u> : Life in the Ocean – Marine life and the environment
		<u>Sem-VI</u> : Medical Geology (DSE)	<u>Unit-2</u> : Basic features of geological environments, Anthropogenic degradation of geological environments.
		<u>Sem-VI</u> : Urban Geology (DSE)	<u>Unit-5</u> : Urban Wastes and Treatment
Philosophy		<u>SEM-IV</u> [CBCS] SEC: Applied Ethics	Unit-3: Environmental Ethics
		<u>SEM-IV</u> [CBCS] Prog. SEC: Applied Ethics	Unit-3: Basic Concept of Environmental Ethics

1.3.1 Highlighted parts of the Syllabi of Bankura University, addressing crosscutting issues relevant to professional ethics, gender, human values, environment and sustainability [CC - Core Course; DSE – Department Specific Elective; GE- Generic Elective; AECC – Ability Enhancement Compulsory Course]



Bankura University

Environmental Studies (AECC-1)

CBCS w.e.f. 2017-18

BANKURA UNIVERSITY

CBCS SYLLABUS

Ability-Enhancement Compulsory Course (AECC)

COURSE TITLE: Environmental Studies

COURSE CODE: ACSHP/ 104/ AECC-1

Marks: 50 (40+10)

Credit: 04

**FOR ALL STREAMS OF UNDER GRADUATE HONOURS AND PROGRAM COURSES
(Arts, Science and Commerce)**

Unit 1: Introduction to Environmental Studies

- Multidisciplinary nature of environmental studies
- Definition, Nature, Scope and Importance of environmental studies
- Types and Components of environment
- Sustainable development

Unit 2: Ecosystems

- Concept of Ecology and Eco-system, Structure and Function of an Ecosystem
- Different types of ecosystem; Forest, Desert and Aquatic (Ponds and Oceans) Biomes
- Energy flow in the ecosystem, energy flow models
- Food chains, food webs and ecological pyramids
- Ecological Succession

Unit 3: Natural Resources: Renewable and Non-Renewable Resources

- Land resources: Land degradation, Landslides, Soil erosion
- Forest resources: Uses, types and importance, deforestation and its effects, Forest biodiversity and tribal population
- Water resources: Distribution of water on Earth; Use and over-exploitation of surface and ground water; conflicts over water (international & inter-state)
- Energy resources: Renewable and Non-renewable energy sources; Use of alternative energy Sources

Unit 4: Biodiversity and conservation

- Introduction – Definition: Levels of biological diversity: Genetics, Species and Eco-System Diversity, Biodiversity hot spots and mega biodiversity countries.
- Threats to biodiversity; Value (services) of biodiversity; man-wildlife conflicts, biological invasions
- Conservation of biodiversity: *In situ* and *Ex situ* conservation of biodiversity; Endangered and endemic species of India

Unit 5: Environmental Pollution

- Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution
- Nuclear hazards and human health risks.
- Solid waste management: Control measures of urban and industrial waste.
- Fireworks Pollution

Unit 6: Environmental Policies & Practices

- Climate change, global warming, ozone layer depletion, acid rain and its impacts on human communities and agriculture
- Environment Laws: Environment Protection Act, 1986; Air (Prevention & Control of Pollution) Act, 1981; Water (Prevention and control of Pollution) Act, 1972; Wildlife Protection Act, 1972;


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Forest Conservation Act, 1920, 1988; International agreements: Montreal protocols, 1987 and Kyoto protocols, 1997 and Convention on Biological Diversity (CBD)

- Tribal populations and rights.

Unit 7: Human Communities and the Environment

- Human population growth: Population Explosion, Impacts on environment, human health and welfare.
- Disaster management: floods, earthquake, cyclones and landslides.
- Environmental movements: Chipko, Silent valley
- Environmental ethics: Role of Indian and other religions and cultures in environmental Conservation
- Environment and human health: Concept of health and diseases (Vector Borne Diseases)
- Human Rights, Value Education, Role of Information Technology in Environment

Unit 8: Field Work (Project Work)

- Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc.
- Visit to a local polluted site-Urban/Rural/Industrial/Agricultural.
- Study of common plants, insects, birds and basic principles of identification
- Study of simple ecosystems-pond, river etc

Suggested Readings:

1. Carsen, R. 2002. Silent Spring, Houghton Mifflin, Harcourt.
2. Rao, M.N. & Datta A.K. 1987. Waste Water Treatment, Oxford and IBH Publishing Co. Pvt. Ltd.
3. Raven, P.H. Hassenzahl, D.M. & Berg L.R., 2012 Environment 8th Edition. John Wiley & Sons.
4. Singh, J.S. Singh, S.P. and Gupta, S.R. 2014. Ecology, Environmental Science and Conservation. S. Chand Publishing, New Delhi.
5. Agarwal, K.C. 2001 Environmental Biology, Nidi Publication Ltd. Bikaner.
6. Bharucha Erach, The Biodiversity Biology of India, Mapin Publishing Pvt. Ltd. Ahmedabad, India
7. Cunningham, W.P. Cooper, T.H. Gorhani, E. & Hepworth, M.T. 2001, Environmental Encyclopedia. Jaico Publ. House. Mumbai. 1196p.
8. Heywood, V. & Watson, R.T. 1995. Global Biodiversity Assessment. Cambridge University Press.
9. Jadhav, H. & Bhosale V.M. 1995. Environmental Protection and Laws, Himalaya Publishing House, Delhi
10. McKinney, M.L. & Schoch, R.M. 1996. Environmental Science systems & Solutions, Web enhanced edition.
11. Saha T.K. 2010. Ecology and Environmental Biology, Books and Allied (P) Ltd. Kolkata.
12. Santra S.C. 2005. Environmental Science, New Central Book Agency (P) Ltd. Kolkata.
13. Singh, S. 1991. Environmental Geography, Prayag Pustak Bhawan, Allahabad.
14. Roy, S. 2003. Environmental Science, Publishing Syndicate, Kolkata
15. Sharma, P. D. 2012. Ecology and Environment, Rastogi Publication
16. Dash, M. C. 2001. Fundamentals of Ecology, Tata McGraw-Hill Publishing Company Ltd
17. Arora, Mohan P. 2009. Ecology, Himalaya Publishing House
18. Saha T.K. 2010. Ecology and Environmental Biology, Books and Allied (P) Ltd. Kolkata.
19. Santra S.C. 2005. Environmental Science, New Central Book Agency (P) Ltd. Kolkata.
20. Environmental Studies—Prof S.V.S Rana.--Rastogi Publication.
21. Text book of Ecology: The Experimental Analysis of distribution & abundance--(Charles J. Krebs). Pearson Education.
22. Erach Bharucha, 2016. Text Book of Environmental Studies for Undergraduate Courses (Second Edition) for UGC. University Press.

Marks Division: 40 (Theory) + 10 (Project Work/Field Work/Internal) = 50 Marks

C.B.C.S. SYLLABUS
FOR
THREE YEARS UNDER-GRADUATE COURSE
B.A. HONOURS IN BENGALI
(w.e.f. 2022)



BANKURA UNIVERSITY
BANKURA
WEST BENGAL
PIN 722155

একক ৪ : অলঙ্কার – অলঙ্কার সম্পর্কিত সাধারণ আলোচনা, অলঙ্কার নির্ণয়, অনুপ্রাস, যমক, শ্লেষ, বত্রেণক্তি, উপমা, রূপক, উৎপ্রেক্ষা, নিশ্চয়, সন্দেহ, ব্যতিরেক, অতিশয়োক্তি, ব্যাজস্ততি, বিরোধভাস, বিভাবনা, বিশেষোক্তি, অসঙ্গতি।

AHBNG-203 GE-2 বাংলা সাহিত্যের ইতিহাস (উনিশ ও বিশ শতক)

(আর্থসামাজিক-রাজনৈতিক-সাংস্কৃতিক পটভূমিতে বিচার্য)

একক ১ : গদ্যসাহিত্য ও সাময়িক পত্র (শ্রীরামপুর মিশন থেকে ১৯৫০ খ্রিস্টাব্দ)

শ্রীরামপুর মিশন ও ফোর্ট উইলিয়াম কলেজ, রামমোহন রায়, ভবানীচরণ বন্দ্যোপাধ্যায়, ঈশ্বরচন্দ্র বিদ্যাসাগর, অক্ষয়কুমার দত্ত, প্যারীচাঁদ মিত্র, কালীপ্রসন্ন সিংহ, বঙ্কিমচন্দ্র চট্টোপাধ্যায়, মীর মশাররফ হোসেন, স্বামী বিবেকানন্দ, রবীন্দ্রনাথ ঠাকুর, প্রমথ চৌধুরী, বুদ্ধদেব বসু। সাময়িক পত্র: দিগ্‌দর্শন থেকে সবুজপত্র (দিগ্‌দর্শন, সমাচার দর্পণ, সমাচার চন্দ্রিকা, সংবাদ প্রভাকর, তত্ত্ববোধিনী, বঙ্গদর্শন, সাধনা, ভারতী, সবুজপত্র)

