

(Abstract)

Five Year Integrated Master's Programme (FYIMP) in University Teaching Departments/ Schools - Foundation Courses offered by various Teaching Departments/ Schools (other than the six Depts offering FYIMP) for FYIMP - Approved and Implemented w. e. f. 2024-'25 Academic Year - Orders Issued

ACADEMIC C SECTION

ACAD C/ACAD C3/12564/2023

Dated: 23.09.2024

- Read:-1. UO No Acad C3/22488/2023 dated 15/03/2024
2. UO No ACAD H/ACAD H3/4513/2024 dated 15/05/2024
 3. Minutes of the Meeting of the FYIMP Scrutiny Committee held on 18/06/2024
 4. Minutes of the meeting of the Academic Council held on 25/06/2024
 5. Emails received from HoDs of various Teaching Depts.
 6. Minutes of the meeting of the Standing Committee of the Academic Council held on 12/07/2024
 7. Emails received from the Deans of Faculties
 8. Minutes of the meeting of the Standing Committee of the Academic Council held on 30/08/2024
 9. The Orders of Vice Chancellor dtd.20/9/2024

ORDER

1. As per paper read (1) above, the Regulations for the Five Year Integrated Master's programme (FYIMP) in University Teaching Departments/ Schools were implemented w. e. f. the academic year 2024-'25.

2. Accordingly, as per paper read (2) above, Five Year Integrated Master's Programmes (FYIMP) viz, Physical Science, Computational Science, Clinical Psychology and Anthropological Sciences were commenced at various campuses of Kannur University during the academic year 2024-'25. Further, the ongoing Five Year Integrated Master of Physical Education and Sports and Five Year Integrated M.Com. Programmes come under the FYIMP pattern w. e. f. the Academic Year 2024-'25.

3. As per paper read (3) above, the meeting of the FYIMP Scrutiny Committee scrutinized the

Syllabi (including Foundation Courses) of Five Year Integrated Master's Programmes (FYIMP) submitted by the offering Depts and directed all other Departments offering DSC (Foundation Level) or Major/Minor and all other General Foundation Courses, to submit the entire Syllabus, approved by the Department Council concerned, to the University by 19/06/2024.

4. Accordingly, Heads of the Depts of Library & Information Science, Geography, Biotechnology & Microbiology, Music, Malayalam, Hindi & English submitted the Syllabi of Foundation Courses offered by the respective Depts for FYIMP.

5. The Meeting of the Academic Council, held on 25/06/2024, as per the paper read as (4) above approved the Syllabi of 6 Five Year Integrated Master's programmes (including Foundation Courses) viz, (i) FYIMP in Computational Science (offered jointly by the Depts of Information Technology, Mathematical Sciences & Statistical Sciences), (ii) FYIMP in Physical Science (offered jointly by Depts of Physics & Chemistry), (iii) FYIMP in Clinical Psychology (offered by School of Behavioural Sciences), (iv) FYIMP in Anthropological Sciences (offered by the Dept of Anthropology), (v) FYIMP in Physical Education and Sports (offered by the SPE& SS) and (v) FYIMP in Commerce (offered by the Dept of Commerce & Business Studies). Along with this, the Academic Council also approved the Syllabi of the Foundation Courses submitted by the Heads of the Teaching Depts, as detailed in Paragraph 4 above.

6. Later on, the Heads/ Course Director of other Teaching Departments/ Schools also submitted the Syllabi of Foundation Courses offered by their respective Depts for FYIMP as per paper read (5) above. The same were placed before the meeting of the Standing Committee of the Academic Council held on 12/07/2024. Since the remarks of some Deans of Faculties were not received at that time, the Standing Committee vide paper read 6 recommended to place the same in the forthcoming Standing Committee of the Academic Council, along with the remarks of the Deans, concerned.

7. Accordingly, Deans, concerned furnished their Remarks after vetting the Syllabi vide paper read (7) above.

8. In tune with the Recommendation of the meeting of the Standing Committee of the Academic Council held on 12/07/2024, the Syllabi of the Foundation Courses along with the Remarks of the Deans concerned were placed before the Standing Committee of the Academic Council held on

9. The Standing Committee of the Academic Council as per paper read (8) above recommended to approve the Syllabi of the Foundation Courses submitted by the University Teaching Depts/ Schools (other than FYIMP offering Depts/ Schools).

10. The Vice Chancellor, in exercising the powers of the Academic Council conferred under Section 11(1), Chapter III of Kannur University Act 1996, approved the Syllabi of the Foundation Courses, as recommended by the Standing Committee of the Academic Council.

11. The List of Foundation Courses offered by the University Teaching Departments (other than FYIMP offering Departments), as approved by the Meeting of the Academic Council held on 25/06/2024 and approved by the Vice Chancellor, exercising the powers of Academic Council conferred under the Section 11 (1) of the KU Act, is given below.

Sl. No.	Department offering Foundation Course	Title of the Courses
1	Dept. of Library & Information Science	1.Information Resources and Learning Platforms (MDC) 2. Digital Librarianship (MDC)
2	Dept. of Zoology	1.Comparative Physiology (DSC)
3	Dept. of Studies in English	1. Literature and the Contemporary World (MDC) 2. Practical English Language Skills (AEC) 3. English for Business Communication (AEC) 4. English Speaking Skills (AEC) 5. English Language Essentials (AEC) 6. English Language and Communication for Sports (AEC)
4	Dept. of Law	1. Human Rights and Indian Constitution (MDC)
5	Dept. of Economics	1. Introduction to Economics (DSC) 2. Fundamentals of Economic Development (DSC)
6	Dept. of Biotechnology & Microbiology	1. Cell Biology (DSC) 2. Fundamental Genetics (DSC)

7	Dept. of History	<ol style="list-style-type: none"> 1. Indian National Movement (DSC) 2. Themes and Perspectives in Early India (DSC)
8	Dept. of Environmental Studies	<ol style="list-style-type: none"> 1. Basics of Environmental Science (DSC) 2. Gender and Environment (MDC) 3. Energy & Environment (DSC) 4. Eco - Informatics: Environmental Data Analysis & Sustainability (SEC) 5. Green Technology (DSC)
9	Dept. of Geography	<ol style="list-style-type: none"> 1. Kerala Studies (MDC) 2. Geography of India (MDC) 3. Disaster Management (MDC) 4. Fundamentals of Remote Sensing (Practical)(SEC) 5. Introduction to Geographic Information System (Practical) (SEC) 6. Environmental Impact and Risk Assessment (Practical) (SEC) 7. Environment and Sustainability (VAC)
10	Dept. of Music	<ol style="list-style-type: none"> 1. Nottusvara (MDC) 2. Namavali (P) (MDC) 3. Fundamental Exercise of Carnatic Music (P) (SEC) 4. Devarnama and Sankirtana (P) (MDC) 5. Application of Fundamental Aspects of Music (P) (SEC) 6. Application of Major & Minor Ragas of Carnatic Music (P) (SEC) 7. Contributions of Composers of Kerala (P) (VAC) 8. Exploring Sanskrit Compositions (P) (VAC) 9. Music and Nationhood (VAC)
11	Dept. of Malayalam	<ol style="list-style-type: none"> 1. കാല്പനികതാ സാഹിത്യം (AEC) 2. സാഹിത്യം : കലയും രചനാതന്ത്രവും (AEC) 3. സാഹിത്യ വായനയും ആസ്വാദനവും (AEC)

12 Dept. of Hindi

1. Creative Literature in Hindi (AEC)
2. Contemporary Hindi Short Stories (AEC)
3. Communicative Hindi (AEC)

12. The detailed Syllabi of Foundation Courses as detailed in the Table above are appended with this U.O. and uploaded in the official website of the University.

Orders are issued accordingly.



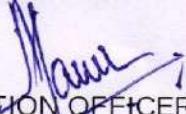
Sd/-

ANIL CHANDRAN R
DEPUTY REGISTRAR (ACADEMIC)
For REGISTRAR

- To:
1. Heads of all Teaching Departments
 2. Nodal Officer. FYIMP Implementation Committee

- Copy To:
1. PS to VC/ PA to R
 2. PA to CE (to circulate among the sections concerned under Examination Branch)
 3. EP IV/ EXC I (Examinations)
 4. JR II (Examinations)
 5. AR/DR (Academic)
 6. Computer Programmer
 7. Webmanager (to publish in the official website)
 8. SF/DF/FC

Forwarded / By Order


SECTION OFFICER

8

Kannur University
Department of Library and Information Science

Multi-Disciplinary Course (MDC)
(FYIMP-2024)

Syllabus

Semester I

KU01MDCLIB101
Information Resources and Learning Platforms

Semester 2

KU02MDCLIB102
Digital Librarianship

Programme Specific Outcomes (PSO)

PSO-1 Identify, select, and provide access to information in a variety of format

PSO-2 Identify the needs of particular user groups and develop collections, services, programs, and policies to meet these needs

PSO-3 Apply a wide range of electronic resources and techniques for effective information retrieval

PSO-4 Analyze relevant information resources and published research to form valid and well-grounded conclusions

PSO-5 Apply appropriate research methodologies to issues and professional concerns in LIS

PSO-6 Conceptualize, employ, evaluate, and utilize appropriate technologies in library and information-related applications

PSO-7 Awareness of contemporary issues in the information workplace, a commitment to professional values, standards, and ethics.

Semester 1

KU01MDCLIB101

Information Resources and Learning Platforms

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
1	MDC	100-199	KU01MDCLIB101	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical	Tutorial	CE	ESE	Total	
3 Hours	-	-	50	50	100	3

Course Description

This course will help you to acquire knowledge and enhance the use of information resources and learning tools and platforms for various learning situations, and opening up career opportunities in Library and Information Science. It will help to explore Information, Knowledge, and Society. Learn about the characteristics of data, information, knowledge, wisdom, and the knowledge economy. Understand the information transfer cycle and the role of libraries in it. It will also enable them to evaluate information resources, including combating misinformation and utilizing e-learning platforms.

Course Prerequisites: NIL

Course Outcomes

Upon completion of the course, the graduate will be able to:

CO No.	Expected Outcome	Learning Domains
CO-1	Gain insight into the role of data, information, knowledge, and wisdom in shaping modern societies and economies.	U
CO-2	Distinguish between primary, secondary, and tertiary information sources, employing various references, databases, and digital tools for academic research	An
CO-3	Critically evaluate information, discerning and addressing misinformation, disinformation, and fake news through fact-checking	E
CO-4	Explore e-learning avenues such as e-journals, e-books, and digital libraries, while understanding the significance of MOOCs and institutional repositories	A
CO-5	Acquire practical proficiency in leveraging digital resources for academic pursuit and research.	C

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOsMapping

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	✓						
CO2		✓					
CO3				✓			
CO4			✓				
CO5				✓			

Syllabus

Module 1: Information, Knowledge and Society

- 1.1 Information: Characteristics; Data, Information, Knowledge, Wisdom; Knowledge Society, Knowledge Economy.
- 1.2 Data in the contemporary society: Big data, Open data, Open Access, Open Science.
- 1.3 Information Transfer Cycle: Generation, Storage and Management of Information.
- 1.4 Information explosion: Need for Knowledge Organization; Role of different types of libraries.

Module 2: Information Resources

- 2.1 Documentary Sources: Primary, Secondary and Tertiary sources.
- 2.2 Reference Sources: Dictionary, Thesaurus, Encyclopedia, Yearbooks, Biographical, Geographical and Statistical Sources.

2.3 E-resources: Ebooks, E-journals, Databases, ETDs, Ezines; Subject gateways.

2.4 Evaluation of Information Sources: Criteria; Mis-Information, Dis-information; Fake news identification and precautions; Fact checking in media.

Module 3: E Learning Platforms

3.1 Learning Management Systems: Moodle

3.2 E-Learning platforms: SWAYAM, NPTEL, Coursera, EDX, e-PG Pathshala.

3.3 Digital Libraries, Institutional Repositories – Scopus, Web of Science, Science Direct, J-Stor, PubMed, Shodhganga, Shodhgangothri, National Digital Library of India.

3.4 AI tools for Academic pursuit: AI Tools in information Search, Information Management, and Learning.

Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	50
Continuous Evaluation	50
Test Paper 1	10
Test Paper 2	10
Assignment	10
Seminar	10
Viva	10
TOTAL	100

Learning Resources

Aberdour, M. (2013). Moodle for Mobile Learning. Packet Publishing.

Bawden, D., & Robinson, L. (2022). Introduction to Information Science. Facet Publishing.

Chandra, A., & Khanijo, M. (2024). Knowledge Economy: The Indian Challenge.

Evans, W., & Baker, D. (2011). Libraries and Society: Role, Responsibility and Future in an Age of Change. Elsevier Science.

Gupta, P. K., & Das, T. (2010). Modern Trends in Library and Information Science. Scientific Publishers.

Holmes, B., & Gardner, J. (2024). e-Learning: Concepts and Practice.

Kaushik, A. (2018). Library and Information Science in the Age of MOOCs. IGI Global.

Secker, J. (2004). Electronic Resources in the Virtual Learning Environment: A Guide for Librarians. Elsevier Science.

Steels, L., & Tokoro, M. (Eds.). (2003). Future of learning: Issues and prospects. IOS Press, Incorporated.

NMEICT National Mission on Education through Information and Communication Technology

MODEL QUESTION PAPER

KU01MDCLIB101: Information Resources and Learning Platforms

Time : 3 hrs

Maximum Marks : 50

PART A (Answer any Five Questions each question carries 3 marks)

1. What is information?
2. Define Knowledge society
3. What is primary source of information?
4. What is misinformation?
5. List out 3 important e-learning platforms
6. What is shodhganga?

(5 x 3 = 15)

PART B (Answer any Three Question. Each question carries 5 marks)

7. Differentiate between data, information and knowledge
8. Discuss the channels involves information transfer cycle
9. Differentiate between Dictionaries and Encyclopedia
10. Discuss the features of MOODLE
11. What is the role of AI Tools in information search

(3 x 5 = 15)

PART C (Answer any Two Question. Each question carries 10 marks)

12. What is reference source discuss various types of reference course found in a University/College Library
13. Discuss the need for evaluating information sources. List out the different criteria used for evaluation of information sources
14. Discuss the features of National Digital Library of India
15. What are e-resources? Discuss the important types of e-resources available on internet

(2 x 10 = 20)

Employability for the Course

For those aspiring to pursue a career in Libraries, the study of Library and Information science programme will be highly beneficial.

This will help the students to have ample opportunities in various Libraries across the country and abroad.

Semester 2

Digital Librarianship

KU02MDCLIB102

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
2	MDC	100-199	KU02MDCLIB102	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical	Tutorial	CE	ESE	Total	
3 Hours	-	-	50	50	100	3

Course Summary

Explore library management fundamentals, digital preservation, and research support in the Digital Librarianship course. Acquire knowledge in library automation, digital library design, and information organization. Additionally, familiarize yourself with essential software tools like D-Space, KOHA, Zotero, etc. to enhance skills in collection curation and research assistance, paving the way for diverse career paths.

Course Outcomes

Upon completion of the course, the graduate will be able to:

CO No.	Expected Outcome	Learning Domains
CO-1	Attain a basic understanding of digital libraries their design, and organization.	U
CO-2	Apply principles of digital library creation, including digitization and metadata development.	A
CO-3	Implement digital preservation and conservation techniques for digital content.	A
CO-4	Utilize digital library software, particularly D-Space, for managing digital collections	A
CO-5	Develop academic content effectively, including assignments, articles, and project; proposals, using appropriate referencing styles and software like Zotero.	A

*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)

Course Prerequisite: NIL

Mapping of Course Outcomes to PSOs Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1			✓				
CO2						✓	
CO3							✓
CO4				✓			
CO5					✓		

Syllabus

Module 1: Library Automation Fundamentals

- 1.1 Libraries and their role in knowledge Organization
- 1.2 Library Automation: Automated Library housekeeping operations; Automated Information Services.
- 1.3 Digital Libraries: Definition, Scope and Characteristics.
- 1.4 Design and organization of digital libraries: Architecture, Interoperability, Compatibility, User interfaces, Protocols and Standards.

Module 2: Development of Digital Libraries

- 2.1 Pre- requisites: Content development - Digitalization – Scanning, OCR and Conversion to PDF.
- 2.2 Metadata development: Digital Preservation and Conservation - Archiving, Security, Preservation and Migration issues.
- 2.3 Ethical Issues: Rights Management.
- 2.4 Digital Library Software: Greenstone Digital Library Software

Module 3: Software for Libraries

- 3.1 Library Automation Software: Koha
- 3.2 Institutional Repository Software: DSpace
- 3.3 Reference Management Software: Zotero
- 3.4 Plagiarism Checking Software: Turnitin/ Ouriginal/ DrillBit

Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	50
Continuous Evaluation	50
Test Paper 1	10
Test Paper 2	10
Assignment	10
Seminar	10
Viva	10
TOTAL	100

Compulsory Readings

Aberdour, M. (2013). Moodle for Mobile Learning. Packet Publishing.

Chindrupananda (2006). Making sense of Library Automation. Meteor.

Mackenzie, A., & Martin, L. (2016). Developing Digital Scholarship: Emerging practices in academic libraries. Facet Publishing.

Misra, Vinod Kumar (2016). Basics of Library Automation. Ess Ess.

Naik, P. G., & Naik, G. R. (n.d.). Creating and Managing Institutional Repository Using DSpace: A Case Study Approach. Edu-creation Publishing.

Puckett, J (2011). Zotero: A guide for librarians, researchers and educators. Assoc. of Collge & Rsrch Libr.

Rajasekharan, K (2010). Digital Library basics: A practical manual. Ess Ess.

Ravindran Asari, K (2009). IT for librarians. International publishing house.

Sharma, A. K. (2019). Koha for Beginners. Willford Press.

Witten and Bridge (2005). How to build a digital library. Morgan Kaufman.

MODEL QUESTION PAPER

KU02MDCLIB102: Digital Librarianship

Time: 3 hrs

Maximum Marks: 50

PART A (Answer any Five Questions each question carries 3 marks)

1. What is Knowledge organization
2. What are the characteristic of a digital Library
3. What is digitalization
4. What is meta data
5. What is plagiarism
6. What is Library automation

(5 x 3 = 15)

PART B (Answer any Three Questions each question carries 5 marks)

7. What is the important of reference management software in publishing
8. Discuss about archiving and security issues in Digital Library
9. Discuss the user interfaces needed in a digital Library
10. What are the different types of contents available in a digital library at a college
11. Discuss the features of Turnitin.

(3 x 5 = 15)

PART C (Answer any Two Question. Each question carries 10 marks)

12. What is library automation? Discuss the important housekeeping operations to be automated in a college library
13. Discuss the pre requisites for the development of digital libraries in a university
14. Discuss the features of Greenstone digital library software
15. Discuss the features of Koha as an integrated library management software.

(2 x 10 = 20)

Employability for the Course

For those aspiring to pursue a career in Libraries, the study of Library and Information science programme will be highly beneficial.

This will help the students to have ample opportunities in various Libraries across the country and abroad.



SEMESTER II

COURSE CODE

COURSE TITLE: Comparative physiology

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
II	Minor	100-199	KU02DSCZOO101	4	75

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/Internship	Tutorial	CE	ESE	Total	
2	1	1	50	50	100	2

L=Lecture, T/S= Tutorial/Seminar, P=Practical, ESE= End Semester Evaluation, CE= Continuous Evaluation

Course Description: Physiology is a phenotype and it can depend on genotype and environment of a species. Physiology and Behaviour are intertwined and to understand behaviour from a biological perspective it is critical to understand physiology.