একক ২ : কাব্য সাহিত্য (ঈশ্বরচন্দ্র গুপ্ত থেকে ১৯৫০ খ্রিস্টাব্দ) ঈশ্বরচন্দ্র গুপ্ত, রঙ্গলাল বন্দ্যোপাধ্যায়, মধুসূদন দত্ত, হেমচন্দ্র বন্দ্যোপাধ্যায়, নবীনচন্দ্র সেন, বিহারীলাল চক্রবর্তী, রবীন্দ্রনাথ ঠাকুর, গিরীন্দ্রমোহিনী দাসী, সত্যেন্দ্রনাথ দত্ত, যতীন্দ্রনাথ সেনগুপ্ত, মোহিতলাল মজুমদার, কাজী নজরুল ইসলাম, জীবনানন্দ দাশ, সুধীন্দ্রনাথ দত্ত, বুদ্ধদেব বসু, বিষ্ণু দে, সমর সেন, সুভাষ মুখোপাধ্যায়, সুকান্ত ভট্টাচার্য, নীরেন্দ্রনাথ চক্রবর্তী, বীরেন্দ্রনাথ চট্টোপাধ্যায়।

একক ৩ : নাট্যসাহিত্য (১৮৫২ – ১৯৫০ খ্রিস্টাব্দ) রামনারায়ণ তর্করত্ন, মধুসূদন দত্ত, দীনবন্ধু মিত্র, অমৃতলাল বসু, গিরিশচন্দ্র ঘোষ, রবীন্দ্রনাথ ঠাকুর, দ্বিজেন্দ্রলাল রায়, ক্ষীরোদপ্রসাদ বিদ্যাবিনোদ, বিজন ভট্টাচার্য, তুলসী লাহিড়ী, মন্মথ রায়, উৎপল দত্ত।

একক ৪ : কথাসাহিত্য – ভবানীচরণ বন্দ্যোপাধ্যায়, প্যারীচাঁদ মিত্র, কালীপ্রসন্ন সিংহ, বঙ্কিমচন্দ্র চট্টোপাধ্যায়, রমেশচন্দ্র দত্ত, স্বর্ণকুমারী দেবী, রবীন্দ্রনাথ ঠাকুর, প্রভাতকুমার মুখোপাধ্যায়, শরৎচন্দ্র চট্টোপাধ্যায়, ত্রৈলোক্যনাথ মুখোপাধ্যায়, জগদীশ গুপ্ত, পরশুরাম, প্রেমেন্দ্র মিত্র, বিভূতিভূষণ বন্দ্যোপাধ্যায়, তারাশঙ্কর বন্দ্যোপাধ্যায়, মানিক বন্দ্যোপাধ্যায়, সতীনাথ ভাদুড়ী, সুবোধ ঘোষ, আশাপূর্ণা দেবী।

ACSHP-204-AECC-2

আবশ্যিক বাংলা

একক ১ : নৈবেদ্য –রবীন্দ্রনাথ ঠাকুর (৩০, ৬৪, ৬৫, ৭০, ৭২, ৯২ সংখ্যক কবিতা)

একক ২ : নির্বাচিত গল্প : পোস্টমাস্টার, মহেশ, দেবী, কালাপাহাড়, কুস্তীর বিভ্রাট, হারানের নাতজামাই।

একক ৩ : নির্বাচিত প্রবন্ধ : শিক্ষার মিলন –রবীন্দ্রনাথ, বাঙ্গালা ভাষা –বিবেকানন্দ, স্ত্রী জাতির অবনতি – বেগম রোকেয়া, কবিতার কথা – জীবনানন্দ দাশ।

একক ৪ : পরিভাষা – কলিকাতা বিশ্ববিদ্যালয় প্রকাশিত ভাষাপাঠ সঞ্চয়ন-এ নির্ধারিত ২৫০টি পরিভাষা।

সেমেস্টার - ৩

AHBNG-301C-5

ভাষাবিজ্ঞান

Objectives:

Basic knowledge of the linguistic features of a language is essential for understanding the literature of that language. This course aims to introduce students with the basic concept of Linguistics with special reference to the linguistic features of the Bengali language.

Course learning outcomes:

It is strongly believed that the course will help the students to understand features of Bengali language in linguistic terms.

একক ১ : প্রাচীন ভারতীয় আৰ্যভাষা থেকে নব্য ভারতীয় আৰ্যভাষার উদ্ভব ও ক্রমবিকাশ

একক ২ : বাংলা ভাষার উদ্ভব ও ক্রমবিকাশ

একক ৩ : ধ্বনিতত্ত্ব

একক ৪ : রূপতত্ত্ব

AHBNG-302C-6

জীবনীসাহিত্য, পত্রসাহিত্য, ভ্রমণ সাহিত্য

একক ১ : আমার জীবন - রাসসুন্দরী দেবী

একক ২ : জীবনস্মৃতি - রবীন্দ্রনাথ

একক ৩ : বিবেকানন্দের পত্রাবলী - স্বামী বিবেকানন্দ (১ম খণ্ড - ৩, ৪ ১১, ১৭, ১৫ ও ১৯ নং পত্র)

একক ৪ : দেশে-বিদেশে - সৈয়দ মুজতবা আলী

AHBNG-303C-7

উনিশ শতকের কাব্য ও নাটক

Objectives:

As a continuation of the preceding course, this course aims at introducing the students to selected poetic and dramatic creations from 19th century along with an understanding of the emergence of new genres and new aesthetics in the context of larger socio-political changes of 19th Century Bengal.

Course learning outcomes:

This course will enable students to understand the emergence of new genres and new aesthetics in 19th century Bengal along with an understanding of the contribution of respective authors.

একক ১ : বীরাঙ্গনা কাব্য - মধুসূদন দত্ত (দুশ্মন্তের প্রতি শকুন্তলা, সোমের প্রতি তারা, দ্বারকানাথের প্রতি রুক্মিণী, দশরথের প্রতি কেকয়ী, লক্ষ্মণের প্রতি শূর্ণগা, নীলধ্বজের প্রতি জনা)

একক ২ : এষা - অক্ষয়কুমার বড়াল

একক ৩ : নীলদর্পণ - দীনবন্ধু মিত্র

একক ৪ : প্রফুল্ল - গিরিশচন্দ্র ঘোষ

AHBNG-604-DSE-4

রবীন্দ্রসাহিত্য

Objectives:

Rabindranath Tagore stands as the most important and most influential figure in the history of Bengal. He influenced Bengali thought and literary-artistic productions irreversibly and continues to be the most important reference point even in contemporary Bengali culture. This course aims at offering detail study of selected Tagore-writings from various genres in the perspective of his philosophical-aesthetic positions.

Course learning outcomes:

This course will enable students to understand Tagore's contribution in various genres along with an understanding of the themes and styles of selected texts.

একক ১ : চতুরঙ্গ

একক ২ : লিপিকা (পায়ে চলার পথ, সন্ধ্যা ও প্রভাত, একটি দিন, রাজপুত্র, কর্তার ভূত, পট, নতুন পুতুল, রথযাত্রা, আগমনী, স্বর্গ-মর্ত্য)

একক ৩ : পঞ্চভূত (পরিচয়, সৌন্দর্যের সম্বন্ধ, নরনারী, পল্লীগ্রামে, মন, অখণ্ডতা, গদ্য ও পদ্য, কাব্যের তাৎপর্য)

একক ৪ : রাশিয়ার চিঠি

AHBNG-604-DSE-4

আধুনিক কবিতা

একক ১ : শঙ্খ ঘোমের নির্বাচিত কবিতা (দেশহীন, অন্ধবিলাপ হেঁতালের লাঠি, বিস্ফোরণ, আয় আরো বেঁধে বেঁধে থাকি, দেশ আমাদের আজও কোনো)

একক ২ : অলোকরঞ্জন দাশগুপ্তের নির্বাচিত কবিতা (বুধুয়ার পাখি, এক জানালা রাত্রি আমার, মুক্তি, এখন শান্তি ও যুদ্ধ, আয়ুর্কর, অনন্তের স্তনবৃত্তে)

একক ৩ : শক্তি চট্টোপাধ্যায়ের নির্বাচিত কবিতা (জরাসন্ধ, অনন্তকুঁয়ার জলে চাঁদ পড়ে আছে, আনন্দ ভৈরবী, পাখি আমার একলা পাখি, দাঁড়াও, হেমন্তের অরণ্যে আমি পোস্টম্যান)

একক ৪ : কবিতা সিংহর নির্বাচিত কবিতা (ঈশ্বরকে ইভ, পৃথিবী দেখে না, কোনো এক কূপমণ্ডকের প্রতি, শমীবৃক্ষে রমণী হে একা, ইচ্ছাময়ীর ইচ্ছা হলে, হরিণা বৈরী)

Objectives:

20th Century & 21st Century Bengal went through various socio-political movements and changes, including Nationalist movements, Leftist movements, Partition and Independence, Language movement and the Liberation war leading to the emergence of Bangladesh etc. The field of cultural and literary production also witnessed path breaking changes. This course aims at teaching selected fictions & selected stories of noted authors of that time in the perspective of the socio-political and aesthetic trends.

Course learning outcomes:

This course will enable students to understand the contribution of selected authors along with an understanding of the socio-political and aesthetic trends at fiction & story.