Course Objectives:

1. To understand neurophysiology-structure, function, techniques, and disorders
2. To understand sensory physiology- structure, function, and disorders
3. To understand reproductive physiology- structure, function, and disorders
4. To understand endocrinology-Structure, function, and disorders
5. Current trends in physiology
6. Integrate the above-mentioned systems from a behavioural perspective

Course Pre-requisites:



Course Outcomes

Course Learning Outcomes: At the end of the Course, the Student will be able to:

CO No.	Expected Outcome	Learning Domains
CO1	Explain/compare/evaluate/analyse the different physiological systems in animals including nervous system, sensory systems etc. which plays a major role in understanding behavior	K,U,A,E,C
CO2	Compare how different environments result in differences in physiological systems/activities (physiology as phenotype)	K,U,A,E,C
CO3	Describe the basic principles and protocols of techniques and methods in physiological experiments	K,U,A,E,C
CO4	Assess the diseases and disorders caused due to irregular functioning of physiological systems including nervous systems	K,U,A,E,C

***Remember (K), Understand (U), Apply(A), Analyze (An), Evaluate(E), Create (C)**

Mapping of Course Outcomes to PSOs/PO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	✓	✓		✓	✓	✓		✓	✓		✓
CO2	✓	✓		✓	✓	✓		✓	✓		✓
CO3	✓	✓		✓	✓	✓		✓	✓		✓
CO4	✓	✓		✓	✓	✓		✓	✓		✓

COURSE CONTENTS

Module 1: (15 Hours)

1. Nerve physiology:

- 1.1 Neurons, action potential, Gross neuroanatomy of brain and spinal chord, Peripheral nervous system, Neurotransmitters and Neurohormones
- 1.2 Synaptic transmissions, Electrical and chemical transmission, Drug modified transmission and synaptic junction
- 1.3 Evolution of neurons, Coordination of behaviour, Learning and memory, Stress and brain
- 1.4 Electrophysiological methods for studying neurology, Neural disorders, Parkinson's disease, Epilepsy, Schizophrenia, Alzheimer's syndrome, Dyslexia, Anxiety

Suggested readings specific to the module.



- 1.1 Neil R. Carlson & Melissa A, 2016, Physiology of Behaviour, Global Edition: Pearson Education
- 1.2 Gerard J Tortora, Bryan H Derrickson, 2009, Principles of Anatomy and Physiology, (12thedition) Volume-1. John Willey and sons, INC.
- 1.3 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 1.4 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 1.5 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 1.6 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 1.7 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 1.8 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 1.9 Neil R. Carlson & Melissa A, 2016, Physiology of Behaviour, Global Edition: Pearson Education
- 1.10 Neil R. Carlson & Melissa A, 2016, Physiology of Behaviour, Global Edition: Pearson Education
- 1.11 Neil R. Carlson & Melissa A, 2016, Physiology of Behaviour, Global Edition: Pearson Education
- 1.12 Covey E & Carter M, 2015, Basic Electrophysiological Methods, Oxford University Press
- 1.13 Guyton and Hall, 2007, Text book of medical Physiology. (11th edition). Elsevier.

Module 2: (15 Hours)

- 2.1 Structural and functional classification, modality, intensity, exteroceptors, interoceptors, secondary sense cells, transduction and sensory coding
- 2.2 Chemical senses
 - 2.2.1 Taste and smell
 - 2.2.2 Mechanism of reception
- 2.3 Mechanoreceptors
 - 2.3.1 Hair cell, organ of equilibrium
- 2.4 Vertebrate ear
 - 2.4.1 Structure; physiology of hearing
- 2.5 Vertebrate eye
 - 2.5.1 Structure; physiology of image formation; evolution of trichromatic color vision
- 2.6 Electro and thermoreceptors
- 2.7 Somatic sensations
 - 2.7.1 Pain receptors; headache; pain suppression (analgesia) system in the brain and spinal cord
- 2.8 Sensory systems and circadian rhythms

Suggested readings specific to the module.

- 2.1 Gerard J Tortora, Bryan H Derrickson, 2009, Principles of Anatomy and Physiology, (12thedition). John Willey and sons, INC.
- 2.2 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 2.3 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 2.4 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 2.5 Gerard J Tortora, Bryan H Derrickson, 2009, Principles of Anatomy and Physiology, (12thedition). John Willey and sons, INC.
- 2.6 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 2.7 Neil R. Carlson & Melissa A, 2016, Physiology of Behavior, Global Edition: Pearson Education
- 2.8 Neil R. Carlson & Melissa A, 2016, Physiology of Behavior, Global Edition: Pearson Education

Module 3: (15 Hours)

3. Reproductive physiology:

- 3.1 General pattern of reproduction
- 3.2 Sex determination
- 3.3 Role of hormones in reproduction in human male
- 3.4 Role of hormones in implantation, pregnancy, parturition and lactation in human female
- 3.5 Reproduction and stress

Suggested readings specific to the module.

- 3.1 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.



- 3.2 White BA, Harrison JR, Mehlmann L, 2018, Endocrine and Reproductive Physiology: Mosby Physiology Series (Mosby's Physiology Monograph), Elsevier.
- 3.3 White BA, Harrison JR, Mehlmann L, 2018, Endocrine and Reproductive Physiology: Mosby Physiology Series (Mosby's Physiology Monograph), Elsevier.
- 3.4 White BA, Harrison JR, Mehlmann L, 2018, Endocrine and Reproductive Physiology: Mosby Physiology Series (Mosby's Physiology Monograph), Elsevier.
- 3.5 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.

Module 4: (15 Hours)

4. Hormones and Cell Signalling:

- 4.1 Endocrine glands
- 4.2 Biochemical basis and signal transduction pathways
- 4.3 Signal transduction pathways
- 4.4 Systems for cell signalling
- 4.5 Basic mechanism of hormone action
- 4.6 Neuro-endocrine regulation
- 4.7 Pheromones
- 4.8 Stress hormones

Suggested readings specific to the module.

- 4.1 Shlomo Melmed, Kenneth S. Polonsky, P. Reed Larsen & Henry M. Kronenberg, Williams Textbook of Endocrinology (12th edition), Elsevier Health Sciences
- 4.2 Shlomo Melmed, Kenneth S. Polonsky, P. Reed Larsen & Henry M. Kronenberg, Williams Textbook of Endocrinology (12th edition), Elsevier Health Sciences
- 4.3 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 4.4 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 4.5 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 4.6 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 4.7 Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
- 4.8 Richard W. Hill, Gordon A. Wyse & Margaret Anderson., 2012, Animal Physiology (3rd Edition), Sinauer Associates.

Module 5: Teacher Specific Module (15 hours)

- 5.1 Read best 15 papers in physiology from Nature, Science, The Lancet, Physiological reviews etc. of the current year
- 5.2 Identify current major gaps in Physiology from these publications
- 5.3 Identify recent trends in physiology from these publications
- 5.4 Write a review based on these publications.

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. Richard W. Hill, Gordon A. Wyse & Margaret Anderson., 2012, Animal Physiology (3rd Edition), Sinauer Associates.
2. Moyes, CD & Schulte, P.M., 2021, Principles of Animal Physiology (3 rd edition), Pearson.
3. Shlomo Melmed, Kenneth S. Polonsky, P. Reed Larsen & Henry M. Kronenberg, Williams Textbook of Endocrinology (12th edition), Elsevier Health Sciences
4. White BA, Harrison JR, Mehlmann L, 2018, Endocrine and Reproductive Physiology: Mosby Physiology Series (Mosby's Physiology Monograph), Elsevier.
Neil R. Carlson & Melissa A, 2016, Physiology of Behavior, Global Edition: Pearson Education
5. Gerard J Tortora, Bryan H Derrickson, 2009, Principles of Anatomy and Physiology, (12thedition). John Willey and sons, INC.
6. Covey E & Carter M, 2015, Basic Electrophysiological Methods, Oxford University Press
7. Guyton and Hall, 2007, Text book of medical Physiology. (11th edition). Elsevier.



Core Suggested Reading

1. Bruce M Koeppen, and Bruce A Stanton, 2009. Berne and Levy Physiology. (6th edition). Elsevier publishers.
2. Clancy, J. and Mc Vicar, A. J. (1995) Physiology and Anatomy. Edward Arnold, London.
3. David Randall, Warren Burggron, Kathleen French, 2002. Eckert Animal Physiology – Mechanisms and Adaptations. (5th edition). W.H Freeman and company.
4. Eckert, R., Animal Physiology, Mechanisms and Adaptation, W.H. Freeman & Company.
5. Gillian Pocock and Christopher D Richards, 2001. Human physiology - The basis of medicine. Oxford University press.
6. Hoar, W.S. (1966) General and Comparative Animal Physiology, Prentice Hall, Inc., USA.
7. Jan kay, 2000, Introduction to Animal Physiology. Viva book private limited.
8. Jensen, D. (1976) The Principles of Physiology, Appleton-Century-Crofts, New York.
9. K. Sembulingam, Prema Sembulingam, 2008. Essentials of Medical Physiology, (4th edition). Jaypee Brothers Medical Publishers (p) Ltd.
10. Knut Schmidt – Nielson, 2007. Animal Physiology – Adaptation and environment. (5th edition) Cambridge university press.
11. Lauralee Sherwood, Hill Arkaladrof, and Paul H Yancey, 2005, Animal physiology from genes to organisms. Thomson books publishers.
12. Pat Willmer, Graham Stone and Ian Johnston, 2005. Environmental physiology of Animals. (2nd edition) Blackwell publishing.
13. Prosser, C.L., (1973) Comparative Animal Physiology, W.B. Saunders & Co
14. Prosser, C.L. Environment and Metabolic Physiology, Wiley-Liss
15. Randall, D., Burgrenn, W. and French, K. (1997), Animal Physiology, W. H. Freeman & Co., New York.
16. Schiemdt-Neilsen, K.K. (1994) Animal Physiology, Adaptation and Environment, Cambridge.
17. Sperelakis, N. and Banks, R.O. eds. (1993) Physiology, Little, Brown & Co., London.
18. Strand, F. L. (1978) Physiology: A regulatory Systems Approach, 4th Ed. Macmillan Publishing Co., New York.
19. Stuart Ira Fox, 2006 Human physiology. (9th edition). McGraw hill higher education press.
20. William S hoar, 2004. General and Comparative Physiology. (3rd edition). Prentice Hall and India Private Limited.

Teaching Learning Strategies (Classroom activities / Lab activities / Field Activities)

MODE OF TRANSACTION

Online/Offline

ASSESSMENT RUBRIC



Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Seminar	10
b)	Assignment	10
c)	Classroom discussions	10
d)	Test	20
Total		100

Sample Questions to test Outcomes.

1. How will you diagnose a person with Parkinsons disease?
2. Imagine you are making a robot with taste sensing. How will you make it?
3. If a person approaches with high levels of sugar in his blood, what would you deduce of his physiological condition?
4. Discuss the benefits and risks of different nutrient delivery for embryo in mammals.

DEPARTMENT OF STUDIES IN ENGLISH

SEMESTER I

MULTIDISCIPLINARY ELECTIVE

KU1MDCENG101: LITERATURE AND THE CONTEMPORARY WORLD

CREDITS: 3

OBJECTIVES:

- To expose students to some of the burning contemporary issues related to
- To acquaint them with the way literature takes on these issues.
- To equip them to critically appraise and shape their own individual opinions.

LEARNING OUTCOME:

By the end of the course students should be able to:

- Makesenseoftheworldtheyliveinthroughthemanylanguagedevicesliterature employs in its representation of reality.
- Have an understanding of cross-cultural encounters in a globalised world.
- Debatetheprosandconsofcurrentissuesincultureusingtheterminologyrelatedto the concerned topics.
- Discusshowtheuseoflanguageandchoiceofgenreinfluencethemeaningofthe text and the reader's response.
- Develop skills of textual analysis.
- Comprehend diverse points of view on the urgent issues facing the world.

MODULE I: Ethics and Culture

UNIT 1: John Lennon: "Imagine"

<https://www.azlyrics.com/lyrics/johnlennon/imagine.html>UNI

T 2: Rabindranath Tagore: "Housewife"

https://www.opendemocracy.net/en/tagore_3390jsp/

MODULE II: Technology and Human Life

UNIT 1: Gareth Southwell: *Artificial Intelligence*

UNIT 2: Ambrose Bierce: “Moxon’s Master”

MODULE III: Gender

UNIT 1: Maya Angelou: “Still I Rise”

<https://www.poetryfoundation.org/poems/48985/phenomenal-woman>

UNIT2: Sarah Joseph: “The Masculine of Virgin” included in *The Masculine of Virgin: Stories by Sarah Joseph*. Trans. J. Devika. OUP, 2012.

UNIT3: Malala Yousafzai: “A Daughter is Born” from *I am Malala: The Girl who stood up for Education and was Shot by the Taliban*.

<https://eg4.nic.in/jnv/DFILES/EBOOKS/IR/IamMalala.pdf>

MODULE IV: Human Rights

UNIT1: Vijayarajamallika: “Injuries”

UNIT 2: Roger Mais: “Blackout”

UNIT 3: Jawaharlal Nehru: “A Tryst with Destiny”

<https://www.freepressjournal.in/india/pandit-jawaharlal-nehru-death-anniversary-full-text-of-tryst-with-destiny-speech-by-indias-first-pm>

MODULE V: Teacher Specific Module

Suggested Reading

Web Resources

TED TALKS

___ . “How Fiction can help us better understand our reality”:

https://www.ted.com/talks/christian_wickert_how_fiction_can_help_us_better_understand_our_reality

___ . “Contemporary Absurdities and the Power of Literature” | Vera Nünning | TEDxUniHeidelberg

https://www.youtube.com/watch?v=35vx8xPC_Z8

___ . “The inspiring truth in fiction: Tomas Elemans TED@Tommy”

https://www.ted.com/talks/tomas_elemans_the_inspiring_truth_in_fiction □ Francisco Díez-Buzo:

___ . “Why should you read “One Hundred Years of Solitude”?”

https://www.ted.com/talks/francisco_diez_buzo_why_should_you_read_one_hundred_years_of_solitude

SEMESTER I
ABILITY ENHANCEMENT COURSE

KU1AECENG101: PRACTICAL ENGLISH LANGUAGE SKILLS
(3 Credits)

Course Description

This ability enhancement course aims to enable students to strengthen the practical English language skills of the degree students by enhancing their ability to communicate effectively in academic, professional and personal contexts. The course focuses on enhancing the proficiency of the learners in speaking, listening, reading and writing.

Course Objectives:

1. The course enables the students to enhance the ability to express ideas coherently.
2. It helps the students to improve active listening and comprehension.
3. It facilitates the students to expand vocabulary for better understanding and communication.
4. It facilitates the students to develop the ability to write clearly and effectively for different purposes.

Course Learning Outcomes:

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

1. Utilize effective verbal communication strategies.
2. Analyse and evaluate information presented in spoken and written forms.
3. Apply active listening skills to comprehend spoken English in various contexts.
4. Write coherently and cohesively for different purposes such as email, reports, memo, notice etc.

MODULE I

Basics of Communication

1. An overview of the aspects of communication
2. Types of communication
3. Barriers in communication
4. Essentials of Non-verbal form of communication

MODULE II

Communicative English- Spoken and Written

1. Difference between the spoken and written English
2. Punctuation
3. Word Formation
4. Synonyms, Antonyms, Homonyms, Homophones, Polysemy, Eponymy

MODULE III

Communicative Grammar in Use

1. Types of Sentences
2. Tense
3. Verb
4. Voice

MODULE IV

Comprehension

1. Letter Writing
2. Resume, Job Applications
3. Email Etiquette
4. Report, Memo, Minutes, Notice

MODULE V: Teacher Specific Module

Suggested Readings

Leech, Geoffrey, and Jan Svartvik. *A Communicative Grammar in English*. Longman, 1975.

Ronald Carter, and Michael McCarthy. *Cambridge Grammar of English: A Comprehensive Guide*. Cambridge UP, 2006.

Sasikumar, V, and P V Dhamija, *Spoken English: A Self-Learning Guide to Conversation Practice*, Tata McGraw-Hill, 1993.

Quirk, Randolph and et al. *A Comprehensive Grammar of the English Language*. Longman, 1985.

SEMESTER I
ABILITY ENHANCEMENT COURSE

Course Code: KU1AECENG102

ENGLISH FOR BUSINESS COMMUNICATION
(3 Credits)

Course Description

This course is designed to enable the students to acquire basic knowledge and skill required for communication in the modern world of business. The course further enhances the knowledge for mastering the basic skills in English to enable the students to be effective communicators in everyday life.

Course Objectives

1. Provide the students with an overview of the contemporary corporate world
2. Help the students to use English language without errors
3. Prepare the learners to use the necessary skills for communication
4. Impart the tools to master communication techniques in business world

COURSE OUTCOMES

Course Learning Outcomes: At the end of the Course, the Student will be able to -

C01	analyze different types of business communication.
C02	identify the different methods to use in the business industry.
C03	correct the errors in the use of language in communication.
C04	write business letters without mistakes.

Course Contents

Module 1

Introduction to business communication.
Aspects of business communication.
Types of business communication

Module 2

Writing for Business Audiences
Improving Writing Techniques

Module 3

E-Mail and Memoranda
Persuasive Messages

Module 4

Writing formal reports
Writing proposals and informal reports

Module 5: Teacher Specific Module

Recommended Reading:

Barrett, Barney and Pete Sharma. *Networking in English: Informal Communication in Business*. Macmillan, 2010.

Bovée, Courtland L. and John V Thill. *Business Communication Essentials*. 5th ed. Pearson Prentice Hall, 2012.

Chan, Mable. *English for Business Communication*. Routledge, 2020.

Giordano, Walter. *English for Business Communication*. EGEATools, 2012.

SEMESTER I
ABILITY ENHANCEMENT COURSE

KU1AECENG103: ENGLISH SPEAKING SKILLS

(3 Credits)

Course Description

The course is designed for undergraduate students who want to continue or move across with their tertiary studies in various disciplines leading to a graduate or master's degree. This course provides the student with strategies, practices and activities for speaking in academic and everyday contexts. The course is envisioned as a practical classroom and out-of-classroom activity which will ultimately enhance the speaking and presentation abilities of the students to sustain their academic ventures in higher education. The teacher has to perform the role of a guide and mentor to hone up the speaking skills for better application of all kinds of knowledge gathered by way of reading inputs by students.

Objectives of the Course:

- The course aims at enhancement of speaking competence through interactive learning.
- Learners will be familiarised with grammatical items essential to spoken language.
- Learners will be trained to use English with fair level of confidence & without committing errors.
- The Course is offered as an Ability Enhancement Course for students from all academic disciplines, to earn three credits.
- The syllabus of spoken English would aim at enriching both primary and secondary skills like Speaking, Listening, Reading and Writing.

SEMESTER I
ABILITY ENHANCEMENT COURSE (AEC)
KU1AECENG104: ENGLISH LANGUAGE ESSENTIALS
(3 Credits)

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
II	AEC	100		4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
60	-	60	50	50	100	1 hour 30 minutes

COURSE DESCRIPTION

This course will help the students to develop fundamental knowledge and communication skills in the English language. The course also helps students familiarize themselves with the basics of grammar, speaking, reading, and vocabulary skills.

COURSE OUTCOMES: At the end of the Course, the Student will be able to –

CO No.	Expected Outcome	Learning Domains
CO1	Identify and understand the different parts of speech in English	K, U
CO2	Communicate in English with better fluency and accuracy	U, A, E
CO3	Significantly enhance their range of vocabulary and strengthen writing skills	K, U
CO4	Understand and analyze passages and recognize the organization	U,A,An

	of ideas	
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*Remember(K), Understand(U), Apply(A), analyze (An), Evaluate (E), Create(C), and Synthesis (Sy)

COURSE CONTENTS

Module 1: Basic Grammar

MODULE	UNIT	DESCRIPTION	HOURS
1	1	Parts of Speech	3
	2	Subject-Verb Concord	2
	3	Essential English Vocabulary (Synonyms and Antonyms, Idioms, Phrasal verbs, Back Formation)	2
	4	Tenses and their Respective Uses	6

1.1 Parts of Speech

1.2 Subject-Verb Concord

1.3 Essential English Vocabulary (Synonyms and Antonyms, Idioms, Phrasal verbs, Backformation)

1.4 Tenses and their Respective Uses

Suggested readings specific to the Module:

1.1 *Murphy, Raymond. English Grammar in Use: A Self Study Reference and Practice Book Intermediate Learners Book. Cambridge UP, 2013.*

1.2 *McCarthy, Michael, and Felicity O'Dell. English Vocabulary in Use: Advanced Book with Answers and Enhanced eBook: Vocabulary Reference and Practice. Cambridge UP, 2017.*

1.3 *McCarthy, Michael. Test Your English Vocabulary in Use Upper – Intermediate. Cambridge UP, 2007.*

1.4 *Wyatt, Rawdon. Check Your Vocabulary for IELTS, Peter Collin Publishing, 2001*

Module 2: Reading Comprehension

MODULE	UNIT	DESCRIPTION	HOURS
2	1	Scanning for keywords and scanning for information	1
	2	Making inferences and understanding the main ideas	1
	3	Understanding new words and sentences from contexts	1
	4	Understanding implications and recognizing the organization of ideas	1

2.1 Scanning for key words and scanning for information

2.2 Making inferences and understanding main ideas

2.3 Understanding new words and sentences from contexts

2.4 Understanding implications and recognizing the organization of ideas

Suggested readings specific to the module:

2.1 Mikulecky, Beatrice S, and Linda Jeffries. *Basic Reading Power*. Longman, 1997.

2.2 Sharma, Arun, and Meenakshi Upadhyay. *How to Prepare for Verbal Ability and Reading Comprehension for CAT*. McGraw Hill, 2020.