- একক ১ : ছোটগল্পের তত্ত্ব (ছোটগল্পের সংজ্ঞা, বৈশিষ্ট্য, ছোটগল্পের সূচনা ও সমাপ্তি, কাহিনির একমুখিনতা, প্রতীতির সমগ্রতা, আখ্যান কথক, ছোটগল্পে সময়ের পদচিহ্ন)
- একক ২ : তারাশঙ্কর বন্দ্যোপাধ্যায়ের নির্বাচিত গল্প (জলসাঘর, তারিণী মাঝি, খাজাঞ্চিবাবু, আখড়াইয়ের দিঘি, নারী ও নাগিনী, কালাপাহাড়)
- একক ৩ : মানিক বন্দ্যোপাধ্যায়ের নির্বাচিত গল্প (কুষ্ঠরোগীর বৌ, শিল্পী, যাকে ঘুষ দিতে হয়, হারানের নাতজামাই, ছোটবকুলপুরের যাত্রী, নদীর বিদ্রোহ)
- একক ৪ : সতীনাথ ভাদুড়ির নির্বাচিত গল্প (গণনায়ক, চকাচকী, ফেরবার পথে, পদাঙ্ক, জোড়-কলম, দিগভ্রান্ত)

AHBNG-603-DSE-3**নাট্যসাহিত্য****Objectives:**

From the beginning to 20th Century Bengal went through various socio-political movements and changes. The field of cultural and literary production also witnessed path breaking changes. This course aims at teaching selected plays of 20th century in the perspective of the socio-political and aesthetic trends of 20th century Bengal.

Course learning outcomes:

This course will enable students to understand the contribution of selected authors in their respective genres along with an understanding of the socio-political and aesthetic trends at play.

- একক ১ : মেবার পতন – দ্বিজেন্দ্রলাল রায়
- একক ২ : নবান্ন – বিজয় ভট্টাচার্য
- একক ৩ : সওদাগরের নৌকা – অজিতেশ বন্দ্যোপাধ্যায়
- একক ৪ : রাজপুরী -মন্মথ রায় (একাক্ষিকা)

AHBNG-402C-9 বাংলা সাহিত্যে কল্পবিজ্ঞান, গোয়েন্দা কাহিনি, অতিপ্রাকৃত আখ্যান ও শিশুসাহিত্য

- একক ১ : শঙ্কু সমগ্র – সত্যজিৎ রায় : বোম্বাচারী ডায়েরি, প্রফেসর শঙ্কু ও ম্যাকাও, প্রফেসর শঙ্কু ও গোলক-
রহস্য, প্রফেসর শঙ্কু ও রোবু, হিপনোজেন, আকাশের দূত।
- একক ২ : শজারুর কাঁটা – শরদিন্দু বন্দ্যোপাধ্যায়।
- একক ৩ : ভূতুড়ে ঘড়ি – শীর্ষেন্দু মুখোপাধ্যায়
- একক ৪ : পদিপিসির বর্মীবাক্স – লীলা মজুমদার

AHBNG-403C-10 বিশ শতকের কাব্য ও নাটক

Objectives:

As a continuation of the preceding course, this course aims at introducing the students to selected Dramas from 20th century along with an understanding of the emergence of new genres and new aesthetics in the context of larger socio-political changes of 20th Century Bengal.

Course learning outcomes:

This course will enable students to understand the emergence of new genres and new aesthetics in 20th century Bengal along with an understanding of the contribution of respective authors.

- একক ১ : বনলতা সেন – জীবনানন্দ দাশ (বনলতা সেন, হাওয়ার রাত, ঘাস, বুনো হাঁস, শঙ্খমালা, তোমাকে)
- একক ২ : ফুল ফুটুক – সুভাষ মুখোপাধ্যায় (আমি আসছি, সালেমানের মা, পারাপার, আমরা যাব, ফুল ফুটুক
না ফুটুক, আরো একটা দিন)
- একক ৩ : ছেঁড়া তার – তুলসী লাহিড়ী
- একক ৪ : সাজানো বাগান – মনোজ মিত্র

AHBNG-404-GE-4 রবীন্দ্রসাহিত্য

Objectives:

Rabindranath Tagore stands as the most important and most influential figure in the history of Bengal. He influenced Bengali thought and literary-artistic productions irreversibly and continues to be the most important reference point even in contemporary Bengali culture. This course aims at offering detail study of selected Tagore-writings from various genres in the perspective of his philosophical-aesthetic positions.

Course learning outcomes:

This course will enable students to understand Tagore's contribution in various genres along with an understanding of the themes and styles of selected texts.

- একক ১ : সঞ্চয়িতা – রবীন্দ্রনাথ ঠাকুর [মেঘদূত (মানসী), সোনার তরী (সোনার তরী), জীবন দেবতা (চিত্রা),
আগমন (খেয়া), বলাকা (বলাকা), হারিয়ে যাওয়া (পলাতকা), সবলা (মহুয়া), ছেলেটা (পুনশ্চ),
যাবার সময় হল বিহঙ্গের (প্রান্তিক), ঐক্যতান (জন্মদিনে), প্রথম দিনের সূর্য (শেষ লেখা)]
- একক ২ : গল্পগুচ্ছ – রবীন্দ্রনাথ ঠাকুর (দেনাপাওনা, শাস্তি, ছুটি, গুপ্তধন, অতিথি, স্ত্রীর পত্র, অপরিচিতা,
বদনাম)
- একক ৩ : চার অধ্যায় – রবীন্দ্রনাথ ঠাকুর
- একক ৪ : ডাকঘর – রবীন্দ্রনাথ ঠাকুর

AHBNG-405-SEC-2 বাংলা রচনাশক্তির নৈপুণ্য

AHBNG-604-DSE-4

বাঁকুড়ার সংস্কৃতি

- একক ১ : বাঁকুড়ার নামের তাৎপর্য, বাঁকুড়ার সংস্কৃতি সম্পর্কে সাধারণ ধারণা
একক ২ : বাঁকুড়ার মন্দির, স্থাপত্যশৈলী
একক ৩ : বাঁকুড়ার সাংস্কৃতিক ব্যক্তিত্ব (নিম্নলিখিত ব্যক্তিত্বের জীবন ও সৃষ্টি) : যামিনী রায়, যদু ভট্ট, রামানন্দ চট্টোপাধ্যায়, রামকিঙ্কর বেইজ, বসন্তরঞ্জন রায় বিদ্ববল্লভ, মানিকলাল সিংহ, ক্ষুদিরাম দাস
একক ৪ : বাঁকুড়ার মেলা, পূজাপার্বণ

AHBNG-604-DSE-4

বাংলাদেশের সাহিত্য

- একক ১ : সূর্য দীঘল বাড়ি - আবু ইসহাক
একক ২ : চিলেকোঠার সেপাই - আখতারুজ্জামান ইলিয়াস
একক ৩ : শহীদ কাদরীর কবিতা - উত্তরাধিকার, অলীক, নিরুদ্দেশ যাত্রা, নিসর্গের নুন, আলোকিত গণিকাবৃন্দ, নির্বাণ
একক ৪ : গণনায়ক - সৈয়দ শামসুল হক



B.A. (HONOURS) IN ENGLISH CBCS SYLLABUS, BANKURA UNIVERSITY, 2022-23

**COURSE DESIGN AND EXAMINATION PATTERN
UNDER CHOICE BASED CREDIT SYSTEM (CBCS)
FOR
SEM- I, SEM-II, SEM-III, SEM- IV, SEM- V, SEM- VI
IN
B.A. (HONOURS) IN ENGLISH
AND
B.A. ENGLISH (GENERIC ELECTIVE)**



(w.e.f. ACADEMIC SESSION 2022-23)

BANKURA UNIVERSITY

P.O. – PURANDARPUR, DIST. – BANKURA

WEST BENGAL, INDIA, PIN - 722 155.


Officer-in-Charge
Kabi Jagadram Roy Govt. General Degree College
Moja-722143 Dist-Bankura, W.B.



B.A. (HONOURS) IN ENGLISH CBCS SYLLABUS, BANKURA UNIVERSITY, 2022-23

21. Kumar, Shiv K. *British Victorian Literature: Critical Assessments*. 2002. Atlantic Publishers and Distributors, 2014.
22. Long, William J. *English Literature: Its History and its Significance for the Life of the English Speaking World*. 1909. Project Gutenberg Ebook, 2004.
23. Marx, Karl, and Friedrich Engels. "Mode of Production: The Basis of Social Life", "The Social Nature of Consciousness", and "Classes and Ideology". *A Reader in Marxist Philosophy*. Edited by Howard Selsam and Harry Martel, International Publishers, 1963, pp. 186–8, 190–1, 199–201.
24. Mill, John Stuart. "The Subjection of Women." Chap. 1. *The Norton Anthology of English Literature*, edited by Stephen Greenblatt, vol. 2, 8th ed., Norton, 2006, pp. 1061–9.
25. Mukherjee, Suroopa. *Victorian Poets: Tennyson, Browning, Rossetti*. Worldview Critical Editions, 2016.
26. Praz, Mario. *The Romantic Agony*. 1933. Oxford Paperbacks, 1970.
27. Rodensky, Lisa. *The Oxford Handbook of the Victorian Novel*. Oxford University Press, 2013.
28. Saintsbury, George. *A Short History of English Literature*. 1898. Macmillan, 1962.
29. Sampson, George. *The Concise Cambridge History of English Literature*. 1941. Cambridge University Press, 1965.
30. Sanders, Andrew. *A Short Oxford History of English Literature*. Oxford University Press, 1994.
31. Sutherland, John, editor. *Eminent Victorians*. By Lytton Strachey. 1918. Oxford University Press, 2003.
32. Trevelyan, G. M. *English Social History*. 1942. Penguin, 1987.
33. Young, W. T. *Robert Browning: A Selection of Poems 1835-1864*. 1911. Cambridge University Press, 1929.