2.3 Geyte, Els Van. *Collins Reading for IELTS*, Collins, 2011.

Module 3: Writing Competency

MODULE	UNIT	DESCRIPTION	HOURS
3	1	Letter Writing, personal letter, formal letter, business letter	3
	2	Email: Modes and Etiquette	2
	3	Paragraph writing: The essential feature	2
	4	Essay writing, descriptive essay, narrative essay, explanatory essay	3

3.1 Letter Writing, personal letter, formal letter, business letter

3.2 Email: modes and etiquettes

3.3 Paragraph writing: essential feature

3.4 Essay writing, descriptive essay, narrative essay, explanatory essay

Suggested readings specific to the module:

3.1 Kumar, Sanjay and Pushpa Lata. *Communication Skills*. OUP, 2006

3.2 Swan, Michael. *Oxford Pocket Basic English Use*, OUP, 2008.

3.3 Hewings, Martin. *Advanced Grammar in Use*. CUP, 2009.

3.4 Ur, Penny. *Grammar Practice Activities*, CUP, 2002.

Module 4: Speaking Skills

MODULE	UNIT	DESCRIPTION	HOURS
4	1	Basic conversational etiquettes in English & use of polite expressions	2
	2	Role play exercises and describing pictures	5
	3	Telephonic conversation and related functions	4
	4	Functional English: expressing necessity and prohibition, advisability, obligation, unfulfilled intentions, suggestions and invitations	2

4.1 Basic conversational etiquette in English & use of polite expressions

4.2 Role-play exercises and describing pictures

4.3 Telephonic conversation and related functions

4.4 Functional English: expressing necessity and prohibition, advisability, obligation unfulfilled intentions, suggestions, and invitations

Suggested readings specific to the module:

4.1 Bansal, R. K., J. K. Harrison, and R. K Harrison. *Spoken English: A Manual of Speech Phonetics*. Orient Black Swan, 2013.

4.2 Kumar, Suresh, and P. Sree Hari. *Communicative English*, Orient Black Swan, 2003.

4.3 Woods, F. T. *A Remedial English Grammar*, CUP, 2004.

4.4 Thomson A. J, and A. V. Martinet. *A Practical English Grammar*, OUP, 2008.

Core Compulsory Readings

- Kumar, Suresh, and P. Sree Hari. *Communicative English*, Orient Black Swan, 2003.
- Murphy, Raymond. *Intermediate English Grammar*. Cambridge University Press, 2008.

Core Suggested Readings

- Chaturvedi, P. D, and Mukesh Chaturvedi, *Bussiness Communication*. Pearson, 2000.
- Eastwood, John. *Oxford Practice Grammar*, OUP, 2000.
- O’Sullivan, Kerry and Michael Garbutt. *IELTS Strategies for Study: Reading, Writing, Listening and Speaking at University and College*. NCELTR Publications, 1991.
- John O. Greene. *Essentials of Communication Skill and Skill Enhancement*. OUP, 2002.
- Kumar Sanjay, Pushpa Lata. *Communication Skills*, CUP, 2006.
- Swan, Michael. *Basic English usage*, CUP, 2004.

Module 5: Teacher Specific Module

TEACHING LEARNING STRATEGIES

End Semester Evaluation	Marks: 50
Continuous Evaluation	Marks: 50
Classroom Tests: Best one out of two-unit tests	Marks: 20
Role Play Exercises	Marks: 10

Worksheets	Marks: 10
Assignments (Two Assignments)	Marks: 10

The class will be taught by using lectures and demonstrations, seminars, classroom discussions, videos, charts and presentation methods.

MODE OF TRANSACTION

Lecture/ laboratory work/ field work/ outreach activities/ project work/ viva/ seminars/ term papers/ assignments/ presentations/ self-study etc.

ASSESSMENT RUBRICS Marks: 100 (50+50)

SEMESTER I

ABILITY ENHANCEMENT COURSE (AEC)

KU1AECENG105: ENGLISH LANGUAGE AND COMMUNICATION FOR SPORTS

(3 Credits)

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
1	AEC	100		4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
60	-	60	50	50	100	1 hour 30 minutes

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

Course Description

This course aims to provide students with a comprehensive understanding of how English language is used within various sports disciplines. Through tailored exercises, students will refine their subject-specific vocabulary, grammar and communication skills to effectively navigate sporting contexts. Emphasis will be placed on developing fluency and accuracy in spoken and written English. By the end of the course students will have the linguistic tools necessary to communicate proficiently in English within the realm of sports, whether as athletes, commentators, journalists or enthusiasts.

Course Outcomes: At the end of the Course, the Student will be able to –

CO No.	Expected Outcome	Learning Domains
C01	Acquire and apply sports-specific vocabulary and terminology	R,U,A
C02	Enhance listening and speaking skills through interactive exercises and simulations	U,A

C03	Develop confidence in using English for diverse professional opportunities and interactions	A
C04	Enhance reading and writing proficiency in sports context	U,A,ANC,S

***Remember(R), Understand(U), Apply(A), analyze (An), Evaluate (E), Create(C), and Synthesis (Sy)**

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1		✓	✓			
CO2		✓	✓			
CO3		✓	✓			
CO4		✓	✓			

Mapping of Course Outcomes to PSOs

COURSE CONTENTS

Module 1: Sports Communication and Terminology

- 1.1 Basic sports vocabulary and terminology- sports lingo/ jargon
- 1.2 Formal and informal sports language
- 1.3 Language vs. dialect on the pitch
- 1.4 Communities and platforms from linguistic point of view

Suggested readings specific to the module:

- 1.1 Zurkowski, Victoria. *53 Important Sports Vocabulary Terms in English*. Fluentu. 13 Feb, 2024.
- 1.2 McCarthy, Michael. *Test Your English Vocabulary in Use Upper – Intermediate*. Cambridge UP, 2007.

Module 2: Speaking proficiency in sports

- 2.1 Communication and types (formal, informal, interpersonal, verbal and non-verbal)
Barriers of communication and its effect on the game

2.2 Live sports commentary and audience (play by play, colour commentary)

2.3 Elements of anchoring (transition phrases), sports news and refereeing – Pre and post-match discussions

- Students are expected to submit a report of pre/post-match discussions of any sports event.
- Workshops demonstrating commentary and anchoring skills.
- Practice commentary sessions on recorded sports events.
- Radio show specific to sports news and updates

Suggested readings specific to the module:

2.1 Bansal, R. K., J. K. Harrison, and R. K. Harrison. *Spoken English: A Manual of Speech Phonetics*. Orient Black swan, 2013.

2.2 Kumar, Suresh, and P. Sree Hari. *Communicative English*, Orient Black Swan, 2003.

Module 3: Enhance listening skills

3.1 Verbal and non-verbal cues

3.2 Need for following instructions and feedback

3.3 Questioning techniques and active listening in sports interviews

3.4 Understanding commentary and sports news

- Interview an eminent sports personality from your locality and submit a report.
- News reading with appropriate intonation, pause and tone.
- Watching and analyzing sports broadcasts, discussing key elements and phrases of effective commentary
- Submit a video of live sports reporting.

Suggested readings specific to the module:

3.1 *How to Improve your Active Listening Skills*. Sport Resilience. 2016.

Module 4 (Writing proficiency)

4.1 Elements of sports discourse

4.2 Sports reporting and journalism

4.3 Community engagement in sports (leveraging social media, email updates etc)

4.4 Types of writing and benefits – feature writing, blogs, magazines, journals, digital and social media influencing

- Sports blogging (website link should be shared)
- Write a newspaper report of any sports event that was conducted in your campus.
- Discussing ethical issues in sports journalism.

Suggested readings specific to the module:

4.1 Cabag, Yen. *Sports Writing: Types, Examples, and Tips for Better Reporting*. TCK Publishing.

4.2 Strunk, J. R. William, and E. B. White. *The Elements of Style*. Macmillan Publishing. April, 2003.

Core Compulsory Readings

- Kumar, Suresh, and P. Sree Hari. *Communicative English*, Orient Black Swan, 2003.
- Murphy, Raymond. *Intermediate English Grammar*. Cambridge University Press, 2008.

Core Suggested Readings

- O’Sullivan, Kerry and Michael Garbutt. *IELTS Strategies for Study: Reading, Writing, Listening and Speaking at University and College*. NCELTR Publications, 1991.
- John O. Greene. *Essentials of Communication Skill and Skill Enhancement*. OUP, 2002.
- Thomson A. J, and A. V. Martinet. *A Practical English Grammar*, OUP, 2008.
- Woods, F. T. *A Remedial English Grammar*, CUP, 2004.

Module 5: Teacher Specific Module

TEACHING LEARNING STRATEGIES

The class will be taught by using lectures and demonstrations, seminars, classroom discussions, videos, charts and presentation methods.

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Classroom Tests 1	10
b)	Classroom Tests 1	10
c)	Role Play Exercises	10

MODE	d)	Worksheets	10	OF
	e)	Assignments (Two Assignments)	10	
	Total		100	

TRANSACTION

Lecture/ laboratory work/ field work/ outreach activities/ project work/ viva/ seminars/ term papers/ assignments/ presentations/ self-study etc.

ASSESSMENT RUBRICS Marks: 100 (50+50)

SAMPLE QUESTIONS

1. Differentiate formal and informal language. Give examples specific to sports genre.
2. What are the key elements of sports discourse?
3. Elucidate different types of writing and list out the benefits of any one form with respect to the field of sports.
4. Explain sports lingo with examples.
5. Write an essay on barriers of communication and its effect on the game.

KU02MDCLEG101
Human Rights and Indian Constitution

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
II	MDC	200	KU02MDCLEG10 1	3	45

Learning Approach (Hours/ Week)			Marks Distribution (%)			Duration of ESE (Hours)
Lecture	Practical	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	3

CourseDescription:

The course "Human Rights and Constitution" explores the intricate relationship between human rights principles and constitutional frameworks. It delves into the fundamental concepts, historical evolution, legal frameworks, and contemporary debates surrounding human rights within the context of constitutional law. Furthermore, the course will explore contemporary challenges and emerging issues in the field of human rights and constitution.

Overall, the course aims to equip students with the knowledge, analytical skills, and ethical perspectives necessary to critically engage with debates surrounding human rights and constitution, and to have equality, human dignity in their professional and personal endeavours. Through a combination of lectures, seminars, readings, discussions, and research assignments, students will develop a comprehensive understanding of the complex interplay between human rights principles and constitutional frameworks, as well as the role of law, politics, and civil society in advancing and protecting human rights in diverse socio-political contexts.

CoursePre-requisite

Must enrol in any post graduation programme offered by Kannur University

CourseOutcomes:AttheendoftheCourse,theStudentwillbeableto-

CO No.	Expected Outcome	Learning Domains
1	Recall key human rights principles and concepts. Memorize significant provisions of the Indian Constitution related to human rights.	R
2	Explain the significance of human rights in contemporary society. Interpret the relationship between international human rights standards and the Indian Constitution. Describe the role of judiciary and other institutions in upholding human rights in India.	U
3	Apply human rights principles to analyze real-life scenarios and case studies.	A

	Utilize constitutional provisions to address human rights violations in hypothetical situations.	
4	Analyze the intersectionality of different human rights issues within the Indian context. Evaluate the effectiveness of existing legal frameworks in protecting human rights in India	A
5	Critically evaluate the strengths and weaknesses of human rights protection mechanisms in India. Assess the impact of government policies and interventions on the promotion and protection of human rights.	A
6	Synthesize knowledge of human rights principles and constitutional provisions to propose innovative solutions to contemporary human rights challenges. Develop advocacy strategies and campaigns aimed at promoting awareness and respect for human rights in society.	C

***Remember(K),Understand(U),Apply(A),Analyse(An),Evaluate(E),Create(C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1							
CO 2							
CO 3							
CO 4							

COURSE CONTENTS		Hours
Module I	Introduction to Human Rights and their Importance	
1.1	Introduction to Human Rights and their Importance	
1.2	Definition and evolution of human rights	
1.3	UN Charter on Human Rights, Universal Declaration of Human Rights (UDHR) and other international instruments	
1.4	Role of human rights in promoting dignity, equality, and justice	
Suggested Readings specific to the Module I		
1.1	Indian Constitutional Law by MP.Jain	
1.2	Constitution Of India by VN Shukla	
1.3	Introduction to the Constitution of India by Durga Das Basu	
1.4	Indian Polity by M. Laxmikanth	
Module II	Overview of the Indian Constitution	Hours
2.1	Overview of the Indian Constitution	

2.2	Historical context and framing process	
2.3	Key features: Preamble, Fundamental Rights, Directive Principles of State Policy, and Fundamental Duties.	
2.4	Comparison with other Constitutions and its unique aspects.	
Suggested Readings specific to the Module II		
2.1	Indian Constitutional Law by MP Jain	
2.2	Constitution Of India by VN Shukla	
2.3	Introduction to the Constitution of India by Durga Das Basu	
2.4	Indian Polity by M. Laxmikanth	
Module III	Fundamental Rights in the Indian Constitution	Hours
3.1	Detailed study of fundamental rights guaranteed by the Constitution.	
3.2	Significance and limitations of fundamental rights.	
3.3	Case studies illustrating the application of fundamental rights.	
3.4	Overview of constitutional remedies for human rights violations, including writs and public interest litigation (PIL)	
Suggested Readings specific to the Module III		
3.1	Indian Constitutional Law by MP Jain	
3.2	Constitution Of India by VN Shukla	
3.3	Introduction to the Constitution of India by Durga Das Basu	
3.4	Indian Polity by M. Laxmikanth	
Module IV	Contemporary Human Rights Issues in India	Hours
4.1	Contemporary Human Rights Issues in India	
4.2	Role of judiciary, executive, and legislature in protecting human rights.	
4.3	Exploration of current human rights challenges in India, such as gender inequality, caste discrimination, and religious freedom.	
4.4	Examination of the role of civil society organisations and media in advocating for human rights.	
Suggested Readings specific to the Module IV		
4.1	Indian Constitutional Law by MP. Jain	
4.2	Constitution Of India by VN Shukla	
4.3	Introduction to the Constitution of India by Durga Das Basu	
4.4	Indian Polity by M. Laxmikanth	
Module V	Teacher Specific Module	Hours
5.1	Mention broad area of content, transaction and evaluation.	

Core Compulsory Readings (Books, Journals, E-sources Websites/weblinks) List

1. Indian Constitutional Law by MP. Jain
2. Constitution Of India by VN Shukla
3. Introduction to the Constitution of India" by Durga Das Basu
4. Indian Polity" by M. Laxmikanth

CoreSuggestedReadings(Books,Journals,E-sourcesWebsites/weblinks)List

1. Human Rights: A Very Short Introduction" by Andrew Clapham
2. Understanding Human Rights: An Exercise Book" by Claire Moon and James W. Sweeney

TEACHINGLEARNINGSTRATEGIES(Classroomactivities/Labactivities/Field Activities)

Classroom Lecturing, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

MODEOFTRANSACTION

Hybrid

ASSESSMENTRUBRICS

EvaluationType		Marks
EndSemesterEvaluation		50
ContinuousEvaluation		50
a)	TestPaper-1	10
b)	TestPaper-2	10
c)	Assignment	10
d)	Seminar	10
e)	Book/ArticleReview	10
Total		100

SampleQuestionstotestOutcomes.

1. Discuss the evolution of human rights discourse in the Indian Constitution, highlighting key amendments and judicial interpretations that have shaped its current framework?
2. Analyse the significance of fundamental rights enshrined in the Indian Constitution in safeguarding human dignity and promoting social justice. Provide examples of landmark cases where these rights have been upheld or challenged?
3. Explore the intersectionality between human rights and constitutional provisions for marginalized communities in India, such as Dalits, Adivasis, women, and LGBTQ+ individuals. How effective has the Constitution been in addressing their unique challenges?
4. Assess the role of the judiciary in protecting human rights under the Indian Constitution, with a focus on the doctrine of judicial activism and its impact on promoting social justice and equality?
5. Examine the limitations and critiques of human rights enforcement mechanisms within the Indian constitutional framework. How can these shortcomings be addressed to ensure more effective protection of human rights for all citizens?

Employability for the Course/Programme

- **Legal Profession:** For those aspiring to pursue a career in law, whether as advocates, legal advisors, or judges, a deep understanding of the Indian Constitution and human rights is essential. This course equips students with the necessary legal knowledge and analytical skills to excel in these roles.
- **Public Policy and Governance:** Understanding the intricacies of the Indian Constitution and human rights is crucial for policymakers, civil servants, and government officials. This course enables students to critically analyze policy implications, navigate legal frameworks, and advocate for human rights-based approaches in governance and policymaking.
- **Non-Governmental Organizations (NGOs) and Civil Society:** NGOs and civil society organizations play a vital role in promoting and protecting human rights. Graduates of this course can contribute effectively to advocacy, research, and implementation of programs aimed at advancing human rights agendas and social justice initiatives.
- **International Organizations:** With the growing importance of human rights in global discourse, international organizations often seek professionals with expertise in national legal systems and human rights frameworks. This course provides a solid foundation for employment opportunities in international organizations working on human rights issues in India.
- **Academic and Research Institutions:** Many universities and research institutions require experts in constitutional law and human rights for teaching, research, and policy analysis roles. Graduates of this course can pursue careers as professors, researchers, or policy analysts in academic and research settings.
- **Corporate Sector:** Corporations are increasingly recognizing the importance of human rights compliance and ethical business practices. Professionals with knowledge of human rights law can find employment in corporate social responsibility (CSR) departments, legal compliance teams, and consulting firms advising businesses on human rights issues.

KU01DSCECO101
INTRODUCTION TO ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
I	Minor	100	KU01DSCECO101	4	75

Learning Approach (Hours/ Week)			Marks Distribution (%)			Duration of ESE (Hours)
Lecture	Practical	Tutorial	CE	ESE	Total	
3	1	4	50	50	100	2

Course Description:

This is designed to provide non-economic students with a foundational understanding of economic principles and their relevance in daily life. This course offers a comprehensive exploration of fundamental economic concepts, aiming to equip learners with the necessary tools to navigate economic issues in their personal and professional spheres. From understanding price determination and inflation to exploring personal finance, global trade dynamics, and social issues such as income inequality and poverty alleviation, students will gain practical insights into economics. By the end of the course, participants will have developed a basic understanding of economic phenomena, enabling them to make informed decisions and engage meaningfully with economic issues in their everyday lives.

Course Prerequisite: NIL

Course Outcomes: At the end of the Course, the student will be able to

CO No.	Expected Outcome	Learning Domains
1	Gain a foundational understanding of economic principles to interpret and engage with economic issues in everyday life.	R, U, E
2	Apply economic concepts to make informed decisions regarding personal finance and investments.	U, A, An
3	Develop awareness of global economic dynamics and their implications for individual economies and societies.	U, A
4	Enhance critical thinking skills to analyze and address social and economic challenges such as inequality, discrimination, poverty, and corruption.	U, An, C

****Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)***

COURSE CONTENTS

Hours 15

Module I A basic understanding of Economics

- 1.1 What is economics? Definition and scope of economics; Importance of learning economics in daily life
- 1.2 Role of economics in decision-making and understanding societal systems
- 1.3 Price determination - Factors influencing prices and reasons for price fluctuations
- 1.4 Per-capita GDP; Understanding Inflation - Meaning of inflation and how it is measured in India; Economic cycles - Understanding the phases of economic cycles, and their causes

Suggested Readings specific to the Module I

- 1.1 Officer, L. H. 2009. Everyday Economics: Honest Answers to Tough Questions. Palgrave Macmillan
- 1.2 Krugman, P., and Wells, R. 2020. Economics (6th ed.). Worth Publishers.
- 1.3 Mankiw, N.G. 2020. Principles of Economics (9th ed). Cengage Learning
- 1.4 Khan, M. Y. 2011. Indian Financial System, Tata McGraw Hill, 7th edition.