SEMESTER- III

Course Title (Generic Elective): Contemporary India: Women and Empowerment

(To be opted by students from other departments)

Course Code: AH/ENG/304/GE-3

Credit: 06

Contact Hours/week: 06

Maximum Marks: 50 (ESE-40; IA-10)

Examination Duration: 2 Hours

Course Objectives:

- To familiarise the students with contemporary representations of women, femininities, gender-parity and power through theoretical engagements and select literary and cultural texts



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- To cultivate in students an awareness of the theoretical frameworks which would enable close critical reading of the prescribed literary texts as mapped against their socio-economic and political contexts
- To help students from diverse disciplinary backgrounds understand, analyse and engage with the designs of gender discourse that underlie and shape our very lives, thus enabling them to identify and examine the socially-constructed nature of gendering across texts and disciplines
- To develop a nuanced understanding among students, through the analysis of literary texts and critical insights gained from theoretical scholarship, as to how to perceive, read, understand, interpret and intervene ethically in debates on the subject

Course Outcomes:

- To read, understand and examine closely narratives that seek to represent women, femininities and, by extension, the very process and politics of gendering
- To identify how gendered practices influence and shape knowledge production and circulation of knowledges thus produced in creating legal, sociological, cultural, religious and scientific discourses
- To participate in questioning and revisiting gendered practices that reinforce socio-political discrimination and thereby demonstrate a gender-sensitised approach
- To kindle research interest in this interdisciplinary domain seething with emergent possibilities among students who have not majored in English literature
- To prepare students to act and transform at the cusp of fresh perspectives in literary critique, new research, policy intervention and fieldwork-based social action undertaken from the perch of gender, exclusion and disaster studies

Course Content:

1. Concepts:

Social Construction of Gender

Masculinity and Femininity

History of Women's Movements in India (Pre-independence, post-independence)

Women, Nationalism, Partition

2. Begum Rokeya Sakhawat Hossain: *Sultana's Dream*



3. Aanchal Malhotra: The following excerpts from *Remnants of Separation*:

“The Dialect of Stitches and Secrets”, “Between This Side and That”

Sudha Murthy: *Mahasweta*

Marks Division:

The course will have an Internal Assessment Test of 10 marks.

Question Pattern for End Semester Examination: Total 40 marks

1 long question worth 10 marks out of 2 questions to be attempted from each of the Units 1, 2 and 3:

3x10=30

5 short questions worth 2 marks out of 10 to be attempted from Units 1 & 2:

5x2=10

Recommended Reading:

1. Bhasin, Kamala. *What is Patriarchy?* Kali for Women, 1993.
2. Klages, Mary. *Literary Theory: A Guide for the Perplexed*. Bloomsbury Academic India, 2016.
3. Kumar, Radha. *The History of Doing: An Illustrated Account of Movements for Women’s Rights and Feminism in India 1800-1990*. 1993. Zubaan, 2011.
4. Malhotra, Aanchal. *Remnants of a Separation: A History of the Partition through Material Memory*. Harper Collins, 2017.
5. Murthy, Sudha. *Mahasweta*. Penguin India, 2007.
6. Ray, Raka. *Fields of Protest: Women’s Movements in India*. University of Minnesota Press, 1999.
(Recommended as textbook for teaching Unit 1.)
7. Sakhawat, Hossain Rokheya. *Sultana’s Dream and Padmarag: Two Feminist Utopias*. Penguin, 2005.
8. Sangari, Kumkum, and Sudesh Vaid, editors. Introduction. *Recasting Women: Essays in Colonial History*, Kali for Women, 1989, pp. 1–25.
9. Waugh, Patricia. *Literary Theory and Criticism: An Oxford Guide*. Oxford University Press, 2006.
(Recommended as textbook for teaching Unit 1.)



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8. Eliot, T. S. "Tradition and the Individual Talent." *The Norton Anthology of English Literature*, Stephen Greenblatt, editor, 8th ed., vol. 2., W. W. Norton, 2006, pp. 2319–25.
9. Ford, Boris. *The New Pelican Guide to English Literature: From James to Eliot*. Vol. 7. Penguin Books, 1982.
10. Freud, Sigmund. "Theory of Dreams", "Oedipus Complex", and "The Structure of the Unconscious." *The Modern Tradition*, edited by Richard Ellman et al., Oxford University Press, 1965, pp. 571, 578–80, 559–63.
11. Jain, Manju. *A Critical Reading of the Selected Poems of T. S. Eliot*. Oxford University Press, 2001.
12. Levenson, Michael. *The Cambridge Companion to Modernism*. Cambridge University Press, 1999.
13. Saintsbury, George. *A Short History of English Literature*. 1898. Macmillan, 1962.
14. Sampson, George. *The Concise Cambridge History of English Literature*. 1941. Cambridge University Press, 1965.
15. Sanders, Andrew. *A Short Oxford History of English Literature*. Oxford University Press, 1994.
16. Trevelyan, G M. *English Social History*. 1942. Penguin, 1987.
17. Williams, Raymond. Introduction. *The English Novel from Dickens to Lawrence*. Hogarth Press, 1984. 9–27.

SEMESTER- V

Course Title (Core Course): Women's Writing

Course Code: AH/ENG/502/C-12

Credit: 06

Contact Hours/week: 06

Maximum Marks: 50 (ESE-40; IA-10)

Examination Duration: 2 Hours

Course Objectives

- To train students in close literary-critical exegesis of the prescribed texts and their representations of female experience as mapped against the various socio-cultural, historical, economic and political contexts
- To analyse and creatively engage with women's writing within the theoretical frameworks of gynocriticism, *écriture féminine* ("feminine writing"), feminism and its many morphings across time and space, as perceived from the locational context of the student
- To recognise the importance of gender specificity in literature and the invisibilisation of such specificities, when it happens, together with the political ramifications



B.A. (HONOURS) IN ENGLISH CBCS SYLLABUS, BANKURA UNIVERSITY, 2022-23

- To link the status of woman to oft-normativised social discrimination and the possibilities of social change
- To enable the students to draw a location specific trajectory of female bonding or empowerment and cultivate a comparative perspective on such trajectories across spaces

Course Outcomes:

- To cultivate an understanding of the complexity and contestations around social and biological constructions of manhood and womanhood
- To examine the relationship of women to work and production
- To explain the difference between the feminine and the feminist vis-à-vis the female
- To be able to explore women's writings across time and space and their confluences-conversations from a cross-cultural, comparative perspective
- To kindle research interest in women's writing aimed at creating a discursive framework for imagining alternative modernities, re-fashioned social relations premised on gender symmetries and equity, and a matrix of collaboration, solidarity and female-enabling social change through the processes of inclusion, visibilisation

Course Content:

1. Emily Dickinson: "I cannot live with you", "Because I Could not Stop for Death"

Sylvia Plath: "Lady Lazarus"

Eunice De Souza: "Advice to Women"

2. Charlotte Perkins Gilman: "The Yellow Wallpaper"

Mahashweta Devi: "Draupadi", translated by Gayatri Chakravorty Spivak

Mary Wollstonecraft: *A Vindication of the Rights of Woman* chap. 1, pp. 11–19

3. Literary Terms & Concepts:

Poetry: Allegory, Blank verse, Carpe Diem, Dissociation of Sensibility, Dramatic monologue, Heroic Couplet, Metaphysical Conceit, Ode, Pastoral, Elegy, Sprung Rhythm, Sonnet, the Symbolist Movement



B.A. PROGRAMME (ENGLISH) CBCS SYLLABUS, BANKURA UNIVERSITY, 2022-23

**COURSE DESIGN AND EXAMINATION PATTERN
UNDER CHOICE BASED CREDIT SYSTEM (CBCS)
FOR
SEM- I, SEM-II, SEM-III, SEM- IV, SEM- V, SEM- VI
IN
B.A. PROGRAMME (ENGLISH)**



(w.e.f. ACADEMIC SESSION 2022-23)

BANKURA UNIVERSITY

P.O. – PURANDARPUR, DIST. – BANKURA

WEST BENGAL, INDIA, PIN - 722 155.



4. Rizvi, Ashraf. *Effective Technical Communication*. McGraw Hill, 2005.
5. Varma, Promodini, et al., editors. *English at the Workplace*. Parts 1 and 2, Oxford University Press, 2006.

SEMESTER- III

Course Title (Core Course): Contemporary India: Women and Empowerment

Course Code: APENG – 301/C-1C

Credit: 06

Contact Hours/week: 06

Maximum Marks: 50 (ESE-40; IA-10)

Examination Duration: 2 Hours

Course Objectives:

- To familiarise the students with contemporary representations of women, femininities, gender-parity and power through theoretical engagements and select literary and cultural texts
- To cultivate in students an awareness of the theoretical frameworks which would enable close critical reading of the prescribed literary texts when mapped against their socio-economic and political contexts
- To help students from diverse disciplinary backgrounds understand, analyse and engage with how discourses of gender underlie and shape our very lives, thus enabling them to identify and examine the socially-constructed nature of gendering across texts and disciplines
- To develop a nuanced understanding among students, through the analysis of literary texts and critical insights gained from theoretical scholarship, as to how to perceive, read, understand, interpret and intervene ethically in debates on the subject.