Module II Economics of Finance: both personal and national

Hours 15

- 2.1 Personal budget; Income. expenditure, saving, and investment (concepts)
- 2.2 Alternatives to savings accounts and considerations for investment decisions
- 2.3 Government budget; Taxes, subsidies and fiscal deficit, Components of Government budget, Reasons behind heavy taxation on specific goods (eg: Taxation on alcohol and tobacco)
- 2.4 Stock market mechanics: Bulls and bears, Functioning of stock markets and the impact of market trends on investments

Suggested Readings specific to the Module II

- 2.1 Samuelson, P.A. and Nordhaus, W.D. 2010. Microeconomics, Nineteenth Edition, McGraw Hills Irwin.
- 2.2 Muraleedharan, D. 2014. Modern Banking: Theory and Practice. New Delhi: PHI Learning Pvt. Ltd.
- 2.3 Shekhar, K. C. and Lekshmy Shekhar. 2013. Banking Theory and Practice, Vikas Publishing House Pvt Ltd, Noida, 21st edition
- 2.4 Nadar, Narayana E. 2016. Money and Banking. New Delhi: PHI Learning Private Ltd.

Module III Economic systems and globalization

Hours 15

- 3.1 Economic systems and globalization
- 3.2 Capitalism vs. Socialism; Contrasting features and implications of different economic systems, Balancing between state regulation and free market dynamics
- 3.3 Nationalization: Effects of Government ownership on economic growth
- 3.4 Trade: Imports, and exports, Free trade: controversies surrounding unrestricted trade policies

Suggested Readings specific to the Module III

- 3.1 Thirlwall, A.P. 1994. Growth and Development with Special Reference to Developing Countries. New Delhi: Palgrave McMillian.
- 3.2 Thirlwall, A.P. 1994. Growth and Development with Special Reference to Developing Countries. New Delhi: Palgrave McMillian.
- 3.3 Krugman, P., and Wells, R. 2020. Economics (6th ed.). Worth Publishers.
- 3.4 List Stonier, A.W. and Hague, D.C. 1980. A Textbook of Economic Theory, London: Longman Group

Module IV Economics of social issues

Hours 15

- 4.1 Inequality: Inequality in income distribution, Disproportionate earnings: Analysis of income inequality and its relation to societal contributions
- 4.2 Discrimination in the job market: Examination of gender and minority discrimination in employment, Gender pay gap
- 4.3 Poverty: Feasibility and strategies for poverty alleviation
- 4.4 Unemployment: Types of unemployment, Definition and implications of an acceptable level of unemployment.
Corruption: An economic perspective

Suggested Readings specific to the Module IV

- 4.1 Debraj Ray. 1998. Development Economics. New Oxford University Press.
- 4.2 Panzar, J. C., and Willig, R. D. 1981. Economies of scope. The American Economic Review, 71(2), 268-272.
- 4.3 Todaro, Michael P. and Stephen C. Smith. 2020. Economic Development. New Delhi Pearson Education.
- 4.4 Rose - Ackerman. S. 1999. Corruption and Government: Causes, Consequences, and Reform. Cambridge University Press

Module V Teacher Specific Module

Hours 15

- 5.1 This module includes interactive sessions that facilitate deep learning and critical thinking among students. Integrating case studies, group discussions, and real-world examples can enhance students' understanding and appreciation of the

complex dynamics of economic development.

Core Compulsory Readings (Books, Journals, E-sources, Websites/weblinks)

1. Pindyck R. S., Rubinfeld, D. L., and Mehtha P L. Microeconomics. Pearson Education. Latest Edition
2. Mankiw, N.G. 2020. Principles of Economics (9th ed). Cengage Learning
3. Musgrave, R. A., & Musgrave, P. B. 1989. Public Finance in Theory and Practise (5thed.).McGraw – Hill.
4. Mankiw, N.G. 2020. Principles of Economics (9thed). Cengage Learning
5. Mankiw, N.G. 2020. Principles of Economics (9thed). Cengage Learning

Core Suggested Readings (Books, Journals, E-sources, Websites/weblinks)

1. Friedman, D. D. 1997. Hidden Order: The Economics of Everyday Life. Harper Collins.
2. Heyne, P. T. 1983. The Economic Way of Thinking (4th ed.). Science Research Associates.
3. McConnell, C. R., Brue, S. L., & Flynn, S. M. 2018. Economics: Principles, Problems, and Policies (21st ed.). McGraw – Hill Education.
4. Krugman, P., and Wells, R. 2021. Economics (5th ed). Worth Publishers.
5. Rosen, H. S. 1992. Public Finance (3rd). Irwin.
6. Tylor, P. E. 1970. The Economics of Public Finance (3rded).The Macmillan Company.

Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecturing, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

Mode of Transaction

Online Classes

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper- 1	10
b)	Test Paper -2	10
c)	Assignment	10
d)	Seminar	10
e)	Book/ Article Review/Field Report	10

Total	100
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Sample Questions to test Outcomes

1. Write a note on the role of economics in decision making?
2. Explain the principles of economics?
3. Demonstrate the types of unemployment?
4. Write a note on income and inequality?
5. Analyse the development issues of various societies?
6. Write a note on the free market dynamics?

Employability for the Course/Programme

- Employability as economists in various institutions of Planning and Development
- Banking Sector, Debarment of Economics and Statistics, Labour Department, Ministry of Finance, RBI, Data Analyst, Research Officer, teaching, etc.

KU02DSCECO102
Fundamentals of Economic Development

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
I	Minor	100	KU02DSCECO102	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	0	0	50	50	100	2

Course Description:

This course provides a comprehensive overview of economic development theories and practices with a focus on developing countries, particularly India. It examines the meaning, measurement, and determinants of economic development, explores the role of human resources in development, introduces concepts of sustainable development, and analyzes India's development experience from pre-independence to contemporary issues.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Students will be able to define economic development and differentiate it from economic growth	R, U
2	Analyze the determinants of economic growth and development using theoretical frameworks and empirical evidence.	R, U
3	Evaluate the role of human resources, including education, health, and gender, in economic development	R, U
4	Understand the concept of sustainable development and its application in policy-making.	R, U
5	Critically assess India's development experience, including the successes, challenges, and implications for future policy	R, U

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

COURSE CONTENTS

Hours 10

Module I Economic Development- Meaning and Measurement

- 1.1 Meaning of economic development
- 1.2 Distinction between Growth and Development
- 1.3 Determinants of Growth and Development
- 1.4 Measurement of Growth and Development – GNP Per capita, PQLI, HDI, Gender Development Index, Gender Empowerment Index, Global Hunger Index

Suggested Readings specific to the Module I

- 1.1 Aghion, P., and Howitt, P. 2009. The Economics of Growth. The MIT Press
- 1.2 Bhagwati, J. 1971. The Economics of Underdeveloped Countries. Cambridge University Press.
- 1.3 Bruton, H. J. 1997. Principles of Economics. Addison Wesley Longman.
- 1.4 Clunies – Ross, A., Forsyth, D., and Haq, M. 1994. Development Economics. New Delhi: McGraw Hill Education.

Module II Human Resource and Economic Development

Hours 15

- 2.1 Human Resource and Development, Manpower planning
- 2.2 Concept of intellectual capital and its size, Role of education and health in economic development
- 2.3 Gender and development, Women in the labour force
- 2.4 Theory of demographic transition, Ageing and younging issues

Suggested Readings specific to the Module II

- 2.1 Aghion, P., and Howitt, P. 2009. The Economics of Growth. The MIT Press
- 2.2 Bhagwati, J. 1971. The Economics of Underdeveloped Countries. Cambridge University Press.
- 2.3 Bruton, H. J. 1997. Principles of Economics. Addison Wesley Longman.
- 2.4 Clunies – Ross, A., Forsyth, D., and Haq, M. 1994. Development Economics. New Delhi: McGraw Hill Education.

Module III Introduction to Sustainable Development

Hours 15

- 3.1 Definition and concept of sustainable development, Objectives of Sustainable development, Three pillars of sustainable development
- 3.2 Dimensions of sustainable development-social, economic and environmental
- 3.3 The Millennium Development Goals
- 3.4 Tools for Sustainable growth

Suggested Readings specific to the Module III

- 3.1 Aghion, P., and Howitt, P. 2009. *The Economics of Growth*. The MIT Press
- 3.2 Bhagwati, J. 1971. *The Economics of Underdeveloped Countries*. Cambridge University Press.
- 3.3 Bruton, H. J. 1997. *Principles of Economics*. Addison Wesley Longman.
- 3.4 Clunies – Ross, A., Forsyth, D., and Haq, M. 1994. *Development Economics*. New Delhi: McGraw Hill Education.

Module IV Indian Development Experience

Hours 10

- 4.1 Pre-Independence Economy and Development Challenges
- 4.2 Planning for Development: The Five-Year Plans
- 4.3 Sectoral Development Policies (Green Revolution and agricultural transformation-Industrial policy and public sector undertakings)
- 4.4 Economic Reforms and Liberalization, Contemporary Development Issues

Suggested Readings specific to the Module IV

- 4.1 Ghatak, S. 2003. *Introduction to Development Economics*. 4th Ed. New Delhi: Routledge.
- 4.2 Higgins, B. 1968. *Economic Development: Problems, Principles, and Policies* (Rev. Ed.). New York: W.W. Norton and Co.
- 4.3 Meier, G. M. 2001. *Leading Issues in Economic Development*. Oxford: Oxford University Press.
- 4.4 Nafziger, E. W. 2006. *Economic Development* (4th Ed.). Cambridge: Cambridge University Press

Module V Teacher Specific Module

Hours 10

- 5.1 This module includes interactive sessions that facilitate deep learning and critical thinking among students. Integrating case studies, group discussions, and real-world examples can enhance students' understanding and appreciation of the complex dynamics of economic development.

Core Compulsory Readings (Books, Journals, E-sources, Websites/weblinks)

1. Todaro and Smith, 2020. *Economic Development*. New Delhi: Pearson Education.
2. Ray, Debraj. 1998. *Development Economics*. New Delhi: Oxford University Press.
3. Thirlwall, A.P. 2017. *Growth and Development with Special Reference to Developing Countries*. New Delhi: Palgrave McMillian.
4. Perkins, Radelet and Lindauer. 2012. *Economics of Development*. 7th Ed. New York: W.W Norton & Co.
5. Uma Kapila. 2018. *Indian Economy: Performance and Policies*. New Delhi: Academic Foundation.

6. Agarwal, A. N. 1976. Indian Economy – Nature, Problems and Progress. New Delhi: Vikas Publishing House.
7. K L Gupta and Harvinder Kaur. 2004. New Indian Economy and Reforms. New Delhi: Deep and Deep Publications.

Core Suggested Readings (Books, Journals, E-sources, Websites/weblinks)

1. Aghion, P., and Howitt, P. 2009. The Economics of Growth. United States: The MIT Press
2. Bhagwati, J. 1971. The Economics of Underdeveloped Countries. Cambridge: Cambridge University Press.
3. Bruton, H. J. 1997. Principles of Economics. UK: Addison Wesley Longman.
4. Clunies – Ross, A., Forsyth, D., and Haq, M. 1994. Development Economics. New Delhi: McGraw -Hill Education.
5. Ghatak, S. 2003. Introduction to Development Economics. 4th Ed. New Delhi: Routledge.
8. Higgins, B. 1968. Economic Development: Problems, Principles, and Policies. (Rev. ed.). New York: W.W Norton & Co.
6. Meier, G. M. 2001. Leading Issues in Economic Development. Oxford: Oxford University Press.
7. Nafziger, E. W. 2006. Economic Development. 4th Ed. Cambridge: Cambridge University Press.

Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecturing, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

Mode of Transaction

Online Classes

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper- 1	10
b)	Test Paper-2	10
c)	Assignment	10
d)	Seminar	10
e)	Book/ Article Review	10
Total		100

Sample Questions to test Outcomes

1. How to measure economic development?
2. Analyse the determinants of economic growth and development?
3. Examine India's development experience?
4. Critically evaluate the theories and policies related to the economic development?
5. Demonstrate the role of education, health, gender, and demographic transition in the economic development?
6. Write a note on sectoral development policies and economic reforms?

Employability for the Course/Programme

- Employability as economists in various institutions of Planning and Development
- Banking Sector, Department of Economics and Statistics, Labour Department, Ministry of Finance, RBI, Data Analyst, Research Officer, teaching, etc.

KU02DSCBIO102

Cell Biology

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
II	Minor	100	KU01DSCBIO102	4	60

Learning Approach (Hours/ Week)			Marks Distribution (%)			Duration of ESE (Hours)
Lecture	Practical	Tutorial	CE	ESE	Total	
4			50	50	100	2

Course Description:

The Cell biology course introduces the fundamentals of a cell. Students will be able to understand the origin of a cell, different types of cells, its structure and function, cell division and cell death.

Course Prerequisite: NIL

Course Outcomes: At the end of the Course, the Student will be able to

CO No.	Expected Outcome	Learning Domains
1	Develop a foundational understanding of cellular structures and functions.	A
2	Apply knowledge of cell biology to broader biological and anthropological contexts.	A
3	Analyse genetic information and its role in cellular functions	An
4	Evaluate the implications of cell cycle regulation and uncontrolled cell division in human health.	E
5	Understand the cellular mechanisms underlying human development and immunity	U
6	Analyse the role of cellular signalling in social behaviour and social disorders.	An
7	Investigate the cellular basis of evolutionary adaptations and cancer resistance in populations.	An

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO 1	✓						
CO 2	✓						
CO 3	✓		✓				
CO 4		✓					
CO 5					✓		
CO6						✓	
C07			✓				

COURSE CONTENTS

		Hours
Module I	Introduction to cell and cell theory	15
1.1	Cell as a basic unit of life- brief introduction on theory of biogenesis and abiogenesis, early conditions on earth- Haldane and Oparin theory of the origin of life, Urey-Miller experiment, Fox's experiments. Robert Hooke –Discovery of cells and cell theory.	
1.2	General organization of cells, broad classification of cell types-PPL0, bacteria, eukaryotic microbes, plant cell and animal cell.	
1.3	Different levels of organization-cell, tissue, organ, and organism as different level of organization	
1.4	Brief account on the structure of cell membrane and cytoplasmic matrix	

Suggested Readings specific to the Module I

- 1.1 Verma P. S. and Agarwal V.K. 2021. Cytology. New Delhi: S. Chand Publications.
- 1.2 Arumugam, N. 2019. Cell Biology and molecular biology. New Delhi: Saras Publications.
- 1.3 Arumugam, N. 2019. Cell Biology and molecular biology. New Delhi: Saras Publications.
- 1.4 Verma P. S. and Agarwal V.K. 2021. Cytology. New Delhi: S. Chand Publications.

		Hours
Module II	Cellular Organization	13

- 2.1 Structure and functions of cell organelles-Structure and functions of cell organelles Mitochondria, Chloroplast, Nucleus
- 2.2 Chromosome structure-General introduction, discovery, morphology and structural organization.
- 2.3

Cellular aging and lifespan, role of telomeres, Apoptosis

2.4 Cellular adaptations and evolution

Suggested Readings specific to the Module II

- 2.1 Verma P. S. and Agarwal V.K. 2021. Cytology. New Delhi: S. Chand Publications.
- 2.2 Verma P. S. and Agarwal V.K. 2021. Cytology. New Delhi: S. Chand Publications.
- 2.3 Verma P. S. and Agarwal V.K. 2021. Cytology. New Delhi: S. Chand Publications.
- 2.4 Verma P. S. and Agarwal V.K. 2021. Cytology. New Delhi: S. Chand Publications.

Module III Cell Cycle and Cell Division

Hours 13

- 3.1 Mitosis and meiosis – Phases and significance of cell cycle.
- 3.2 Cell cycle
- 3.3 Cancer-brief account on the fate of cells undergoing uncontrolled division
- 3.4 Cancer Resistance in populations

Suggested Readings specific to the Module III

- 3.1 Verma P. S. and Agarwal V.K. 2021. Cytology. New Delhi: S. Chand Publications.
- 3.2 Verma P. S. and Agarwal V.K. 2021. Cytology. New Delhi: S. Chand Publications.
- 3.3 Verma P. S. and Agarwal V.K. 2021. Cytology. New Delhi: S. Chand Publications.
- 3.4 Verma P. S. and Agarwal V.K. 2021. Cytology. New Delhi: S. Chand Publications.

Module IV

Hours 13

- 4.1 Embryonic Development in humans
- 4.2 Cellular Immunity
- 4.3 Role of cellular signalling in social behaviour (Neuropeptides)
- 4.4 The cellular basis of social disorders

Suggested Readings specific to the Module IV

- 4.1 Singh, Inderbir. 2020. Human Embryology. 11th Ed. New Delhi: Jaypee Brothers Medical Publishers
- 4.2 Firth, Christopher D. and Daniel Wolpert. Eds. 2004. The Neuroscience of Social Interaction: Decoding, Influencing, and Imitating the Actions of Others. Oxford:

Oxford University Press.

- 4.3 Michael Numan ed. 2014. *Neurobiology of Social Behaviour: Toward an Understanding of the Prosocial and Antisocial Brain* 1st Ed. London: Academic Press.
- 4.4 Chris Frith and Daniel Wolpert. 2004. *The Neuroscience of Social Interaction: Decoding, Influencing, and Imitating the Actions of Others*. 1st Ed. New Delhi: Oxford University Press

Module V Teacher Specific Module

Hours 6

- 5.1 Mention broad area of content, transaction and evaluation.

Core Compulsory Readings (Books, Journals, E-sources, Websites/weblinks)

1. Verma P. S. and Agarwal V.K. 2021. *Cytology*. New Delhi: S. Chand Publications.
2. Arumugam, N. 2019. *Cell Biology and molecular biology*. New Delhi: Saras publications

Core Suggested Readings (Books, Journals, E-sources, Websites/weblinks)

1. Janet Iwasa, Wallace Marshall. 2020. *Karp's Cell and Molecular Biology*. 9th Ed., Gerald Karp, Wiley.
2. Harvey Lodish, Arnold Berk, Chris A. Kaiser, Monty Krieger, Anthony Bretscher, Hidde Ploegh, Kelsey C. Martin, Michael Yaffe, Angelika Amon. 2021. *Molecular Cell Biology*. 9th Ed. W. H. Freeman.
3. Bruce Alberts, Alexander Johnson, Julian Lewis, Martin Roff, Keeth Roberts, Peter Walter. 2022. *Essential Cell Biology*. 7th Ed. New York: W. W. Norton & Company
4. Becker, Wayne M.; Kleinsmith, Lewis J.; Hardin, Jeff; Bertoni, Gregory Paul. 2008. *The World of the Cell*. 7th Ed. Benjamin Cummings.
5. Geoffrey M. Cooper and Kenneth W. Adams. 2022. *The Cell: A Molecular Approach* 9th Ed. New Delhi: Oxford University Press.
6. Eduardo D.P. DeRobertis and E.M.P. DeRobertis. 2017. *Cell and Molecular Biology*. 8th Ed. Lea & Amp; Febiger, U.S.
7. Thomas D. Pollard, William C. Earnshaw, Jennifer Lippincott- Schwartz, Graham Johnson. 2023. *Cell Biology* (4th Ed) Elsevier.
8. Douglas J. Futuyma and Mark Kirkpatrick Edition: *Evolution* 4th Ed. Sinauer Associates, Inc.
9. *Human Embryology*" by Inderbir Singh Edition: 11th Ed. 2020. Jaypee Brothers Medical Publishers
10. Michael Numan ed. 2014. *Neurobiology of Social Behavior: Toward an Understanding of the Prosocial and Antisocial Brain* 1st Edition. London: Academic Press.
11. Firth, Christopher D. and Daniel Wolpert. Eds. 2004. *The Neuroscience of Social Interaction: Decoding, Influencing, and Imitating the Actions of Others*. Oxford: Oxford University Press.