Course Outcomes:

- To read, understand and examine closely narratives that seek to represent women, femininities and, by extension, the very process and politics of gendering.
- To participate in questioning and revisiting gendered practices that reinforce socio-political discrimination and thereby demonstrate a gender-sensitised approach.



- To prepare students to act and transform at the cusp of fresh perspectives in literary critique, policy intervention and fieldwork-based social action undertaken from the perch of gender, exclusion and disaster studies

Course Content:

1. Concepts:

Social Construction of Gender

Masculinity and Femininity

History of Women's Movements in India (Pre-independence, post-independence)

Women, Nationalism, Partition

2. Begum Rokeya Sakhawat Hossain: *Sultana's Dream*

3. Amruta Patil: *Kari*

Marks Division:

The course will have an Internal Assessment Test of 10 marks.

Question Pattern for End Semester Examination: Total 40 marks

1 long question worth 10 marks out of 2 questions to be attempted from each of the Units 1, 2 and 3:

3x10=30

5 short questions worth 2 marks out of 10 to be attempted from Units 1 & 2:

5x2=10

Recommended Reading:

1. Bhasin, Kamala. *What is Patriarchy?* Kali for Women, 1993.
2. Klages, Mary. *Literary Theory: A Guide for the Perplexed*. Bloomsbury Academic India, 2016.
3. Kumar, Radha. *The History of Doing: An Illustrated Account of Movements for Women's Rights and Feminism in India 1800-1990*. 1993. Zubaan, 2011.
4. Patil, Amruta. *Kari*. Harper Collins, 2008.
5. Ray, Raka. *Fields of Protest: Women's Movements in India*. University of Minnesota Press, 1999.
(Recommended as textbook for teaching Unit 1.)
6. Sakhawat, Hossain Rokheya. *Sultana's Dream and Padmarag: Two Feminist Utopias*. Penguin, 2005.



Bankura University

B.A.(Programme) History

CBCS w.e.f. 2022

CBCS SYLLABUS

for

B.A IN HISTORY (PROGRAMME)

(w.e.f. 2022)



BANKURA UNIVERSITY

BANKURA

WEST BENGAL

PIN 722155

**Generic Elective I (Inter-Disciplinary):-****Women's Studies in India:****Objectives:**

This course will introduce the concepts of gender and sex and therefore, engage with the social constructions of masculinity and femininity. It would also dwell on the way Women's Studies in India has evolved over the years. It addresses issues of intersectional identities of women in India.

Outcome:

The course historicizes the concepts of gender to better understand changes in the given social, political, legal and cultural paradigms in India over the years.

Evaluation:

Internal Assessment- 10 marks.

2 marks x 5= 10 marks (short descriptive answers within 50 words).

5 marks x 4= 20 marks (within 100 words).

10 marks x 1= 10 marks (within 500 words).

Module-I: Basic Concepts & Theories: Defining Gender and Sex; Patriarchy – Ideology & Practice; Relationship between Gender, Caste, Class, Religion & Politics; Masculinity and Femininity; Social Constructions of Gender.

Module –II: Emergence of Women's Studies in India: Objectives, Importance and Evolution.

Module-III: Gender & Social History: Family & Marriage; Women's Question in the 19th Century; Women's Movement in Colonial & Post-colonial India.

Module-IV: Gender, Law & Politics: Constitution of India and Women; Laws of Marriage and Divorce; Property Laws; Violence against Women & Preventive Laws.

Module-V: Gender, Development & Culture: Issues of Labour & Health; Access to Resources; Gender Audit.

Suggested Readings:

Judith Butler, *Gender Trouble*, London, Routledge, 1990.

Kamla Bhasin, *Understanding Gender*, New Delhi, Kali for Women, 2000.

Kamla Bhasin, *What is Patriarchy?* New Delhi, Kali for Women, 1993.

Madhu Vij et al, *Women's Studies in India: A journey of 25 Years*, Rawat, 2014.

Kumkum Sangari & Sudesh Vaid, *Recasting Women: Essays in Colonial History*, New Delhi, Kali for Women, 1989

Chakraborty, Nirmal & Chakraborty Shachi Eds., *Gender Justice*, Kolkata, R. Cambray & Co. Private Ltd., 2008

Borde, Constance & Malovany-Chevallier, Sheila *Trans.*, Beauvoir, Simone De, *The Second Sex*, New York, Vintage, 2011

Geraldine Forbes, *Women in Modern India*, Cambridge University Press, 1996.

Nivedita Menon, *Ed. Gender and Politics in India*, OUP, 2001.

Ritu Menon and Kamla Bhashin, *Bodies and Boundaries: Women in India's Partition*, New Delhi, Kali for Women, 1998.

Samita Sen, *Women and Labour in Late-colonial India: The Bengal Jute Industry*, CUP, 1999.

Nita Kumar, *The Politics of Gender, Community and Modernity*, OUP, 2006.

Charu Gupta (ed.), *Gendering Colonial India*, Orient Blackswan, 2012.

Anshu Malhotra, *Gender, Caste and Religious Identities*, OUP, 2004.

Liddle, J. and Joshi, R., *Daughters of Independence: Gender, Caste and Class in India*, 1986.

Bharati Ray ed., *Women in India: Colonial and Post-colonial Periods*, Sage, 2005.

Sumit Sarkar and Tanika Sarkar, *Women and Social Reform in Modern India: A Reader*, Volumes I and II, Indiana University Press, 2007

Flavia Agnes, *Law and Gender Inequality: The Politics of Women's Rights in India*, OUP, 2001.

Basabi Chakraborty and Rajashree Basu, *Prasanga Manabividyā* (Bengali), Urbee Prakashan, 2014.

Pulak Chanda, *Naribiswa* (Bengali), Kolkata, Gangchil, 2008.

Mallika Sengupta, *Strilinga Nirman* (Bengali), Ananda, 2014.

**Generic Elective II (Inter-Disciplinary):-****Gender and Education in India: -****Objectives:**

This course aims to understand and examine how education and schooling are deeply 'gendered' constructs and experiences. It uses education and schooling as an entry point to examine questions related to state formation, international institutions, public policies, inequality and labour in colonial and contemporary contexts through the lens of gender. The course has scrutinized the historic denial and unequal access of education to girls and women and the challenges to this inequality, which shaped up in colonial and independent India. Different national and international policy documents and discourses are examined in the course to take note of how state policies, international institutions, different sections of civil society and the intersecting vectors of gender, class, race, caste and ethnicity shape the policies, initiatives, and programmes for education of girls.

Outcome:

On successful completion of this course students should be able to: Explain key concepts related to gender and different feminist perspectives on education; Demonstrate familiarity with key policies, issues and debates around gender and education in contemporary India; Examine gendered nature of school curriculum, textbooks, school processes, classrooms, teacher attitudes and peer conversation.

Evaluation:

Internal Assessment- 10 marks.

2 marks x 5= 10 marks (short descriptive answers within 50 words).

5 marks x 4= 20 marks (within 100 words).

10 marks x 1= 10 marks (within 500 words).

Module-I: Historiographical Trends. Concepts of Sex and Gender, Gender Stereotypes, Gender Bias.

Module-II: Education in Early and Medieval Times; Formal & Informal

Module-III: Colonial Period: Socio-Religious Reforms; Women & Education for females including Western Medical Education.

Module-IV: Role of School and Colleges in Colonial and Post Colonial Period.

Module-V: Contours of Female Literacy since 1950.

Module-VI: Present Scenario: Education as a Tool of Empowerment.

Suggested Readings:

Aparna Basu, Growth of Education and Political Development in India, 1898-1920, 1974

Aparna Basu, Bharati Ray, Women Struggle, A History of the All India Women's Conference, 2002

Ram Nath Sharma Rajender Nath Sharma, History of Education in India, Atlantic Publishers, 1996

Radha Kumar, A History of Doing, 1993

Usha Sharma, Women Education in Modern India, 1995



CBCS SYLLABUS
FOR
THREE YEARS UNDER-GRADUATE COURSE
IN
.....ECONOMICS..... (HONOURS)
(w.e.f. 2017)



BANKURA UNIVERSITY
BANKURA
WEST BENGAL
PIN 722155



3. Marc Blaug: *Economic Theory in Retrospect* (CUP, 1978).
4. Ben Fine: *Marx's Capital* (Macmillan)
5. M. Desai: *Marxian Economics* (Basil Blackwell)
6. E. Mandel: *Marxist Economic Theory* (Merlin Press)
7. T. Bottomore: *A Dictionary of Marxist Thought* (OUP, Indian Edition, Maya Blackwell)
8. P.N. Junankar: *Marx's Economics* (Heritage Publishers)

DSE-3.2: ENVIRONMENTAL ECONOMICS

Credit- 06

Full Marks: 50

Classes: 60 (Lecture) + 15 (Tutorial)