12. Chris Frith and Daniel Wolpert. 2004. The Neuroscience of Social Interaction: Decoding, Influencing, and Imitating the Actions of Others. 1st Ed. New Delhi: Oxford University Press.

Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecturing, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

Mode of Transaction

Offline Classes

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper 1	10
b)	Test Paper 2	10
c)	Assignment	10
d)	Seminar	10
e)	Viva voce	10
Total		100

Sample Questions to test Outcomes

1. Explain the general organization of cells?
2. Write a note on the biogenesis and abiogenesis?
3. Analyse the cellular signalling in social behaviour and social disorders?
4. Write a note on the cellular mechanisms of human development and immunity?
5. Differentiate cell cycle and cell division?
6. Write a note on the cellular basis of evolutionary adaptations and cancer resistance in populations?

Employability for the Course/Programme

- Employability as teachers, Lab assistants in Forensic and Research Labs, ICAR institutions.
- Jobs in Botanical Survey of India, Zoological Survey of India, Agricultural and State Universities as Lab Assistants.

KU01DSCBIO101
Fundamental Genetics

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
I	Fundamental	100	KU01DSCBIO101	4	60

Learning Approach (Hours/ Week)			Marks Distribution (%)			Duration of ESE (Hours)
Lecture	Practical	Tutorial	CE	ESE	Total	
Modules 1, 2, and 3	Module 4		50	50	100	2

Course Description:

Genetics is the study of genes, heredity, and variation in organisms. This course gives an overview on the basic principles of heredity and the fundamentals of it including Mendelian and few non-Mendelian patterns of inheritance, gene interactions, chromosomal theory, sex determination and sex linkage and population genetics.

Course Prerequisite: NIL

Course Outcomes: At the end of the Course, the Student will be able to

CO No.	Expected Outcome	Learning Domains
1	Remember basic genetic terms and use these terms to explain genetic concepts	R
2	Analyse the concept of inheritance based on universal Mendelian laws and exceptions to it	A
3	Understand the method of sex determination and sex linked characters	U
4	Evaluate the principles of genetics at population level	E
5	Create crosses and work out monohybrid and dihybrid ratios	C

****Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)***

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1		✓					
CO 2		✓					
CO 3		✓					
CO 4		✓					
CO 5				✓			

COURSE CONTENTS

COURSE CONTENTS		Hours 13
Module I	History of genetics and introduction to genetics	
1.1	History - Pre- Mendelian theories- Mendel- Post Mendel	
1.2	Basic terminology of Genetics- Gene, alleles, heredity, variation, mutation, diploid, haploid, basic chromosome set	
1.3	Mendel's works-selection of experimental plant, experimental procedures, observations, and results-back cross and test cross	
1.4	Scope and Importance of Genetics	
Suggested Readings specific to the Module I		
1.1	Verma P. S and VK. Agarwal. 2009. Genetics, 9 th Edition. S. Chand publishers.	
1.2	Verma P. S and VK. Agarwal. 2009. Genetics, 9 th Edition. S. Chand publishers.	
1.3	Verma P. S and VK. Agarwal. 2009. Genetics, 9 th Edition. S. Chand publishers.	
1.4	Vijayakumaran Nair, K. and M. Jayaprakash. 2007. Cell biology Genetics and Molecular Biology Fourth edition. Academica.	
Module II	Principles of Genetic Transmission	Hours 13
2.1	Monohybrid and dihybrid crosses	
2.2	Principle of dominance, law of segregation and law of independent assortment	

2.3	Extension of Mendelism -Allelic variation and gene function- Incomplete dominance, co-dominance, multiple alleles	
2.4	Gene action-from genotype to phenotype. Gene interaction, penetrance, expressivity, epistasis, pleiotropy, interaction with environment.	
Suggested Readings specific to the Module II		
2.1	Vijayakumaran Nair, K. and M. Jayaprakash. 2007. Cell biology Genetics and Molecular Biology Fourth edition. Academica.	
2.2	Vijayakumaran Nair, K. and M. Jayaprakash. 2007. Cell biology Genetics and Molecular Biology Fourth edition. Academica.	
2.3	Verma P. S and VK. Agarwal. 2009. Genetics, 9 th Edition. S. Chand publishers.	
2.4	Verma P. S and VK. Agarwal. 2009. Genetics, 9 th Edition. S. Chand publishers.	
Module III	The chromosomal basis of heredity - Chromosome Variation and Population genetics	Hours 13
3.1	Chromosome theory- Chromosomes – chromosome number, sex chromosome- Sex linked genes in humans - Haemophilia, colour blindness Sex chromosome and sex determination – Humans Sex influenced and sex limited traits Fundamentals of Linkage and polygenic traits	
3.2	Extra chromosomal inheritance-mitochondria and chloroplast genes	
3.3	Chromosomal aberrations-structural and numerical, chromosomal disorders in humans	
3.4	Population genetics- Hardy Weinberg equilibrium - Natural selection- Forces of selection - Migration- Introduction- Genetic drift	
Suggested Readings specific to the Module III		
3.1	Vijayakumaran Nair, K. and M. Jayaprakash. 2007. Cell biology Genetics and Molecular Biology Fourth edition. Academica.	
3.2	Verma P. S and VK. Agarwal. 2009. Genetics, 9 th Edition. New Delhi: S. Chand publishers.	
3.3	Monroe W Strickberger. 2018. Genetics. III Edition. New Delhi: Prentice Hall India.	
3.4	Benjamin A. Pierce. 2020. Genetics: A Conceptual Approach; VII Edition. New Delhi: Macmillan Learning	
Module IV	Laboratory experiments	Hours 15
4.1	Karyotyping with the help of photographs	
4.2	Working out monohybrid crosses and dihybrid crosses	
4.3	Solving genetic problems - concept of dominance- incomplete dominance - co dominance	

4.4	Solving genetic problems - concept of multiple alleles- lethality -gene interactions	
Suggested Readings specific to the Module IV		
4.1	Benjamin A. Pierce. 2020. Genetics: A Conceptual Approach; VII Edition. New Delhi: Macmillan Learning	
4.2	Vijayakumaran Nair, K. and M. Jayaprakash. 2007. Cell biology Genetics and Molecular Biology Fourth edition. Academica.	
4.3	Verma P. S and VK. Agarwal. 2009. Genetics, 9 th Edition. New Delhi: S. Chand publishers.	
4.4	Verma P. S and VK. Agarwal. 2009. Genetics, 9 th Edition. New Delhi: S. Chand publishers.	
Module V	Teacher Specific Module	Hours 6
5.1	Mention broad area of content, transaction and evaluation.	

Core Compulsory Readings (Books, Journals, E-sources, Websites/weblinks)

1. Verma P. S. and V. K. Agarwal. 2009. Genetics, 9th Edition. New Delhi: S. Chand Publishers.
2. Vijayakumaran Nair, K. and M. Jayaprakash. 2007. Cell biology Genetics and Molecular biology Fourth edition. Academica.
3. Benjamin A. Pierce. 2020. Genetics: A Conceptual Approach; VII Edition. New Delhi: Macmillan Learning

Core Suggested Readings (Books, Journals, E-sources, Websites/weblinks)

1. Leland H. Hartwell et al. 2021. Genetics from genes to genomes. VII Edition. McGraw Hill.
2. Monroe W Strickberger. 2018. Genetics. III Edition. Prentice Hall of India.
3. Principles of Genetics, Sinnott, E.W., Dunn, LC and Dobzhansky.
4. Gardner, E.J., Simmons, M.J., Snustad, D.P. 2006. Principles of Genetics. VIII Edition John Wiley & Sons.
5. Russell, P. J. 2009. Genetics- A Molecular Approach. III Edition. Benjamin Cummings.
6. Klug, W.S., Cummings, M.R., Spencer, C.A. 2009. Concepts of Genetics. IX Edition. Benjamin

Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecturing, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

Mode of Transaction

Offline Classes

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper 1	10
b)	Test Paper 2	10
d)	Seminar	10
g)	Lab performance	10
h)	Lab Report	10
Total		100

Sample Questions to test Outcomes

1. Write a note on the basic terminologies in Genetics?
2. Explain the principles of Genetic Transmission?
3. Demonstrate the chromosomal basis of heredity?
4. Write a note on population genetics?
5. How to apply the principles of genetics at population level?
6. Write a note on the universal Mendelian laws?

Employability for the Course/Programme

- Employability as teachers, Lab assistants in Forensic and Research Labs, ICAR institutions
- Jobs in Botanical Survey of India, Zoological Survey of India, Agricultural and State Universities as Lab Assistants

PROGRAMME OUTCOMES (PO)

PO1	Study key concepts and theories of History
PO2	Understand and evaluate historical processes and perspectives
PO3	Acquire a basic understanding of research methodology and historical method
PO4	Develop a discipline specific knowledge and critical thinking
PO5	To acquire multicultural competence

PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1	To Identify different historical phenomena such as Nationalism ,colonialism,and social stratification
PSO2	To equip students in Historical method
PSO3	Describe the key concepts of History
PSO4	Explain the contestations and debates in historiography

“COURSE CODE”：“Indian National Movement”

Check Course Code Guidelines

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
1	DSC	100	KU 1 DSC HIS 100	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
45	-	15	50	50	100	2

Course Description: The Course aims to explore the role of the Indian National Movement in the formation of Modern India. This course provides historical contextualization of Indian Nationalism in relation to politics of empire and colonies in the twentieth century world. The course attempts a critical study of different strands and contestations within the Indian National Movement.

Course Pre-requisite: Foundational Level Knowledge of Modern Indian History

Course Outcomes: At the end of the Course, the Student will be able to -

CO No.	Expected Outcome	Learning Domains
1	To understand the Historical conditions that produced and shaped the Indian National Movement	U,K
2	To Analyze Colonization as a process	An
3	To Remember major facts and concepts related to India's struggle for Independence	K
4	To Evaluate the impact and various forms of Nationalism	E
5	Make a survey report on the local experience of National Movement in the region	C, A

***Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	?		?	?			
CO 2	?	?					
CO 3	?		?				
CO 4			?	?			
C05		?					

COURSE CONTENTS

Module 1 (12)

- 1.1 Foundation of the British Empire in South Asia,
- 1.2 The Ideologies of the British Administration
- 1.3 Subaltern and Elite response till 1857
- 1.4 The Revolt of 1857 and the Aftermath
- 1.5 Early expressions of Nationalism and the beginning of Modern Organized Politics
- 1.6 Swadeshi Movement.

Suggested readings specific to the module.

- 1.1 Bandyopadhyay, Sekhar, *From Plassey to Partition and After: A History of Modern India*, Orient Blackswan, New Delhi, 2015.
- 1.2 Chandra, Bipan, *India's Struggle for Independence*, Penguin Books, New Delhi, 1989.
- 1.3 Sarkar, Sumit. "Hindu-Muslim Relations in Swadeshi Bengal, 1903-1908." *The Indian Economic & Social History Review* 9, no. 2 (1972): 161-216.
- 1.4 Sarkar, Sumit, *Modern India, 1885-1947*, Madras, 1983.

Supplementary Readings

Jones, Kenneth W. *Socio-religious reform movements in British India*. Vol. 1. Cambridge University Press, 1989.

Pati, Biswamoy, ed. *The Great Rebellion of 1857 in India: Exploring transgressions, contests and diversities*. Vol. 7. Routledge, 2010.

Sarkar, Sumit, Neeladri Bhattacharya, and Dipesh Chakrabarty. *The Swadeshi Movement in Bengal, 1903-1908*. New Delhi: People's Publishing House, 1973

Module 2 (12)

- 2.1 The Ideologies within Early Indian Nationalism,
- 2.2 The Social Composition of Early Nationalist Leaders
- 2.3 Colonial Middle class and new nationalism
- 2.4 The limitations of Elite nationalism

Suggested readings specific to the module.

2.1 Bandyopadhyay, Sekhar, *From Plassey to Partition and After: A History of Modern India*, Orient Blackswan, New Delhi, 2015.

2.2 Chandra, Bipan, *India's Struggle for Independence*, Penguin Books, New Delhi, 1989.

2.3 Sarkar S. 'Kaliyuga', 'chakri' and 'bhakti': Ramakrishna and his times. *Economic and Political Weekly*. 1992 Jul 18:1543-66.

2.3 Sarkar, Sumit, *Modern India, 1885-1947*, Madras, 1983.

2.4 Chatterjee P. The Subalternity of a Nationalist Elite. *The Middle Class in Colonial India*. 2010:94-117.

Supplementary Readings

2.5 Chandra, Bipan, *Nationalism and Communalism in Modern India*, Vikas Publishing House, New Delhi, 1979.

2.6 Chatterjee, Partha. *The nation and its fragments: Colonial and postcolonial histories*. Vol. 4. Princeton University Press, 1993

Module 3 (12)

- 3.1 Gandhian Era- Satyagraha and Passive Resistance,
- 3.2 Non- cooperation and Khilafat Movements
- 3.3 Civil Disobedience Movements and the Turbulent Thirties
- 3.4 Socialist and Working class movements

Suggested readings specific to the module.

- 3.1. Amin, Shahid. *Event, Metaphor, Memory: Chauri Chaura, 1922-1992*. Univ of California Press, 1995.
- 3.2 Bandyopadhyay, Sekhar, *From Plassey to Partition and After: A History of Modern India*, Orient Blackswan, New Delhi, 2015.
- 3.3 Chandra, Bipan, *India's Struggle for Independence*, Penguin Books, New Delhi, 1989.

Supplementary Readings

- 3.4 Maclean, Kama. *A revolutionary history of interwar India: Violence, image, voice and text*. Penguin UK, 2016.

Module 4 (12)

- 4.1 Nationalism and its discontents
- 4.2 Periyar and the Dravidian Exception,
- 4.3 Non-Brahmin and Dalit Movements
- 4.4 Communities and Nation, Language and Region,

Suggested readings specific to the module.

- 4.1 Bandyopadhyay, Sekhar, *From Plassey to Partition and After: A History of Modern India*, Orient Blackswan, New Delhi, 2015.
- 4.2 Chandra, Bipan, *India's Struggle for Independence*, Penguin Books, New Delhi, 1989.
- 4.3 Pandey, Gyanendra. *The Construction of Communalism in Colonial North India*. Oxford University Press, 2006.
- 4.4 Pandian MSS. *Brahmin and non-Brahmin: Genealogies of the Tamil political present*. Permanent Black. 2007.

Module 5: Teacher Specific Module(12)

- 5.1 Subaltern Historiography of Nationalism.

5.2 Ranajit Guha's critique

5.3 Memory Studies and peasant Histories

5.4 Debates in Partition historiography

As part of continuous evaluation, Assignments will be given in this module to write alternative histories of an event, leaders, communities related to Nationalism in the local region.

Suggested Readings:

- 5.1. Guha, Ranajit. "On Some Aspects of the Historiography of Colonial India 1." In *Imperialism*, pp. 53-59. Routledge, 202
- 5.2 Guha, Ranajit, and GayatriChakravorty Spivak, eds. *Selected subaltern studies*. Oxford University Press, 1988.

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. Bandyopadhyay, Sekhar, *From Plassey to Partition and After: A History of Modern India*, Orient Blackswan, New Delhi, 2015.
2. Chatterjee, Partha. *The Nation and its Fragments: Colonial and Postcolonial Histories*. Vol. 4. Princeton University Press, 1993
3. Chandra, Bipan, *India's Struggle for Independence*, Penguin Books, New Delhi, 1989.
4. Chandra, Bipan, *Nationalism and Communalism in Modern India*, Vikas Publishing House, New Delhi, 1979.
5. Guha, Ranajit, and GayatriChakravorty Spivak, eds. *Selected subaltern studies*. Oxford University Press, 1988.
6. Hasan, Mushirul. *Nationalism and Communal Politics in India, 1885-1930*, New Delhi, 1991.
7. Jalal A. *The sole spokesman: Jinnah, the Muslim League and the demand for Pakistan*. Cambridge University Press; 1994.
8. Maclean, Kama. *A revolutionary history of interwar India: Violence, image, voice and text*. Penguin UK, 2016.
9. Mahajan, Sucheta. *Independence and Partition: Erosion of Colonial Power in India*, Sage Publications, New Delhi, 2000.
10. Pandey, Gyanendra. *The Construction of Communalism in Colonial North India*. Oxford University Press, 2006.
11. Pandian MSS. *Brahmin and non-Brahmin: Genealogies of the Tamil political present*. Permanent Black. 2007.
12. Sarkar, Sumit, and Tanika Sarkar, eds. *Women and social reform in modern India: a reader*. Indiana University Press, 2008.
13. Sarkar, Sumit, *Modern India, 1885-1947*, Madras, 1983.

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

Chatterjee, Partha. *The nation and its fragments: Colonial and postcolonial histories*. Vol. 4. Princeton University Press, 1993.

Guha, Ranajit. "On Some Aspects of the Historiography of Colonial India 1." In *Imperialism*, pp. 53-59. Routledge, 202.

Maclean, Kama. *A revolutionary history of interwar India: Violence, image, voice and text*. Penguin UK, 2016.

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- **Reviewing the cinematic representation of Nationalism in Indian and Global films**
- **Visiting important sites in the local region related to National Movement**

MODE OF TRANSACTION

- **Classroom lectures**
- **Online resources and newspaper archive analysis**

ASSESSMENT RUBRICS

Evaluation Type		Marks	Sample Questions to test Outcomes.
End Semester Evaluation		50	
Continuous Evaluation		50	
a)	Test Paper- 1	5	
b)	Test Paper-2	5	
c)	Assignment	10	
d)	Seminar	10	
e)	Book/ Article Review		
f)	Viva-Voce		
g)	Field Report	--	
h)	Add relevant mode		
Total		100	

mes.

1. **Prepare a historical review of a regional film concerning an event from the**

Indian National Movement .

- 2. Make a survey report of the colonial experience of your locality or town .**
- 3. Prepare a bibliographical essay surveying the historiography of the Indian National Movement.**

Employability for the course

1. Students can partake in various publishing projects associated with the governmental bodies such as Indian Council of Historical Research, and Non Governmental bodies on the history of Modern India.
 2. Students can join as Research Associates with the Film industry , OTT platforms , and television industry where Nationalism and its local responses are increasingly a major theme.
 3. Students can find opportunities in the creative writing field where Modern History would be an important theme.
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“COURSE CODE: KU 1 DSC HIS 101”
“COURSE NAME: THEMES AND PERSPECTIVES IN EARLY INDIA”

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
1	DSC	100	KU1DSCHIS101	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
45		15	50	50	100	2

Course Description:

The course seeks to introduce the students to a basic understanding of Early India, one of the formative phases in the history of the Indian subcontinent. Rather than focusing on a chronological timeline, the paper follows historiographical debates in order to introduce the student to key themes in early Indian history.

Course Pre-requisite: None

Course Outcomes: At the end of the Course, the Student will be able to -

CO No.	Expected Outcome	Learning Domains
1	To understand the historical processes at work in Early India	U
2	To familiarize students to the significance of sources in History	R,U
3	To familiarize students to the key historiographical debates on early India	A,E
4	To equip students to perform a basic level analysis of sources	A,E

***Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>			
CO 2	<input type="checkbox"/>	<input type="checkbox"/>					
CO 3	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
CO 4			<input type="checkbox"/>		<input type="checkbox"/>		

COURSE CONTENTS

MODULE1

Perceptions of the Past: Geography - sources of Early India - the significance of early India – the colonial perception of Ancient India and its critiques – conception of time - the past as the present

Indus Civilization : Origins - town planning - polity and social organisation - craft production and trade - religious and cultural practices – art – causes of decline

MODULE2

Vedic Culture: The Aryan question - Vedic polity and social stratification – gender relations - Settlement patterns - technological and economic developments- religion and philosophy -Vedic to Later Vedic transition

Second Urbanization: From *jana* to *janapada* – Nature of Janapada polity – From state to Empire – Nature of the Mauryan state – Oriental Despotism? – Debates on Arthashastra – Seven castes of Megasthenes – Policy of dharma - the decline of the Mauryan state.