Course Description

- A. Introduction (06 Lectures)**
- Subject Matter of Environmental Economics – The Environment-Economy Interaction – Key Environmental Issues and Problems – Economic Way of Thinking about These Problems
- B. Theory of Externalities & Market Failure (14 Lectures)**
- Definition of Market Failure & Externalities – Positive & Negative Externalities - Pareto Optimality and Market Failure in the Presence of Externalities – Pollution as externality – Optimal Level of Pollution.
 - Externalities and Property Rights - The Coase Theorem.
 - Common Property Resources & The Tragedy of Commons
 - Public Goods & Free Rider Problem
- C. Design and Implementation of Environmental Policy (12 Lectures)**
- Overview: Determination of the Socially Efficient Level of Emission - Optimum Pollution
 - Types of Pollution Control Policy: Direct Regulation or Command-and-Control Policies – Polluters Pay Principle (PPP)
 - Emissions/Pollution Standard
 - Pigovian Taxes
 - Emissions/Effluent Fee
 - Standards Versus Fees and Taxes Versus Standards - Inefficiency of Standard-Setting
 - Tradable Emissions/Pollution Permits – Advantages & Disadvantages
- D. Environmental Valuation (12 Lectures)**
- Meaning of Environmental Valuation – Valuation of Non-market Goods & Services – Use of Economic Value, Costs, Benefits, Willingness To Pay (WTP) & Willingness To Accept (WTA), Total Economic Value, Option Value, and Existence Value.
 - Brief Discussion of Alternative Methods of Valuation
 - Cost-Benefit Analysis of Environmental Policies & Regulations
- E. International Environmental Problems (08 Lectures)**
- Trans-Boundary Environmental Problems
 - Global Warming
 - Rain Forest Destruction
 - Economics of Climate Change.
 - North-South Divide



F. Environment & Sustainable Development (08 Lectures)

- An Overview of Economic Development & Environmental Change – Possibility of Environmental Degradation
- Concepts of Sustainable Development & Environmental Accounting - Objectives of Sustainable Development - Environmental Protection & Sustainable Development
- Population-Resource-Environment Interlinkage
- Poverty & Environment
- Growth Versus Environment – The Environmental Kuznets Curve
- Rural Development & the Environment – Urban Development & The Environment
- Sustainable Development from Indian Perspectives.

REFERENCES

1. Charles Kolstad: *Intermediate Environmental Economics* (Oxford University Press, 2nd edn. 2010).
2. Pearce & Turner: *Economics of Natural Resources & The Environment*
3. Hanley Shogren & B. White: *Environmental Economics* (CUP, 1999)
4. Tietenberg: *Environmental Economics*
5. Rabindranath Bhattacharya (ed.): *Environmental Economics – An Indian Perspective* (OUP)
6. Robert S. Pindyck, Daniel L. Rubinfeld, PremL.Mehta: *Microeconomics, Chapter 18* (7th Edn. Pearson).
7. Dominick Salvatore: *Microeconomics, Chapter 18* (Oxford)
8. Michael P. Todaro & Stephen C. Smith: *Economic Development* (Pearson, 10th Edn.)
9. Sampat Mukherjee: *Contemporary Development Economics* (New Central Book Agency)

THIRD YEAR: SEMESTER-VI
(UG/ECO/604/DSE-4) DSE-4: One Course to be Chosen from the Following Two:

DSE-4.1: ISSUES IN DEVELOPMENT ECONOMICS		
<u>Credit- 06</u>	<u>Full Marks: 50</u>	<u>Classes: 60 (Lecture) + 15 (Tutorial)</u>

Course Description

A. Demographic Issues & Development (10 Lectures)

- Demographic Concepts: Birth & Death Rates, Fertility Rate, Mortality Rate, Life Expectancy at Birth, Sex Ratio, Age Structure & Dependency Burden, Youth Dependency Ratio
- Structure of the World’s Population
- Effects of Population Growth on the Process of Development – The Two-Way Relation
- Theories of Population Growth: The Malthusian Theory – The Optimum Population Theory – The Theory of Demographic Transition – Relation between Economic Transition & Demographic Transition - Transition in LDCs – The Hidden Momentum of Population Growth
- Demographic Dividend or Demographic Window of Opportunity

B. Gender Issues & Development (06 Lectures)

- Aspects of Gender Inequality: Discrimination Against Women at Workplace – Evidences of Unequal Treatment within Households
- The Concept of “Missing Woman” in Developing Countries



- Planning Authority in India: National Development Council – Planning Commission – NITI Aayog – Reasons & Objectives behind formation of Niti Aayog
- Broad Objectives of Planning in India: Evolution of India's Development Goals & Strategies – Pre -1991 & Post-1991 Plans
- Overall Achievements & Failures of India's Five Year Plans

B. Public Sector in India (05 Lectures)

- Public Sector: Meaning, Role, Performance & Problems of Public Sector Enterprises in India – Privatisation & Disinvestment Policy – Exit Policy.

C. Money, Banking & Monetary Policy (15 Lectures)

- Concepts of Money Supply in India (M_1 , M_2 etc.)
- The Role of Commercial Banks in India – Nationalisation of Banks – Banking Sector Reforms – Causes & Consequences
- Features of Money and Capital Markets in India
- Reserve Bank of India and Monetary Policy.

D. Indian Public Finance (15 Lectures)

- Sources of Revenue of Central and State Governments – Direct & Indirect Taxes – Major Heads of Expenditures – Plan vs. Non-plan Expenditures
- Centre-State Financial Relations – Role of Finance Commission of India
- Tax Reforms since 1991
- Components of Public Debt in India

E. India's Foreign Trade & Balance of Payments (10 Lectures)

- Importance of Foreign Trade for India – Volume & Direction of Foreign Trade in the Post-Liberalisation Period - Reforms in Foreign Trade Policy since 1991 - SEZ Policy
- Trends of India's Balance of Payments in the Post-Liberalisation Period.

REFERENCES

1. Datt and Sundharam: *Indian Economy* (S. Chand, Latest Edition)
2. Misra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)
3. Uma Kapila: *Indian Economy – Issues in Development & Planning and Sectoral Aspects* (Academic Foundation, 19th Edn.)
4. Joshi & Little: *India's Economic Reforms 1991-2001* (OUP)
5. Bimal Jalan (Ed.): *The Indian Economy* (OUP)
6. দেবেশ মুখার্জী: সমকালীন ভারতীয় অর্থনীতি (নিউ সেন্ট্রাল বুক এজেন্সী)
7. বসাক ও চক্রবর্তী: ভারতের অর্থনীতির পরিচয় (বিদ্যোদয় লাইব্রেরী)

GE-4.2 ENVIRONMENTAL ECONOMICS

Credit- 06

Full Marks: 50

Classes: 60 (Lectures) +15 (Tutorials)

Course Description

A. Introduction (06 Lectures)

- Subject Matter of Environmental Economics – The Environment-Economy Interaction – Key Environmental Issues and Problems – Economic Way of Thinking about These Problems

**B. Theory of Externalities & Market Failure (14 Lectures)**

- Definition of Market Failure & Externalities – Positive & Negative Externalities - Pareto Optimality and Market Failure in the Presence of Externalities – Pollution as externality – Optimal Level of Pollution.
- Externalities and Property Rights - The Coase Theorem.
- Common Property Resources & The Tragedy of Commons
- Public Goods & Free Rider Problem

C. Design and Implementation of Environmental Policy (12 Lectures)

- Overview: Determination of the Socially Efficient Level of Emission - Optimum Pollution
- Types of Pollution Control Policy: Direct Regulation or Command-and-Control Policies – Polluters Pay Principle (PPP)
- Emissions/Pollution Standard
- Pigovian Taxes
- Emissions/Effluent Fee
- Standards Versus Fees and Taxes Versus Standards - Inefficiency of Standard-Setting
- Tradable Emissions/Pollution Permits – Advantages & Disadvantages

D. Environmental Valuation (12 Lectures)

- Meaning of Environmental Valuation – Valuation of Non-market Goods & Services – Use of Economic Value, Costs, Benefits, Willingness To Pay (WTP) & Willingness To Accept (WTA), Total Economic Value, Option Value, and Existence Value.
- Brief Discussion of Alternative Methods of Valuation
- Cost-Benefit Analysis of Environmental Policies & Regulations

E. International Environmental Problems (08 Lectures)

- Trans-Boundary Environmental Problems
- Global Warming
- Rain Forest Destruction
- Economics of Climate Change.
- North-South Divide

F. Environment & Sustainable Development (08 Lectures)

- An Overview of Economic Development & Environmental Change – Possibility of Environmental Degradation
- Concepts of Sustainable Development & Environmental Accounting - Objectives of Sustainable Development - Environmental Protection & Sustainable Development
- Population-Resource-Environment Interlinkage
- Poverty & Environment
- Growth Versus Environment – The Environmental Kuznets Curve
- Rural Development & the Environment – Urban Development & The Environment
- Sustainable Development from Indian Perspectives.

REFERENCES

1. Charles Kolstad: *Intermediate Environmental Economics* (Oxford University Press, 2nd edn. 2010).
2. Pearce & Turner: *Economics of Natural Resources & The Environment*
3. Hanley Shogren & B. White: *Environmental Economics* (CUP, 1999)
4. Tietenberg: *Environmental Economics*
5. Rabindranath Bhattacharya (ed.): *Environmental Economics – An Indian Perspective* (OUP)



F. Environment & Sustainable Development (08 Lectures)

- An Overview of Economic Development & Environmental Change – Possibility of Environmental Degradation
- Concepts of Sustainable Development & Environmental Accounting - Objectives of Sustainable Development - Environmental Protection & Sustainable Development
- Population-Resource-Environment Interlinkage
- Poverty & Environment
- Growth Versus Environment – The Environmental Kuznets Curve
- Rural Development & the Environment – Urban Development & The Environment
- Sustainable Development from Indian Perspectives.

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1. Charles Kolstad: *Intermediate Environmental Economics* (Oxford University Press, 2nd edn. 2010).
2. Pearce & Turner: *Economics of Natural Resources & The Environment*
3. Hanley Shogren & B. White: *Environmental Economics* (CUP, 1999)
4. Tietenberg: *Environmental Economics*
5. Rabindranath Bhattacharya (ed.): *Environmental Economics – An Indian Perspective* (OUP)
6. Robert S. Pindyck, Daniel L. Rubinfeld, PremL.Mehta: *Microeconomics, Chapter 18* (7th Edn. Pearson).
7. Dominick Salvatore: *Microeconomics, Chapter 18* (Oxford)
8. Michael P. Todaro & Stephen C. Smith: *Economic Development* (Pearson, 10th Edn.)
9. Sampat Mukherjee: *Contemporary Development Economics* (New Central Book Agency)

<p>THIRD YEAR: SEMESTER-VI</p> <p>(UG/ECO/604/DSE-4) DSE-4: One Course to be Chosen from the Following Two:</p>

<p>DSE-4.1: ISSUES IN DEVELOPMENT ECONOMICS</p> <p>Credit- 06 Full Marks: 50 Classes: 60 (Lecture) + 15 (Tutorial)</p>

Course Description

A. Demographic Issues & Development (10 Lectures)

- Demographic Concepts: Birth & Death Rates, Fertility Rate, Mortality Rate, Life Expectancy at Birth, Sex Ratio, Age Structure & Dependency Burden, Youth Dependency Ratio
- Structure of the World’s Population
- Effects of Population Growth on the Process of Development – The Two-Way Relation
- Theories of Population Growth: The Malthusian Theory – The Optimum Population Theory – The Theory of Demographic Transition – Relation between Economic Transition & Demographic Transition - Transition in LDCs – The Hidden Momentum of Population Growth
- Demographic Dividend or Demographic Window of Opportunity

B. Gender Issues & Development (06 Lectures)

- Aspects of Gender Inequality: Discrimination Against Women at Workplace – Evidences of Unequal Treatment within Households
- The Concept of “Missing Woman” in Developing Countries



- Gender Gap in Health & Education – Consequences of Gender Bias in Health & Education – Benefits of Educating Women
 - Woman & Development – Adverse Impact of Gender Bias on Development Performance
 - Women & Poverty
 - Importance of Empowerment of Women
- C. International Trade & Development (07 Lectures)**
- Trade as Enemy, Handmaiden and Engine of Economic Growth
 - Terms of Trade and Economic Development – The Prebisch-Singer Thesis
 - Traditional Trade Strategies for Development: Import Substitution Vs. Export Promotion
 - Trade Policy Reforms: Concept of Trade Liberalisation – Its Advantages & Disadvantages for Developing Countries
- D. Foreign Capital Inflow: Opportunities & Controversies (08 Lectures)**
- Various Forms of Foreign Capital Inflow
 - Role of Foreign Capital in Economic Development – The Logic of the Two-Gap Model
 - Foreign Aid & The Development Assistance Debate: Arguments in Favour of Foreign Aid – Difficulties Associated with Foreign Aid – Tied Aid & Untied Aid
 - Foreign Direct Investment(FDI): Meaning of FDI – Role of FDI in Economic Development – Pros & Cons
 - Multinational Corporations (MNCs) & FDI: Present-day Role of MNCs in Developing Countries – Multinationals and Transfer of Technology
 - Private Portfolio Investment- Boon or Bane for LDCs?
- E. Development & The Role of The State, Market & Institutions (10 Lectures)**
- The Role of The State: Arguments for State Intervention in LDCs
 - Development Planning: The Nature of & Rationale for Development Planning in Mixed Developing Economies
 - The Crisis in Planning: Problems of Plan Implementation & Plan Failure – Reasons Thereof
 - Government Failures and The Resurgent Preference for Markets over Planning – Role & Limitations of the Market in LDCs
 - Development & Problem of Corruption: Meaning of Corruption – Importance of Elimination of Corruption for Economic Development – Governance Reform & Tackling the Problem of Corruption
 - Decentralization, Development Participation and Role of NGOs, Self Help Groups, Women Agencies & Institutions of Micro Finance
- F. Globalization & Economic Development (12 Lectures)**
- Globalization: Meaning & Dimensions – Conditions/ Essentials For Globalization - Implications & Impact of Globalization – Benefits & Opportunities, Costs & Risks for LDCs – Issue of International Migration & Brain Drain in the Globalization Perspective
 - GATT & WTO: Objectives of GATT – Main Resolutions of The Uruguay Round – From GATT to WTO – Major Differences between GATT & WTO – Functions & Principles of WTO – The WTO Agreements – WTO Agreements & Developing Countries
 - Globalization - The Indian Case: Obstacles to Globalisation – Favourable Factors – A Brief Review of Globalisation and its Impact on India
- G. Environment & Sustainable Development (07 Lectures)**
- An Overview of Economic Development & Environmental Change – Scope of Environmental Degradation
 - Concepts of Sustainable Development & Environmental Accounting



- Common-pool (or Common Property) Resources and The Tragedy of the Commons
- Poverty & Environment
- Growth Versus Environment – The Environmental Kuznets Curve
- Rural Development & The Environment – Urban Development & The Environment
- Environmental Issues & The North-South Divide

REFERENCES

1. Michael P. Todaro & Stephen C. Smith: *Economic Development* (Pearson, 10th Edn.)
2. Debraj Ray: *Development Economics* (Oxford University Press, 2009)
3. A. P. Thirlwall: *Growth & Development* (Lynne Rienner Publishers)
4. Gerald M. Meier & James E. Rauch: *Leading Issues in Development* (Oxford University Press)
5. Sampat Mukherjee: *Contemporary Development Economics* (New Central Book agency)
6. Subrata Ghatak : *Development Economics* (Routledge, 4th Edn, 2012)
7. Pearce & Turner: *Economics of Natural Resources & The Environment*
8. Abhijit V. Banerjee & Esther Duflo: *Poor Economics-Rethinking Poverty & The ways to End It* (Random India)
9. Sunanda Sen: *Globalisation and Development* (National Book Trust, 2007)
10. J.G. Stiglitz: *Globalisation and its Discontents* (Penguin)
11. Soumyen Sikdar: *Contemporary Issues in Globalisation, An Introduction to Theory and Policy in India.* (Oxford University Press)
12. D. Nayyar: *Governing Globalisation, Issues and Institutions* (Oxford University Press)
13. Misra and Puri: *Indian Economy* (Himalaya Publishing House, Latest Edition)

Credit- 06

DSE-4.2: PROJECT

Full Marks: 50

GENERAL GUIDELINES FOR PROJECT

Purpose: The course is aimed at providing students the scope to develop skill for taking up independent analytical work/research project whereby they can learn how to select a real life problem, transform the problem into a research question and to apply an analytical framework based on theories and concepts studied and use quantitative tools learnt. They are supposed to come up with a conclusive answer to the research question.

Guidelines to be Followed:

1. The Project may be based on field survey or on analysis of data from a secondary data source. Accordingly, the project may address issues of local economy including issues of rural development, income inequality, unemployment, infrastructure, health & education etc. using primary data and applying simple statistical & econometric tools learnt.
Alternatively, the project work may concentrate on any national issue like, structural changes, demographic issues, regional comparisons, changes in monetary & fiscal policies, studies of the union budgets etc. using secondary data (from sources like C.S.O., Census Reports, Union Budget Documents, NSS, Economic Survey, RBI Bulletins, Handbook of Statistics etc.) and applying simple statistical & econometric tools.
2. Each of the projects will be supervised by a teacher. Number of projects to be supervised by a teacher will be decided according to the number of teachers and the number of students in the respective departments.



Bankura University

B.Sc. Geology (Honours) CBCS w.e.f. 2022-23

**LEARNING OUTCOMES BASED CURRICULUM
FRAMEWORK (LOCF)
FOR
SIX SEMESTER B. Sc. (GEOLOGY HONOURS)
UNDER
CHOICE-BASED CREDIT SYSTEM (CBCS)**

(w.e.f. A.Y. 2022-2023)



BANKURA UNIVERSITY
BANKURA, WEST BENGAL, PIN 722155

**(i) Course objectives:**

The objective of the course is to provide ideas about natural hazards and their management

(ii) Course learning outcomes:

Students will have very good knowledge about various natural hazards and disaster management, hazard zonation mapping. They will have good ideas about remote-sensing and GIS applications in real time disaster monitoring prevention and rehabilitation

(iii) Content of the course:**Unit 1**

1. Natural Hazards: Concept and types of hazards

Unit 2

1. Concepts of disaster.
2. Types of disaster: natural and manmade - cyclone, flood, landslide, land subsidence, fire and earthquake, tsunami and volcanic eruption.
3. Issues and concern for various causes of disasters.

Unit 3

1. Disaster management, mitigation, and preparedness.
2. Techniques of monitoring and design against the disasters Management issues related to disaster.

Unit 4

1. Disaster Management in India: Risk, Vulnerability and Hazard Mitigation through capacity building.
2. Legislative responsibilities of disaster management; disaster mapping, assessment Pre-disaster risk & vulnerability reduction.
3. Disaster preparation: Pre- disaster: reduction of risk & vulnerability; Syn-disaster and Post-disaster: recovery and rehabilitation.