MODULE3

Megalithic culture - Antecedents – spread of megalithic culture – types of megaliths - pottery – funerary customs – habitation sites – a case study of *kodumanal*

Tamilakam– Sangam literature -the concept of *tinai* – power structure – kinship pattern – writing - maritime trade – Buddhism and Jainism - tamil epics – crisis?

MODULE4

The Emergence of a New Empire: Gupta state and polity – agriculture , craft and trade – social organization -gender- caste -law and customs -puranic Hinduism

Pallavas, Chalukyas and Vardhanas :Political and social formation – agrarian expansion and land grants -changing production relations -proliferation of *jati* -nature of the transition to the early medieval.

MODULE 5: Teacher Specific Module:

Gender and Caste in the Early Past

Gender in Early India -the Vedic *dasi* – queering the early past -untouchability in early India – tribe to caste transitions in South India - tribe to caste transitions in South India – gender in early Historic Tamilakam

Module 1 -14 hrs (Mention hours of transaction)

- 1.1 Geography -2
- 1.2 sources of Early India -1
- 1.3. the significance of early India -1
- 1.4 the colonial perception of Ancient India and its critiques -2
- 1.5 conception of time -1
- 1.6. the past as the present -1
- 1.7.Indus Civilization -origins - 1
- 1.8. polity and social organization -1
- 1.9. craft production and trade -1
- 1.10. religious and cultural practices -1
- 1.11. Indus art -1
- 1.12. Decline -1

Suggested readings specific to the module

- 1.1. Thapar, R. *Early India: From the Origins to AD 1300*. New Delhi: Penguin, 2003.

- 1.2. Singh, U. *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*, New Delhi: Pearson, 2016.
- 1.3. Thapar, R. 'Interpretations of Ancient Indian History', *Ancient Indian Social History: Some Interpretations*, New Delhi: Orient Longman, 1978.
- 1.4. Thapar, R. 'Interpretations of Ancient Indian History', *Ancient Indian Social History: Some Interpretations*, New Delhi: Orient Longman, 1978.
- 1.5. Thapar, R. 'Time as a Metaphor for History', *Cultural Pasts Essays in Early Indian History*. New Delhi: Oxford University Press, 2000.
- 1.6. Thapar, R. 'Of Histories and Identities' and "In Defense of History", *The Past as Present: Forging Contemporary Identities through History*, New Delhi: Aleph, 2014.
- 1.7. Ratnagar, Shereen. *Understanding Harappa: Civilization in the Greater Indus Valley*. New Delhi: Tulika, 2001.
- 1.8. Singh, U. *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*, New Delhi: Pearson, 2016.
- 1.9. Kenoyer, J.M. *Ancient Cities of the Indus Valley Civilization*. Karachi: Oxford University Press and American Institute of Pakistan Studies, 1998.
- 1.10. Ratnagar, Shereen. *Understanding Harappa: Civilization in the Greater Indus Valley*. New Delhi: Tulika, 2001.
- 1.11. Kenoyer, J.M. *Ancient Cities of the Indus Valley Civilization*. Karachi: Oxford University Press and American Institute of Pakistan Studies, 1998.
- 1.12. Singh, U. *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*, New Delhi: Pearson, 2016.

Module 2 - 12 hrs

- 2.1. The Aryan question -1
- 2.2 Vedic polity and social stratification -1
- 2.3. Gender relations -1
- 2.4. Settlement patterns & technological and economic developments -1
- 2.5. Religion and philosophy -1
- 2.6. Vedic to Later Vedic transition -1
- 2.7. Second Urbanization -1
- 2.8. From *jana* to *janapada* – Nature of Janapada polity -1
- 2.9. From state to Empire – Nature of the Mauryan state -1

- 2.10. Oriental Despotism?, Debates on Arthashastra -1
- 2.11. Policy of dharma – 1
- 2.12. the decline of the Mauryan state -1

Suggested readings specific to the module.

- 2.1. Trautmann, T. *The Aryan Debate*, New Delhi: Oxford Academic, 2007.
- 2.2. Thapar, R. *Early India: From the Origins to AD 1300*. New Delhi: Penguin, 2003.
- 2.3. Chakravarti, U. 'Beyond the Altekarian Paradigm: Towards a New Understanding of Gender Relations in Early Indian History', *The Social Scientist*, Vol.16, No.8, 1988, pp.44-52.
- 2.4. Chakravarti, Ranabir. *Exploring Early India up to c. AD 1300*. Delhi: Primus, 2016.
- 2.5. Thapar, R. *Early India: From the Origins to AD 1300*. New Delhi: Penguin, 2003.
- 2.6. Singh, U. *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*, New Delhi: Pearson, 2016.
- 2.7. Chakravarti, Ranabir. *Exploring Early India up to c. AD 1300*. Delhi: Primus, 2016.
- 2.8. Thapar, R. *Early India: From the Origins to AD 1300*. New Delhi: Penguin, 2003.
- 2.9. Thapar, R. 'Mauryas Revisited', *Cultural Pasts Essays in Early Indian History*. New Delhi: Oxford University Press, 2000.
- 2.10. Thapar, R. 'Mauryas Revisited', *Cultural Pasts Essays in Early Indian History*. New Delhi: Oxford University Press, 2000.
- 2.11. Chakravarti, U. *The Social Dimensions of Early Buddhism*, New Delhi: Munshiram Manoharlal, 1996.
- 2.12. Thapar, R. *Asoka and the Decline of the Mauryas*, New Delhi: Oxford University Press, 1961.

Module 3 - 12

- 3.1. Megalithic culture – Antecedents -1
- 3.2. spread of megalithic culture – types of megaliths -1
- 3.3 pottery – funerary customs -1
- 3.4. habitation sites – a case study of kodumanal -1
- 3.5. Tamilakam– Sangam literature -1
- 3.6. the concept of *tinai*-1
- 3.7. power structure – kinship pattern -1
- 3.8. writing - 1

3.9.maritime trade -2

3.10. Buddhism and Jainism -1

3.11. tamil epics -1

3.12.crisis -1

Suggested readings specific to the module.

3.1. Karashima, N. ed., *History and Society in South India; The Cholas to Vijayanagara*, Delhi: Oxford University Press, 2001, pp.15-31.

3.2. Karashima, N. ed., *History and Society in South India; The Cholas to Vijayanagara*, Delhi: Oxford University Press, 2001, pp.15-31.

3.3. Moorti, U.S., *Megalithic Culture of South India: Socioeconomic Perspectives*, Ganga Kaveri Publishing House, 1994.

3.4. K. Rajan, 'Situating Early Historic Times Of Tamil Nadu', *Proceedings of the Indian History Congress* , 2007, Vol. 68, Part Two (2007), pp. 1268-1301 .

3.5. Zvelibil, K. *The Smile of Murugan*, Leiden: Brill, 1973.

3.6. K. Sivathamby, 'Early South Indian Society and Economy: The Tinai Concept', *Social Scientist*, Vol. 3, No. 5 (Dec., 1974), pp. 20-37.

3.7.Gurukkal, R., 'Characterizing Ancient Society: The Case of South India', *Proceedings of the Indian History Congress*, Vol.59, 1998,pp.30-57.

3.8.Ganesh, KN., 'Transitions In Early Tamil Society: A Hypothesis On The Formation Of Tamil Region', *Proceedings of the Indian History Congress* , 2013, Vol. 74 (2013), pp. 23-47.

3.9. Gurukkal, R., 'Characterizing Ancient Society: The Case of South India', *Proceedings of the Indian History Congress*, Vol.59, 1998,pp.30-57.

3.10.Krishnakumari,M., 'Exploring Early Indian Buddhism with special reference to Andhra-Some Issues and Concerns', Sectional President's Address, *Proceedings of the Indian History Congress*,Vol.75, Platinum Jubilee, 2014, pp.25-43.

Warrier, R., *JainamathamKeralalthil*, Kerala: SahityaPravathaka Cooperative Society Ltd, 2012.

3.11. Exercise using translation of excerpts from original texts – tutorial

3.12. Gurukkal, R., 'Towards the Voice of Dissent: Trajectory of Ideological Transformation in Early South India', *Social Scientist*, Vol. 21, No. 1/2 (Jan. - Feb., 1993), pp. 2-22.

Module 4 -12 hrs (Mention hours of transaction)

4.1. Gupta state and polity -2

4.2. agriculture , craft and trade -1

4.3. social organization -1

4.4.gender and caste transformations -1

4.5.law and customs -1

4.6. puranic Hinduism -1

4.7. Pallavas, Chalukyas and Vardhanas -1

4.8. Political and social formation -1

- 4.9. agrarian expansion and land grants -1
changing production relations
- 4.10. proliferation of *jati* -2
nature of the transition to the early medieval.

Suggested readings specific to the module.

- 4.1. Thapar, R. *Early India: From the Origins to AD 1300*. New Delhi: Penguin, 2003.
- 4.2. Chakravarti, Ranabir. *Exploring Early India up to c. AD 1300*. Delhi: Primus, 2016.
- 4.3. Thakur, Vijay Kumar, Regional Patterns of Early Medieval Formation in India: A Study Of Gupta Towns, *Proceedings of the Indian History Congress*, Vol.58, 1997, pp.30-76.
- 4.4. PriyaDarshini, 'Women And Patrilineal Inheritance During The Gupta Period', *Proceedings of the Indian History Congress*, Vol.62, pp.71-77.
- 4.5. Thapar, R. *Early India: From the Origins to AD 1300*. New Delhi: Penguin, 2003.
- 4.6. Nath, Vijay, 'From 'Brahmanism' to 'Hinduism': Negotiating the Myth of the Great Tradition', *Social Scientist*, Vol.29, No,3/4.2001, pp.19-50.
- 4.7. Karashima, Noboru, ed., *A Concise History of South India; Issues and Interpretations*, Oxford University Press, New Delhi, 2014.
- 4.8. Karashima, Noboru, ed., *A Concise History of South India; Issues and Interpretations*, Oxford University Press, New Delhi, 2014.
- 4.9. Chattopadhyaya, BD., 'Political Processes and Structure of Polity in Early Medieval India: Problems of Perspective', *Social Scientist*, Vol. 13, No. 6 (Jun., 1985), pp. 3-34.
- 4.10. Veluthat, Kesavan, 'Into The "Medieval" - And Out Of It: Early South India in Transition', *Proceedings of the Indian History Congress*, Vol.58, 1997, pp.168-20

Module 5: Teacher Specific Module: Gender and Caste in the Early Past -10

- 5.1. Gender in Early India -2
- 5.2. gender in the Indus civilization - 1
- 5.3. the Vedic *dasi* -brahmanical patriarchy -1
- 5.4. queering the early past -1
- 5.5. untouchability in early India -1
- 5.6. tribe to caste transitions in South India -2
- 5.7. tribe to caste transitions in Kerala -1
- 5.8. gender in early Historic Tamilakam -1

Suggested readings specific to the module.

- 5.1. Chakravarti, U. 'Beyond the Altekarian Paradigm: Towards a New Understanding of Gender Relations in Early Indian History', *The Social Scientist*, Vol.16, No.8, 1988, pp.44-52.

5.2. Clark, Sharri R., 'Material Matters: Representation and Materiality of the Harappan Body', *Journal of Archaeological Method and Theory*, Vol. 16, No. 3, The Materiality of Representation (Sep., 2009), pp. 231-261.

5.3. Uma Chakravarti, 'What Happened to the Vedic Dasi: Orientalism, Nationalism and a Script for the Past' in Kumkum Sangari and Sudesh Vaid eds., *Recasting Women: Essays in Indian Colonial History*, New Delhi: Zubaan, 1988, pp.27-87.

5.4. Vanita, Ruth, *Queering India: Same Sex Love and Eroticism in Indian Culture and Society*, New York: Routledge, 2001.

5.5. Jha, Vivekanandha., 'Caste, Untouchability and Social Justice: Early North Indian Perspective', *Social Scientist*, Vol.25.Mo.11/12.1997. PP. 19-30.

5.6. Ambedkar, BR., *Castes in India : Their Mechanism, Genesis and Development*, Kalyan Prakasahan, 2003, (1916).

Jaiswal, Suvira, *Caste: Origin, Functions and Dimensions of Change*, New Delhi: Manohar Publishers, 1998.

5.7. Madhavan, KS, 'People and Life Activities in Western Ghats as represented in Classical Tamil Texts' in M P Mujeed Rehman and K S Madhavan, eds., *Explorations in South Indian History*, Kottayam: SPCS, 2014, pp.167-180.

Madhavan, KS, 'Social Stratification, Hierarchy and Subjection of AI and Atiyar in Early Medieval Kerala' in T. Muhammedali, ed., *Proceedings of the Kerala History Congress*, 2002.

5.8. R .Mahalakshmi, 'Women in Premodern South Indian Society' in Karashima, Noboru, ed., *A Concise History of South India; Issues and Interpretations*, Oxford University Press, New Delhi, 2014.

Mention broad area of content, transaction and evaluation.

Early Indian Social and Economic History

Taught Lectures and Activities including analysing primary sources and site visits

Evaluation will be done through continuous evaluation through tutorials, book reviews, seminars and assignments as well as an end semester exam.

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

List

- Chakravarti, Ranabir. *Exploring Early India up to c. AD 1300*. Delhi: Primus, 2016.
- Karashima, N., ed. *A Concise History of South India: Issues and Interpretations*. New Delhi: Oxford University Press, 2014.
- Ratnagar, Shereen. *Understanding Harappa: Civilization in the Greater Indus Valley*. New Delhi: Tulika, 2001.
- Singh, U. *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*, New Delhi: Pearson, 2016.
- Thapar, R. *Early India: From the Origins to AD 1300*. New Delhi: Penguin, 2003.
- Trautmann, T. *The Aryan Debate*, New Delhi: Oxford Academic, 2007.
- Nath, Vijay, 'From 'Brahmanism' to 'Hinduism': Negotiating the Myth of the Great Tradition', *Social Scientist*, Vol.29, No,3/4.2001, pp.19-50.
- Chakravarti, U. 'Beyond the Altekarian Paradigm: Towards a New Understanding of Gender Relations in Early Indian History', *The Social Scientist*, Vol.16, No.8, 1988, pp.44-52.
- Gurukkal, R., 'Characterizing Ancient Society: The Case of South India', *Proceedings of the Indian History Congress*, Vol.59, 1998, pp.30-57.

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

List

- Agrawal, D. P. *Indus Civilisation*. Aryan Book Depot, 2017.
- Chakrabarti, D.K. *India: An Archaeological History*. New Delhi: Oxford University Press, 1999.
- Chakravarti, U. *The Social Dimensions of Early Buddhism*, New Delhi: MunshiramManoharlal, 1996.
- Chattopadhyaya, BD., 'Political Processes and Structure of Polity in Early Medieval India: Problems of Perspective', *Social Scientist*, Vol. 13, No. 6 (Jun., 1985), pp. 3-34.
- Darshini, Priya, 'Women And Patrilineal Inheritance During The Gupta Period', *Proceedings of the Indian History Congress*, Vol.62, pp.71-77.
- Kenoyer, J.M. *Ancient Cities of the Indus Valley Civilization*. Karachi: Oxford University Press and American Institute of Pakistan Studies, 1998.
- Sivathamby, K., 'Early South Indian Society and Economy: The Tinai Concept', *Social Scientist*, Vol. 3, No. 5 (Dec., 1974), pp. 20-37.
- Sharma, R.S. *Material Culture and Social Formations in Ancient India*. Delhi: Macmillan India, 198.
- Thapar, R. *Asoka and the Decline of the Mauryas*, New Delhi: Oxford University Press, 1961.
- Thapar, R. *Cultural Pasts: Essays in Early Indian History*. New Delhi: Oxford University Press, 2000.

- Thakur, Vijay Kumar, Regional Patterns of Early Medieval Formation in India: A Study Of Gupta Towns, *Proceedings of the Indian History Congress*, Vol.58, 1997, pp.30-76.
- Zvelibil, K. *The Smile of Murugan*, Leiden: Brill, 1973.

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- **Book Reviews**
- **Survey of Archaeological and historical monuments**
- **Museum Visits**
- **Basic level analysis of primary sources (through translations)**
- **‘Show and tell’ of artefacts/replicas**
- **Exhibitions of models of historical monuments/cities**

MODE OF TRANSACTION

- **Taught Lectures**
- **Activities**
- **Book Reviews**
- **Library and Museum Visits**
- **Site visits**

ASSESSMENT RUBRICS

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper- 1	5
b)	Test Paper-2	5
c)	Assignment	10
d)	Seminar	10
e)	Book/ Article Review	0
f)	Viva-Voce	0
g)	Field Report	--
h)	Add relevant mode	

Total	100
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Sample Questions to test Outcomes.

- 1. What are the major arguments on the Aryan debate? What is its contemporary relevance?**
- 2. Prepare a report on a megalithic site and compare it to the representation of funerary customs in Sangam literature**
- 3. What are the recent findings on Harappan sites? How have they impacted our understanding Harappan social organisation?**
- 4. Chose any film set against the backdrop early India and reflect on them based on historiographical works you have covered in the course.**

Employability for the Course / Programme

- The course will equip students to analyse documents and primary sources which will not equip them for higher studies but will enable them to be employed in professions involving data analysis particularly the qualitative analysis.
- Inter and multi-cultural competence acquired through the course will enable the student to work in think-tanks, research organisations and NGOs where diversity plays a key role.
- The course will open up the perspectives of students to issues of social justice particularly those of gender and caste inequalities. This will make them be sensible and help them find employment in rights-based organisations and advocacy groups.
- As the course involves both verbal articulation through tutorials and written submissions, students' communication and presentation skills will be honed which will enable them to be job-ready in general.

COURSE CODE: KU1DSCEVS101- BASICS OF ENVIRONMENTALSCIENCE

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
1	DSC	100	KU1DSCEVS101	4	75

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
5	-	1	40	60	100	75

Course Description:

- This interdisciplinary course assess the concept of ecology, the interaction of matter, energy and material cycling, knowledge on the principles for balancing social, economic and environmental dimensions of human development. Students will be able to understand the basic facts of environmental science, gain knowledge on basics on natural resources, identify and analyze the types, features, structure and function of major ecosystems, describe the causes, effects and control measures of various environmental pollution, and aware of environmental ethics, issues and possible solutions.

Course Pre-requisite

1. Introduction to basics of Environmental Science
2. Study differentiates renewable and nonrenewable resources.
3. Principles of role of individuals in prevention and control of pollution
4. Identify the basics of disaster management
5. Expand knowledge on social issues and environment

Course Outcomes: At the end of the Course, the student will be able to -

CO No.	Expected Outcome	Learning Domains
1	Aware of conservation and sustainable utilization of natural resources.	Cognitive
2	Identify and analyze the types, features, structure and function of major ecosystems.	Cognitive
3	Analyze the role of individuals in prevention and control of pollution.	Cognitive
4	Categorize the basics resettlement and rehabilitation of people	Cognitive & Psychomotor
5	Knowledge on acts and policies related to environmental protection.	Cognitive

COURSE CONTENTS

Module 1: Introduction of Environmental Science

(15 Hrs)

Definition, scope and importance. Need of Environmental awareness – Methods for Environmental awareness. Natural Resources - Renewable and non-renewable resources. Natural resources and associated problems and desertification.

Module 2: Ecosystems

(15 Hrs)

Concept of an ecosystem. Structure and function of an ecosystem. Producers, consumers and decomposers. Energy flows in the ecosystem. Ecological succession. Food chains, food webs and ecological pyramids. Introduction, types, characteristic features, structure and function of the following ecosystem: Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

Module 3: Environmental Pollution

(15 Hrs)

Definition - Cause, effects and control measures of: Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, and Nuclear hazards.

Module 4: Social Issues and the Environment**(15 Hrs)**

From unsustainable to sustainable development urban problems related to energy. Water conservation - rain water harvesting, watershed management. Resettlement and rehabilitation of people - its problems and concerns. Environmental ethics - issues and possible solutions. Climate change, global warming, acid rain, ozone layer depletion. Nuclear accidents and holocaust, Case Studies. Wasteland reclamation, Consumerism and waste products

Module 5: Teacher Specific Module**(15 Hrs)**

1. Seminar presentations
2. Field visits are encouraged to relevant places in Kerala and Western Ghats like Biodiversity park
3. Industrial plants, etc.
4. Industrial visit and report preparation

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. K.C. Agarwal, 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
2. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India.
3. R.S.Clark, Marine Pollution, Clarendon Press Oxford (TB)
4. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Publ. House, Mumabai, 1196p
5. A.K.De, Environmental Chemistry, Wiley Eastern Ltd.
6. Down to Earth, Centre for Science and Environment (R)
7. H.P. Gleick, 1993. Water in crisis, Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute Oxford Univ. Press. 473p
8. R.E. Hawkins, Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay (R)
9. V.H. Heywood & R.T. Waston, 1995. Global Biodiversity Assessment. Cambridge Univ. Press 1140p.
10. H. Jadhav & V. M. Bhosale, 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

1. M.L. Mckinney & R.M. School, 1996. Environmental Science systems & Solutions, Web enhanced edition. 639p.
2. A.K. Mhaskar, Matter Hazardous, Techno-Science Publication (TB)
3. T.G. Miller Jr., Environmental Science, Wadsworth Publishing Co. (TB)
4. E.P. Odum, 1971. Fundamentals of Ecology. W.B. Saunders Co. USA

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- Direct instruction: Brain storming lecture, Explicit Teaching, E-learning (video)
- Interactive Instruction: Active co-operative learning, seminars, group assignments, library work and group discussion, presentation by individual student/group representative
- Fieldwork and field visits

MODE OF TRANSACTION

- Face to face: Lecture method & demonstration method
- Learner-centered technique: Computer-assisted learning & individual project teaching

ASSESSMENT RUBRICS

Evaluation Type		Marks
End Semester Evaluation		60
Continuous Evaluation		40
a)	Test Paper- 1	10
b)	Test Paper-2	10
c)	Assignment	10
d)	Seminar	10
e)	Book/ Article Review	-
f)	Viva-Voce	-
g)	Field Report	-
h)	Add relevant mode	
Total		100

Sample Questions to test Outcomes.

1. Explain the importance and need of Environmental awareness.
2. Describe the role of fire in shaping an ecosystem.
3. What is the significance of climatic factors on shaping the ecosystems?
4. Discuss about the impact of human on ecosystem.
5. Write an essay on terrestrial ecosystems.
6. What are the major objectives of environmental pollution monitoring?
7. What are the main sources of air pollution?
8. Elaborate on various classifications and sources of water pollution.
9. What are the watershed management practices in Kerala?
10. Give a brief note on the ecological impacts of acid rain.

Employability for the Course / Programme

- **Environmental Consultant**
 - Work with industries Environmental Health and Safety Officer
 - Environmental Policy Analyst
 - Environmental Consultant
 - Environmental Engineer
 - Conservation Scientist
 - Environmental Educator
 - Environmental manager
 - Waste management officer
 - Nature conservation officer
- **Environment Policy Analyst**
 - Analyze and develop environment acts and policies
 - Estimate various ecology, and pollution studies and environmental impacts
 - Conduct research on recent technologies in ecosystem species distribution, and pollution related studies in various aspects
 - Advise governments and organizations on environmental related resolutions.

KU2MDCEVS101: GENDER AND ENVIRONMENT

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
2	MDC	100	KU2MDCEVS101	3	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
5	-	1	40	60	100	60

Course Description:

This interdisciplinary course explores the intricate relationships between gender and the environment, examining how social constructs of gender shape our understanding, experience, and management of natural resources. Through a critical lens, we will analyze how gender influences environmental access, control, and benefits, and how environmental issues impact men and women differently.

Course Pre-requisite

1. Introduction to Gender Studies or Women's Studies
2. Environmental Studies or Environmental Science
3. Sociology or Social Sciences
4. Human Geography or Development Studies
5. Any course that introduces students to social justice, inequality, or sustainability concepts

Course Outcomes: At the end of the Course, the student will be able to -

CO No.	Expected Outcome	Learning Domains
1	Analyze the intersectionality of gender and environment	Cognitive
2	Evaluate gendered environmental impacts and responses	Cognitive
3	Apply gender equity principles to environmental management	Cognitive
4	Critique gendered power dynamics in environmental contexts	Cognitive & Psychomotor
5	Design gender-responsive solutions for sustainable futures	Cognitive

COURSE CONTENTS

Module 1: Gender and Society

(10 Hrs)

The socially constructed 'gender' concept; Gender existence in society; gender: matriarchy and patriarchy as means of social exclusion (case studies in an Indian context); gender equity issues in rural and urban settings.

Module 2: Gender and the environment

(10Hrs)

Relevance of the concept in an environmental context; evolution of gender hierarchies in historical and contemporary perspective; gendered division of roles in cultural, social, and economic perspective; gender inequalities.

Module 3: Gender, resources, and the environment

(15Hrs)

Knowledge about the environment among men and women; differential dependencies on environmental resources; implications of gendered responses to environmental degradation.

Module 4: Gender, environmental management and future

(10 Hrs)

Women's participation in environmental movements and conservation; historical and contemporary case studies; the role of women in environmental education, awareness, and sustainable development.

Module 5: Teacher Specific Module

(15 Hrs)

Mention broad areas of content, transaction, and evaluation.

5.1 Student Presentations

5.2 Group Discussions

5.3 Mini Group Projects for Students

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. Agarwal, B. 2001. Participatory exclusions, community forestry, and gender: An analysis for South Asia and a conceptual framework. *World Development* 29: 1623-1648.
2. Agarwal, B., 2019. The gender and environment debate: Lessons from India. In *Population and environment* (pp. 87-124). Routledge.
3. Buckingham, S., 2005. *Gender and Environment*. Routledge.
4. Gaarder, E., 2011. Women and the animal rights movement. In *Women and the Animal Rights Movement*. Rutgers University Press.
5. Jackson, C. 1993. Doing what comes naturally? Women and environment in development. *World Development* 21: 1947-63.
6. Leach, M. 2007. Earth Mother myths and other ecofeminist fables: How a strategic notion rose and fell. *Development and Change* 38: 67-85.
7. MacGregor, S. ed., 2017. *Routledge Handbook of Gender and Environment*. Taylor & Francis.

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

1. Miller, B. 1993. *Sex and Gender Hierarchies*. Cambridge University Press
2. Oswald Spring, Ú., 2008. *Gender and disasters: human, gender and environmental security*. UNU-EHS.
3. Rodríguez-Labajos, B. and Ray, I., 2021. Six avenues for engendering creative environmentalism. *Global Environmental Change*, 68, p.102269.
4. Stein, R. (ed.). 2004. *New Perspectives on Environmental Justice: Gender, Sexuality, and Activism*. Rutgers University Press.
5. Stephens, A., Lewis, E.D. and Reddy, S., 2018. Towards an inclusive systemic evaluation for the SDGs: Gender equality, environments and marginalized voices (GEMs). *Evaluation*, 24(2), pp.220-236.

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- Direct instruction: Brain storming lecture, Explicit Teaching, E-learning (video)
- Interactive Instruction: Active co-operative learning, seminars, group assignments, library work and group discussion, presentation by individual student/group representative
- Fieldwork and field visits

MODE OF TRANSACTION

- Face to face: Lecture method & demonstration method
- Learner-centered technique: Computer-assisted learning & individual project teaching

ASSESSMENT RUBRICS

Evaluation Type		Marks
End Semester Evaluation		60
Continuous Evaluation		40
a)	Test Paper- 1	10
b)	Test Paper-2	10
c)	Assignment	10
d)	Seminar	10
e)	Book/ Article Review	-
f)	Viva-Voce	-
g)	Field Report	-
h)	Add relevant mode	
Total		100

Sample Questions to test Outcomes.

1. How do patriarchal and matriarchal societies differ in environmental impact?
2. How does climate change affect women and men differently in rural India?
3. Design a gender-inclusive conservation project. What strategies would you use?
4. How do gendered power relations contribute to environmental degradation?

5. Integrate gender perspectives into a sustainable development plan. What key elements would you include?

Employability for the Course / Programme

- Sustainability Consultant: Apply gender-sensitive approaches to environmental impact assessments, sustainability strategies, and policy development in government, NGOs, or private companies.
- Gender & Development Specialist: Design and implement gender-responsive projects, conduct research, and build capacity on gender-environment intersections in international development agencies, NGOs, or research institutions.

KU2DSCEVS102: ENERGY AND ENVIRONMENT

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
2	DSC	100	KU2DSCEVS102	4	75

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
5	-	1	40	60	100	75

Course Description:

This interdisciplinary course explores the complex relationships between energy production, consumption, and environmental sustainability. Students will examine the social, economic, and political dimensions of energy systems, analyzing the impacts of energy choices on the environment and society.

Course Pre-requisite

1. Introduction to Environmental Science or Environmental Studies
2. Basic Physics or Energy Fundamentals
3. Principles of Sustainability or Sustainable Development
4. Social Science Research Methods or Environmental Policy
5. Introductory Economics or Energy Economics

Course Outcomes: At the end of the Course, the student will be able to -

CO No.	Expected Outcome	Learning Domains
1	Analyze energy systems	Cognitive
2	Evaluate energy-environment interactions	Cognitive
3	Explain energy demand and consumption patterns	Cognitive
4	Develop sustainable energy solutions	Cognitive & Psychomotor
5	Critique energy policy and governance	Cognitive

COURSE CONTENTS

Module 1: Energy resources (15 Hrs)

Defining energy; forms and importance; Global energy resources; renewable and non-renewable resources: distribution and availability; sources and sinks of energy

Module 2: Energy demand (15 Hrs)

Global energy demand: historical and current perspective; energy demand and use in domestic, industrial, agriculture, and transportation sector; generation and utilization in rural and urban environments

Module 3: Energy, environment and society (15 Hrs)

Energy production as a driver of environmental change; nature, scope, and analysis of local and global impacts of energy use on the environment; fossil fuel burning and related issues of air pollution

Module 4: Energy and related issues (15 Hrs)

Radioactive waste, spent fuel; energy production, transformation, and utilization associated environmental impacts (Chernobyl and Fukushima nuclear accidents, construction of dams, environmental pollution); energy over-consumption and its impact on the environment

Module 5: Teacher Specific Module (15 Hrs)

Mention broad areas of content, transaction, and evaluation.

5.1 Student Presentations

5.2 Group Discussions

5.3 Mini Group Projects for Students

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. McKibben, B. 2012. Global Warming's Terrifying New Math, Rolling Stone
2. Magazine. Craig. J.R., Vaughan, D.J., Skinner. B.J. 1996. Resources of the Earth: Origin, use, and environmental impact (2nd edition). Prentice Hall, New Jersey.
3. Rowlands, I.H. 2009. Renewable Electricity: The Prospects for Innovation and Integration in Provincial Policies in Debora L. Van Nijnatten and Robert Boardman(eds), Canadian

Environmental Policy and Politics: Prospects for Leadership and Innovation, Third Edition. Oxford University Press, pp. 167-82.

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

1. Oliver, J. 2013. Dispelling the Myths about Canada's Energy Future, Policy: Canadian Politics and Public Policy, June-July.
2. Mallon, K. 2006. Myths, Pitfalls and Oversights, Renewable Energy Policy and Politics: A Handbook for Decision-Making. EarthScan.

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- Direct instruction: Brain storming lecture, Explicit Teaching, E-learning (video)
- Interactive Instruction: Active co-operative learning, seminars, group assignments, library work and group discussion, presentation by individual student/group representative
- Fieldwork and field visits

MODE OF TRANSACTION

- Face to face: Lecture method & demonstration method
- Learner-centered technique: Computer-assisted learning & individual project teaching

ASSESSMENT RUBRICS

Evaluation Type		Marks
End Semester Evaluation		60
Continuous Evaluation		40
a)	Test Paper- 1	10
b)	Test Paper-2	10
c)	Assignment	10
d)	Seminar	10
e)	Book/ Article Review	-
f)	Viva-Voce	-

g)	Field Report	-
h)	Add relevant mode	
Total		100

Sample Questions to test Outcomes.

1. Compare renewable and non-renewable energy sources
2. How does fossil fuel combustion impact air quality and climate?
3. What factors drive energy demand in transportation?
4. Design a community-scale renewable energy project.
5. Evaluate a national energy policy's effectiveness in promoting sustainability.

Employability for the Course / Programme

- Sustainability Consultant
 - Work with organizations to develop sustainable energy strategies
 - Conduct environmental impact assessments
 - Implement energy-efficient solutions
 - Collaborate with stakeholders to promote sustainability
- Energy Policy Analyst
 - Analyze and develop energy policies
 - Evaluate energy projects' environmental impacts
 - Conduct research on energy trends and technologies

- Advise governments and organizations on energy-related decisions

KU3SECEVS101: ECO-INFORMATICS: ENVIRONMENTAL DATA ANALYSIS & SUSTAINABILITY

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
3	SEC	100	KU3SECEVS101	3	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
5	-	1	40	60	100	60

Course Description

This course explores the intersection of environmental science and data analysis, focusing on the application of informatics tools and techniques to understand and manage ecological systems. It opens up into the role of digital technologies in achieving sustainable development goals, including data analysis, visualization, as well as digital solutions for environmental monitoring, conservation, and community engagement.

Course Pre-requisite

Introduction to Environmental Science, Data Analysis, or Equivalent

Course Outcomes: At the end of the Course, the Student will be able to -

CO No.	Expected Outcome	Learning Domains
1	Understand the principles of eco-informatics and its role in environmental decision-making.	Cognitive
2	Apply programming languages (e.g., R) to ecological data analysis.	Cognitive
3	Examine the potential of digital tools for sustainable development	Cognitive
4	Explore digital solutions for environmental monitoring and conservation	Cognitive & Psychomotor
5	Analyze and interpret ecological data using statistical and machine learning techniques.	Cognitive

COURSE CONTENTS

Module 1: Introduction to Eco-Informatics

(10 Hrs)

1.1 Eco-Informatics

Definition, History and Evolution of the Field, Key Concepts and Applications

1.2 Ecological Data Management

Introduction to Databases and Data Repositories, Data Storage and Retrieval Techniques, Data Sharing and Collaboration Tools

Module II: Data Analysis

(20 Hrs)

2.1 Exploratory Data Analysis for Ecological Data

Importance of EDA in Ecological Research, Types of Ecological Data (Field Data, Remote Sensing, Etc.), Methods of Data Collection in Ecology, Public Ecological Datasets and Repositories, Introduction to Data Formats and Standards.

2.2 Population Dynamics and Ecosystem Modeling

Mathematical Modeling of Population Dynamics, Ecosystem Modeling and Simulation

2.3 Programming Languages & Software's

Introduction to R Programming and SPSS Software, Introduction to Data Visualization, Principles of Effective Data Visualization, Plotting Ecological Data Using R, Basic Plots (Scatter Plots, Histograms, and Box Plots). Introduction to Statistical Analysis for Ecological Data, Regression, Classification, and Clustering Techniques.

Module III: Digital Tools for Sustainable Development (10 Hrs)

3.1 Sustainable Development Goals and Digital Technologies: Overview, Key Concepts and Frameworks, Sustainable Development Data Sets, Sustainable Development Goals (SDGs), Importance of Digital Tools in Achieving Sustainability, Introduction to the Digital Transformation and its Implications for Sustainability.

3.2 Environmental Monitoring and Conservation: Digital Solutions for Environmental Monitoring (e.g., Sensor Technologies, Drones), Digital Tools for Conservation Efforts (e.g., Citizen Science Platforms, Conservation Apps), Tools for Digital Communication and Collaboration (Slack, Zoom, Microsoft Teams), Digital Tools for Urban Planning and Management, Role of Digital Tools in Sustainability Education, E-Learning Platforms and Resources.

Module IV: Block chain Technology and AI (10 Hrs)

Block chain Technology and Sustainability: Basics of Block chain Technology, Applications of Block chain In Sustainable Supply Chains and Energy Management.

Artificial Intelligence and Sustainability: Introduction to AI, Applications of AI in Predicting and Solving Sustainability Challenges.

Module V: Teacher Specific Module (10 Hrs)

5.1 Student Presentations

5.2 Group Discussions

5.3 Discussions on Advanced Topics

Suggested Readings

1. Michener, W.K., & Brunt, J.W. (Eds.). (2000). Ecological Data: Design, Management, and Processing. Blackwell Science.

2. Jones, M.B., & Crawley, M.J. (2015). Informatics for Biodiversity and Ecology: Data Management, Information Systems, and Models. Springer.
3. Wilkinson, M.D., et al. (2016). "The FAIR Guiding Principles for Scientific Data Management and Stewardship." Scientific Data, 3, 160018.
4. Borer, E.T., Seabloom, E.W., Jones, M.B., &Schildhauer, M. (2009). "Some Simple Guidelines for Effective Data Management." Bulletin of the Ecological Society of America, 90(2), 205-214.
5. Bolker, B.M. (2008). Ecological Models and Data in R. Princeton University Press.
6. Gotelli, N.J., & Ellison, A.M. (2013). A Primer of Ecological Statistics. Sinauer Associates.
7. Brunsdon, C., & Comber, L. (2015). An Introduction to R for Spatial Analysis and Mapping. Sage.
8. Beckerman, A.P., Childs, D.Z., &Petchey, O.L. (2017). Getting Started with R: An Introduction for Biologists. Oxford University Press.
9. R Documentation: <https://www.rdocumentation.org/>

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

Interactive Instruction: Active co-operative learning, Seminars, Group Assignments, Library work and Group discussion, Presentation by individual student/ Group representative.

Mode of Transaction Face to face: Lecture method & Demonstration method

Learner centered technique: Computer assisted learning & individual project teaching

ASSESSMENT RUBRICS

Evaluation Type		Marks
End Semester Evaluation		60
Continuous Evaluation		40
a)	Test Paper- 1	10
b)	Test Paper-2	10
c)	Assignment	10
d)	Seminar	10
e)	Book/ Article Review	-

f)	Viva-Voce	-
g)	Field Report	-
h)	Add relevant mode	
Total		100

Sample Questions to test Outcomes.

1. Describe the concepts and applications of eco informatics.
2. Write a note on exploratory data analysis.
3. Write an essay on how digital technologies help in achieving SDGs.
4. What is blockchain technology? Explain with their applications in sustainability.
5. Elaborate the concept of digital tools and environmental monitoring.

Employability for the Course / Programme

- Sustainability Consultant
 - Work with organizations to develop new technology strategies
 - Conduct environmental impact assessments with modelling
 - Implement energy-efficient solutions
 - Collaborate with stakeholders to promote sustainability
- Energy Policy Analyst
 - Analyze and develop internal policies

- Evaluate sustainable new projects' environmental impacts
- Conduct research on sustainable trends and technologies
- Advise governments and organizations on energy-related decisions

KU3DSCEVS103: GREEN TECHNOLOGY

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
3	DSC	100	KU3DSCEVS103	4	75

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
5	-	1	40	60	100	75

Course Description

This course provides an introduction to green technology, focusing on sustainable innovations and practices that reduce environmental impact. Students will learn about various green technologies, their applications, and the role they play in addressing global environmental challenges. The course covers renewable energy, sustainable materials, green building, water conservation, and waste management.

Course Pre-requisite

Introduction to Environmental Science, Physics, Mathematics, Engineering or Equivalent

Course Outcomes: At the end of the Course, the Student will be able to -

CO No.	Expected Outcome	Learning Domains
1	Understand the principles of green technology and sustainability.	Cognitive
2	Explore various green technologies and their applications.	Cognitive & Psychomotor
3	Analyze the environmental, economic, and social impacts of green technologies.	Cognitive
4	Develop skills to assess and implement sustainable solutions.	Cognitive & Affective
5	Evaluate case studies of green technology implementations.	Cognitive

COURSE CONTENTS

Module I: Green Technology & Renewable Energy Technology

(15 Hrs)

1.1. Green Technology: Definition, Objectives and Principles of Green Technology, Importance of Sustainability and Environmental Impact.

1.2 Renewable Energy Technology: Renewable Energy Sources (Solar, Wind, Hydro, Geothermal, Biomass), Technologies for Harnessing Renewable Energy, Renewable Energy Projects – Case Studies

Module II: Energy Efficiency and Green Manufacturing (15 Hrs)

2.1 Energy Efficiency And Conservation: Principles of Energy Efficiency, Technologies for Energy Conservation in Residential, Commercial, and Industrial Settings, Case Studies on Energy Efficiency Improvements.