Unit 5

1. Hazard Zonation Mapping.
2. Remote-sensing and GIS applications in real time disaster monitoring Prevention and rehabilitation.

Suggested Readings

- Bell, F.G., 1999. Geological Hazards, Routledge, London.
- Bryant, E., 1985. Natural Hazards, Cambridge University Press.
- Smith, K., 1992. Environmental Hazards. Routledge, London.
- Subramaniam, V., 2001. Textbook in Environmental Science, Narosa International



Unit 4: Drilling and Logging

1. Core and non-core drilling.
2. Planning of bore holes and location of boreholes on ground Core-logging.

Unit 5: Reserve estimations and Errors

1. Principles of reserve estimation, Factors affecting reliability of reserve estimation.
2. Reserve estimation based on geometrical models (square, rectangular, triangular and polygon blocks).
3. Regular and irregular grid patterns.
4. Statistics and error estimation.

Unit 5: Elements of Mining

- a. Classification of mining methods, factors influencing choice of mining method, open cast mining, underground mining, coal mining methods, ore dressing or beneficiation,
- b. Brief outline of Mining Acts and Regulations in India, Conservation of mineral resources.

Suggested Readings

- Clark, G.B. 1967. Elements of Mining. 3rd Ed. John Wiley & Sons.
- Arogyaswami, R.P.N. 1996 Courses in Mining Geology. 4th Ed. Oxford-IBH.
- Moon, C.J., Whateley, M.K.G., Evans, A.M., 2006, Introduction to Mineral Exploration, Blackwell Publishing.

4.6 DSE P3 –Mineral Exploration and Mining Lab

2 Credits

List of Practical

1. Identification of anomaly: Gravity and Magnetic
2. Concept of weighted average in anomaly detection
3. Geological cross-section
4. Models of reserve estimation

4.7 DSE T4 - Earth and Climate

4 Credits

(i) Course objectives:

The objectives of the course are to study the Earth's climate system, the climate change and the related different factors.

(ii) Course learning outcomes:

The students will learn the general characteristics of the Earth's climate system. It will also include interaction of the climate with the biosphere, the cyclicity of the climate and factors related with the monsoon.

(iii) Content of the course:

Unit 1: Climate system: Forcing and Responses

1. Components of the climate system.



2. Climate forcing, Climate controlling factors.
3. Climate system response, response rates and interactions within the climate system.
4. Feedbacks in climate system.

Unit 2: Atmosphere – Hydrosphere

1. Layering of atmosphere and atmospheric Circulation.
2. Atmosphere and ocean interaction and its effect on climate.
3. Heat transfer in ocean.
4. Global oceanic conveyor belt and its control on earth's climate.
5. Surface and deep circulation.
6. Sea ice and glacial ice.

Unit 3: Response of biosphere to Earth's climate

1. Climate Change: natural vs. anthropogenic causes.
2. Future perspectives.
3. Brief introduction to archives of climate change.
4. Brief introduction to palaeoclimate.
5. Paleoclimate data from India.

Unit 4: Orbital cyclicity and climate

1. Milankovitch cycles and variability in the climate.
2. Glacial-interglacial stages.
3. The Last Glacial maximum (LGM).
4. Pleistocene Glacial-Interglacial cycles.
5. Younger Dryas.
6. Isotope Palaeontology.

Unit 5: Monsoon

1. Mechanism of monsoon
2. Monsoonal variation through time
3. Factors associated with monsoonal intensity
4. Effects of monsoon

Suggested Readings

- Rudiman, W.F., 2001. Earth's climate: past and future. Edition 2, Freeman Publisher.
- Rohli, R.V., and Vega, A.J., 2007. Climatology. Jones and Barlett
- Lutgens, F., Tarbuck, E., and Tasa, D., 2009. The Atmosphere: An Introduction to Meteorology. Pearson Publisher
- Aguado, E., and Burt, J., 2009. Understanding weather
- Environmental Geology – an Earth System Science Approach, By – Dorothy J. Merritts, Andrew De Wet & Kristen Menking, W.H. Freeman & Company, New York.

4.8 DSE P4 – Earth and Climate Lab

Earth and Climate

2 Credits

List of Practical

1. Study of distribution of major climatic regimes of India on map
2. Distribution of major wind patterns on World map



3. Preparation of paleogeographic maps (distribution of land and sea) of India during specific geological time intervals
4. Numerical exercises on interpretation of proxy records for paleoclimate

4.9 DSE T5 – Oceanography and Marine Science

4 Credits

(i) **Course objectives:**

To provide essential concepts of oceanography and to study the tectonics, geology, economic resources with respect to the oceans.

(ii) **Course learning outcomes:**

A student will understand and learn about the basic concepts of oceanography and marine geology with respect to geology as to enable them to work as a marine researcher. The students will equip himself with knowledge and skills related to dealing with the physical and chemical components and phenomena related to oceanography and marine geology.

(iii) **Content of the course:**

Unit 1: Fundamentals of Ocean

1. Concept of land and Ocean. Land-Ocean distribution.
2. Marine Provinces.
3. Plate Tectonics and Sea Floor spreading.

Unit 2: Chemical and Physical aspects of Ocean

1. Ocean dynamics.
2. Ocean Chemistry.
3. Marine Sediments.
4. Sea Water: Composition, Controls on sea water composition.
5. Sea-Air Interaction.

Unit 3: Waves, Tides and Coasts

1. Ocean Circulation.
2. Waves and Water Dynamics.
3. Ocean Energy.
4. The Coast: Beaches and Shoreline.
5. The Coastal Ocean - Migration for Coastal Erosion.

Unit 4: Life in the Ocean

1. Marine Life and the Environment.
2. Biologic Productivity and in Ocean.
3. Animals of the Pelagic Environment and Life.
4. Animals of the Benthic environment and Life.

**Suggested Readings**

- Introductory Oceanography by Harold V. Thurman, Mt. San Antonio College, Charles E. Merrill Publishing Company.
- Oceanography for Beginners, by Pronab K. Banerjee, Allied Publishers Pvt Limited
- Coastal Hydraulics, by A. M. Muir and C. A. Fleming 1981, The MacMillan Press Ltd, London.

4.10 DSE P5 – Oceanography and Marine Science Lab**2 Credits**

1. Study of land-ocean distribution, sea floor features, plate boundaries, sea floor spreading, distribution of marine sediments and distribution of marine life
2. Preparation and study of T-S diagrams, Oxygen & carbon dioxide in sea water
3. Study of global winds and ocean currents, divergence and convergence zones in the oceans

4.11 DSE T6 - Medical Geology**4 Credits****(i) Course objectives:**

The course is designed to include the basic concepts of Medical Geology, interaction between abundances of elements and isotopes and the health of humans and plants. Thus, the course provides a basic understanding of geogenic and anthropogenic distribution of trace elements, their toxic effects on human health and that of flora and fauna

(ii) Course learning outcomes:

On completion of the course the student will be able to understand the distribution of trace elements and its cyclic movement through the abiotic-biotic environment and their influence on human health, flora and fauna.

(iii) Content of the course:**Unit-1**

1. History of medical geology; subject matters and theoretical concepts of medical geology; goal, task, and significance of medical geology.

Unit 2

1. Basic features of geological environments; characteristics of geological factors and their influence on human health; interaction between abundances of elements and isotopes and the health of humans and plants, biogeochemical interactions and nutrient anomalies, anthropogenic degradation of geological environments.

Unit 3

1. The public health effects of Earth materials and geological processes.



4.14 DSE P7 –Geodynamics Lab

2 Credits

1. Position of Indian sub-continent during different geological times between break-up of Gondwanaland and formation of the Himalayas.
2. Different stages of Red sea formation with respect to continental rift system.
3. Different stages of Atlantic Ocean formation with respect to continental rift system.
4. Distribution of volcanoes along Ring of Fire in Pacific Ocean.
5. Schematic drawings of different stages of ocean-continent collision and continent-continent collision.

4.15 DSE T8 – Urban Geology

4 Credits

(i) Course objectives:

The major objective is to focus the geology related to urban areas.

(ii) Course learning outcomes:

The students will learn urban agriculture, urban land use, urban water, waste and its treatment and urban planning.,

(iii) Content of the course:

Unit 1: Geology and Society

1. Necessity of Geology in Urban life. Geology in Urban Constructions.
2. Geotechnical feature and mapping for subsurface in Metropolitan areas Building materials, Excavation and cutting in urban areas.

Unit 2: Geology and Urban Agriculture

1. Soil studies, Chemistry and geochemistry of soil in relation to ground water and fertilizer Effect of pollutants on vegetable contamination.

Unit 3: Urban land use

1. Geotechnical site characterization, Geotechnical and land use mapping, Decision making in urban land use, Geological problems in construction of underground structures in urban areas.
2. Urban Tunnelling: Tunnelling for road and rail in urban areas, Method, Equipment, Importance of Geology.

Unit 4: Urban water

1. Water lagging in built-up areas, Source of water, Standards for various uses of water Sources of contamination.
2. Waste waters: Sources and its disinfection and treatment, Ground water surveys and resource development.

Unit 5: Urban wastes and Treatment

1. Urban wastes and Treatment, Geotechnical characterization for waste sites, Domestic waste, Industrial waste, Mine drainage, Power production waste, Radioactive waste, Need for special purpose mapping for selection of waste disposal sites.