2.2 Sustainable Materials and Green Manufacturing: Introduction to Sustainable Materials (Biodegradable, Recyclable, Non-Toxic), Green Manufacturing Processes and Practices.

Module III: Sustainability in Architecture, Water Management, Waste Management and Transportation (15 Hrs)

3.1 Green Building and Sustainable Architecture: Principles of Green Building and Sustainable Architecture, Technologies and Materials Used in Green Construction.

3.2 Water Conservation and Management: Importance of Water Conservation, Technologies for Water Conservation and Management (Rainwater Harvesting, Greywater Systems, Efficient Irrigation).

3.3 Waste Management and Recycling Technologies: Waste Management Principles, Technologies for Waste Reduction, Recycling, and Composting, Waste Management Systems – Case Studies

3.4 Sustainable Transportation: Sustainable Transportation Solutions (Electric Vehicles, Public Transport, Bike-Sharing Systems), Technologies for Reducing Transportation Emissions, Sustainable Transportation Initiatives.

Module IV: Policies and Innovations in Green Technology (15 Hrs)

4.1 Green Information and Communication Technology (ICT): Role of ICT in Promoting Sustainability, Green Data Centers, Energy-Efficient Computing, and Smart Grids.

4.2 Environmental Impact Assessment and Life Cycle Analysis: Introduction to Environmental Impact Assessment (EIA), Life Cycle Analysis (LCA) of Products and Technologies.

4.3 Policy and Regulation in Green Technology: Policies and Regulations Promoting Green Technology, Role of Government, Industry, and NGOs in Fostering Sustainable Practices, Policy-Driven Green Technology Initiatives.

4.4 Innovations in Green Technology: Emerging Technologies and Innovations in Sustainability, Challenges and Opportunities in the Adoption of Green Technology.

Module V: Teacher Specific Module

(15 Hrs)

5.1: Student Presentations

5.2: Group Discussions

5.3: Mini Group Projects for Students

Suggested Readings

1. "Building Energy Efficiency: Why Green Buildings Are Key to Asia's Future" by the World Resources Institute.
2. "Green Building and Climate Resilience: Understanding Impacts and Preparing for Changing Conditions" by the U.S. Green Building Council.
3. "Green ICT: Energy Efficiency for a Sustainable Future" by the International Telecommunication Union (ITU).
4. "Innovative Waste Management Technologies for Sustainable Development" by the United Nations Environment Programme (UNEP).
5. "Sustainable Manufacturing and Eco-Innovation: Framework, Practices and Measurement" by OECD.
6. "The Environmental Benefits of Recycling and Its Contribution to the Reduction of Greenhouse Gas Emissions" by the European Environment Agency.
7. "The Environmental Benefits of Remanufacturing: Beyond Waste Reduction" by Nabil Nasr. International Journal of Environmental Technology and Management.
8. "The Role of Green Building in Climate Change Mitigation" by the World Green Building Council.
9. "The Role of Renewable Energy Technologies in Limiting Climate Change" by the International Energy Agency (IEA).
10. "Urban Water Sustainability: Practices and Issues" by the Environmental Protection Agency (EPA).

11. Black, W. R. (2010). Sustainable Transportation: Problems and Solutions. Guilford Press.
12. Boyle, G. (Ed.). (2012). Renewable Energy: Power for a Sustainable Future (3rd ed.). Oxford University Press.
13. Brown, M. A., & Sovacool, B. K. (2011). Climate Change and Global Energy Security: Technology and Policy Options. MIT Press.
14. Christensen, T. H. (Ed.). (2011). Solid Waste Technology and Management. Wiley-Blackwell.
15. Graedel, T. E., & Allenby, B. R. (2010). Industrial Ecology and Sustainable Engineering. Pearson.
16. MacKay, D. J. C. (2008). Sustainable Energy – Without the Hot Air. UIT Cambridge.
17. Tester, J. W., Drake, E. M., Driscoll, M. J., Golay, M. W., & Peters, W. A. (2012). Sustainable Energy: Choosing Among Options (2nd ed.). MIT Press.

Teaching Learning Strategies Direct Instruction: Brain storming lecture, Explicit Teaching, E-learning (Video)

Interactive Instruction: Active co-operative learning, Seminars, Group Assignments, Library work and Group discussion, Presentation by individual student/ Group representative, Group projects.

Mode of Transaction Face to face: Lecture method & Demonstration method. Learner centered technique: Computer assisted learning & individual project teaching, project presentation.

ASSESSMENT RUBRICS

Evaluation Type		Marks
End Semester Evaluation		60
Continuous Evaluation		40
a)	Test Paper- 1	10
b)	Test Paper-2	10
c)	Assignment	10
d)	Seminar	10

e)	Book/ Article Review	-
f)	Viva-Voce	-
g)	Field Report	-
h)	Add relevant mode	
Total		100

Sample Questions to test Outcomes.

1. Write a note on emerging technologies in sustainability. Explain the challenges in the adoption of green technology.
2. Write an essay on waste management with the help of case studies.
3. What are the renewable energy sources? Explain the technologies used for harnessing renewable energy.
4. Elaborate the concept of green building and sustainable architecture.
5. What is energy efficiency and how it helps in achieving sustainability?

Employability for the Course / Programme

- Sustainability Consultant: Apply gender-sensitive approaches to environmental impact assessments, sustainability strategies, and policy development in government, NGOs, or private companies.
- Development Specialist: Design and implement gender-responsive projects, conduct research, and build capacity on gender-environment intersections in international development agencies, NGOs, or research institutions.

FYIMP

KANNUR UNIVERSITY

**DEPARTMENT OF GEOGRAPHY
(GENERAL FOUNDATION COURSES)**

SYLLABUS

FYIMP 2024

Programme Specific Outcomes (PSO)

At the end of the PYIMP in Geography at Kannur University, a student would:

PSO 1	Analyse the dimensions of complex biophysical and social patterns in the world, and mold out young geographers with wide and deep knowledge in contemporary issues in geography.
PSO 2	Critically examine various concepts, laws, theories, and models in geography and evaluate their significance at the local, regional, and global scales.
PSO 3	Master and update the students in the developments in geographic information science and technology, through real-world practical applications.
PSO 4	Equip the learner to collect, analyze, and interpret geographic data and suggest potential solutions in socio-economic-ecological systems at the man-environment interface.
PSO5	Develop proficiency in effective communication of conceptual and practical geographical knowledge to both scientific and public audiences.
PSO6	Work effectively in interdisciplinary and multicultural real-world contexts to combine theory and practice and forge collaborations and partnerships with academia, industry and local communities to contribute enduring solutions to issues at various scales for both humans and other-than-human.

KU 1 MDC GEO 101 Kerala Studies

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
I	MDC	100-199	KU 1 MDC GEO 101	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	-	30	70	100	2

Course Description:

The course attempts to explore the vibrant and diverse culture, history, physiography, economy and society of Kerala, a state renowned for its unique scenic landscapes and progressive social policies. This interdisciplinary course delves into Kerala's rich heritage, spanning from ancient history to contemporary developments. This course encourages critical thinking and engages students in exploring how Kerala's experiences can contribute to broader global discussions on culture, development, and sustainability.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand the physical setting of Kerala	U
2	Create an awareness about Kerala history and renaissance movement	U

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3	Critical Examination of the Kerala Model of Development and its social implications	An
4	Evaluate disaster vulnerability of Kerala	E

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	✓				✓	
CO 2	✓					✓
CO 3					✓	
CO 4	✓	✓				

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	Physical setting of Kerala		10
	1	Location; Physiographic setting of Kerala, Geology	
	2	Drainage, Backwaters and Water Resources	
	3	Climate- Monsoon	
	4		

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	Vegetation and Soil	
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	Historical Background	10
2	1 Pre-modern	
	2 Colonial Intervention	
	3 Kerala Renaissance	
	4 Nationalist Movement and Formation of Kerala State	

	Demography and Economy	10
3	1 Population composition and dynamics- Migration	
	2 Urbanization trends and problems	
	3 Tourism Industry	
	4 Kerala Model of Development & Panchayat Raj and Peoples planning	

4	Disasters and Sustainability	10
	1 Disasters Vulnerability	
	2 Climate change and adaptation	
	3 Disaster Management in Kerala: Institutional Mechanism, Policy and Plans	
	4 Rebuild Kerala Initiative and implementation of SDG in Kerala	

5	Teacher Specific Module	
	<i>Directions</i>	
	Field visit Conduct a field visit to any localities in Kerala to study its physiography and cultural practices.	5

Essential Readings:

1. Aboo Ishaque PK, Geography of Kerala The Land, People, Economy and Ecology, Lipi Publications.
2. Chattopadhyay, S. 2017. Geomorphological Field Guide Book on Laterites and Backwaters of Kerala (Edited by AmalKar). Indian Institute of Geomorphologists, Allahabad
3. Menon, A. S (2019). A Survey of Kerala History. DC Books
4. Tharakan, P. K. M. (2008). When the Kerala model of development is historicised: A chronological perspective. Centre for Socio-Economic & Environmental Studies.

Suggested Readings:

1. Menon, A. S. (2010). Legacy of Kerala. DC Books.
2. Menon, A. S. (2011). Kerala history and its makers. DC Books.
3. Spate O.H.K. and Learmonth A.T.A., 1967: India and Pakistan: A General and Regional Geography, Methuen.
4. Tirtha, Ranjit 2002: Geography of India, Rawat Pubs., Jaipur & New Delhi.

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	
b)	Test Paper-2	

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c)	Assignment	
d)	Seminar	
e)	Book/ Article Review	
f)	Viva-Voce	
g)	Field Report	
Total		100

KU 2 MDC GEO 102 Geography of India

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
II	MDC	100-199	KU 2 MDC GEO 102	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	-	30	70	100	2

Course Description:

The course offers a comprehensive exploration of the geographical landscape of India. Through a blend of theoretical concepts, case studies, and practical applications, students will delve into the diverse physical, cultural, and socio-economic aspects that shape the geography of India.

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Thus, the course enable students in gaining nuanced understanding of the geography of India, and its implications for various aspects of human life and development.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand a comprehensive idea about physical structure of India	U
2	In-depth knowledge of different resource base of India	An
3	Understand Social-Cultural dynamisms in India	E

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	✓					
CO 2	✓				✓	
CO 3						✓

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
	Physical Settings		15

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1	1	Location and Physiographic Divisions	
	2	Drainage Systems: Himalayan and Peninsular	
	3	Climate: characteristics and classification	

2	Resource Base		10
	1	Soil and Natural Vegetation	
	2	Distribution of Mineral Resources (Iron ore and Bauxite)	
	3	Demographic Dividend (Distribution and Age-Sex Composition)	

3	Social Geography		15
	1	Caste system and its regional structure	
	2	Tribes and their correlates	
	3	Religion and language	

5	Teacher Specific Module		
	<i>Directions</i>		
	Prepare handmade atlas with following plates: 1. Physiographic divisions of India 2. Drainage 3. Soil and Vegetation		5

Essential Readings:

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1. Spate O.H.K. and Learmonth A.T.A., 1967: India and Pakistan: A General and Regional Geography, Methuen.
2. Tirtha, Ranjit 2002: Geography of India, Rawat Publs., Jaipur & New Delhi.
3. Stamp, L. D. (1995). Geography of India, Burma and Ceylon.
4. Deshpande C. D., 1992: India: A Regional Interpretation, ICSSR, New Delhi.
5. Sharma, T.C. (2013) Economic Geography of India. Rawat Publication, Jaipur.
5. Pathak, C. R. 2003: Spatial Structure and Processes of Development in India. Regional Science Assoc., Kolkata.
6. Ahmed A., 1999: Social Geography, Rawat Publications.

Suggested Readings:

1. Husain. (2012). Geography Of India. McGraw-Hill Education (India) Pvt Limited.
2. Khullar, D. R. (n.d.). Geography Textbook. New Saraswati House India Pvt Ltd.
3. Holland, S. T. H., & India, G. S. of. (2023). Sketch Of The Mineral Resources Of India. LEGARE STREET Press.
4. Valdiya, K. S. (2001). Himalaya: Emergence and Evolution. Universities Press.
5. Agarwala, S. N. (1975). India's Population: Some Problems in Perspective Planning: Proceedings. Bloomsbury Academic.

Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	70
Continuous Evaluation	30
a) Test Paper- 1	
b) Test Paper-2	
c) Assignment	
d) Seminar	
e) Book/ Article Review	
f) Viva-Voce	
g) Field Report	

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Total	100
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KU 3 MDC GEO 103: Disaster Management

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	MDC	100-199	KU3MDCGEO103	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	-	30	70	100	2

Course Description:

In an era where natural and man-made disasters are increasingly frequent and severe, understanding and managing these crises is crucial. This course provides an in-depth understanding of Disaster Management, equipping students with the knowledge and skills needed to effectively prepare for, respond to, and recover from various types of disasters.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	In depth understanding about the various concepts associated with disasters management.	U
2	Detailed analysis about the different types of disasters in India.	An
3	Evaluating the role of institutional frameworks to mitigate the disasters in the country.	E

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	✓					
CO 2	✓	✓				
CO 3					✓	✓

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	Conceptual Basis		10
	1	Disasters, Hazards, Risk, Vulnerability- Definition and Classification	
	2	History of Disaster Management	
	3	Disaster Management Cycle	
	4	Community Based Disaster Management	

2	Natural and Human Made Disasters		20
	1	Floods	
	2	Earthquake	
	3	Cyclone	
	4	Industrial and Nuclear	

	Strategies for Disaster Management	10
3	1 Sendai Framework for Disaster Risk Reduction 2015-2030	
	2 Disaster Management Act 2005	
	3 NDMA and Prime Minister’s Ten Point Agenda on DRR	
	4 Kerala State Disaster Management Plan	
	Teacher Specific Module	
4	<i>Directions</i>	
	Field-based case study: Conduct a field survey in a locality recently affected by any of the hazards covered in the syllabus.	5

Essential Readings:

1. Bryant , E.(2004). Natural Hazards. Cambridge University Press, India
2. Wisner, B., Blaikie P et al. (2004). At Risk: Natural Hazards, People’s Vulnerability and Disasters. Routledge Taylor and Francis Group , NY.
3. Coppola, D. (2006). Introduction to international disaster management. Elsevier.
4. Savindra, S. and Jeetendra, S. (2013): Disaster Management. Allahabad, India: Pravalika Publications.
5. Smith, Keith (2013). Environmental Hazards: Assessing risk and reducing disasters
6. Government of India. (2011). Disaster Management in India. Delhi, India: Ministry of Home Affairs.
7. Government of India. (2008). Vulnerability Atlas of India. New Delhi, India: Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India

Suggested Readings:

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1. Modh, S. (2010). Managing Natural Disaster: Hydrological, Marine and Geological Disasters. Delhi, India: Macmillan.
2. Ramkumar, M. (2009). Geological Hazards: Causes, Consequences and Methods of Containment. New Delhi, India: New India Publishing Agency.
3. Stoltman, J.P., et al. (2004). International Perspectives on Natural Disasters. Dordrecht, the Netherlands: Kluwer Academic Publications.

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	
b)	Test Paper-2	
c)	Assignment	
d)	Seminar	
e)	Book/ Article Review	
f)	Viva-Voce	
g)	Field Report	
Total		100

KU 4 SEC GEO 201: Fundamentals of Remote Sensing (Practical)

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	SEC	200-299	KU 4 SEC GEO 201	3	90

Learning Approach (Hours/ Week)		Marks Distribution			Duration of
	Practical/				

FYIMP

Lecture	Internship	Tutorial	CE	ESE	Total	ESE (Hours)
-	6	-	30	70	100	2

Course Description:

The course is designed to introduce students to the fundamental concepts and applications of remote sensing technology. This course emphasizes hands-on experience, providing students with the skills needed to acquire, analyze, and interpret remote sensing data. Through practical exercises and projects students will learn how to apply remote sensing techniques in various fields.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	To create a basic knowledge on different types of remote sensing, basic principles of remote sensing	U
2	To make the students aware about the significance of the applications of remote sensing as a tool for monitoring objects and phenomena and suggesting their strategic management.	A
3	Examine the recent trends in RS technology and its application in various fields of research.	An

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1			✓	✓		
CO 2						✓

CO 3					✓	
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COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	Introduction to Remote Sensing		15
	1	Definition and Historical Development	
	2	Types of Sensors and Platforms	
	3	India's Space Missions	
2	Photogrammetry		20
	1	Introduction to Aerial Photo and Photogrammetry	
	2	Calculation of photo scale	
	3	Annotation and Interpretation Keys	
3	Satellite Remote Sensing		15
	1	Principles of Remote Sensing and EMR Interaction with Atmosphere and Earth Surface	
	2	Types of satellites and sensors	
	3	Sources of Satellite Images (USGS & Bhuvan) and Resolution	

	Image Processing and Interpretation		30
4	1	Data Pre-processing– Basic Principles of Visual Interpretation- Manual Method	
	2	Procedures in Digital Image Processing- Information Extraction; Image Classification	
	3	Practical exercise of Unsupervised Classification/Supervised Classification	
	Teacher Specific Module		
5	<i>Directions</i>		
		<p>Prepare Practical Record File containing at least 5 exercises from the following:</p> <ol style="list-style-type: none"> 1. Practical 1: Calculation of Scale of Aerial Photograph (Using following methods: Focal Length and Flying Height of the Aircraft, Using Photo Distance and Ground Distance, Using Photo Distance and Map Distance). 2. Practical 2: Orientation of Aerial Photo using available Stereoscope (Mirror or Pocket Stereoscope). 3. Practical 3: Identification, Image Interpretation Key and interpretation of Feature Types in Aerial Photographs using a stereoscope. 4. Practical 4: Downloading various remote sensing data (Bhuvan and Landsat data). Preparation of spectral signatures curves for different Various Feature Types (LU/LC) types (only four: Water body, Vegetation, Open/fallow land and built up). 5. Practical 5: Clip, merge, band stacking / virtual raster. 6. Practical 6: Satellite Image Classification Using Supervised Methods and Preparation of Land Use/Land Cover Map Using Bhuvan or Landsat Data. 7. Practical 7: Satellite Image Classification using unsupervised/supervised classification methods. 	5

Essential Readings:

1. Elachi, C., & Van Zyl, J. J. (2021). Introduction to the physics and techniques of remote sensing. John Wiley & Sons.

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2. James B Campbell and Randolph H W (2011) Introduction to Remote Sensing, Gulford Press, New York.
3. Jenson J R (2004) Remote sensing of the Environment, Pearson Education Pvt Ltd, Delhi.
4. Lillesand T M, Kiefer R W and J W Chipman (2008). Remote sensing and Image Interpretation, John Wiley, New Delhi.
5. Paul Curran P.J.(1985) Principles of Remote Sensing, ELBS Publications.
6. Rees, W. G.(2001), Physical Principles of Remote Sensing, Cambridge University Press.

Suggested Readings:

1. Campbell J. B., 2007: Introduction to Remote Sensing, Guildford Press
2. Li, Z., Chen, J. and Batsaviyas, E. (2008) Advances in Photogrammetry, Remote Sensing and Spatial Information Sciences CRC Press, Taylor and Francis, London
3. M. Anji Reddy (2008) Textbook of Remote sensing and Geographical information systems, BS Publications, Hyderabad
4. Basudeb Bhatta (2021) Remote sensing and GIS, Oxford University Press, New Delhi Ian
5. Heywood et.al (2002) An Introduction to Geographical Information System, Pearson Education Private Limited, Delhi.

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	
b)	Test Paper-2	
c)	Assignment	
d)	Seminar	
e)	Book/ Article Review	
f)	Viva-Voce	

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g)	Field Report	
Total		100

KU 5 SEC GEO 202: Introduction to Geographic Information System (Practical)

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
V	SEC	200-299	KU 5 SEC GEO 202	3	90

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
-	6	-	30	70	100	2

Course Description:

Introduction to Geographic Information Systems (GIS) course is designed to equip students with practical skills and theoretical understanding necessary for harnessing the power of GIS technology in geographical analysis and decision-making. GIS is a powerful tool that allows users to visualize, analyze, and interpret spatial data, making it an indispensable tool across various disciplines including geography, environmental science, urban planning, and beyond.

Through a combination of lectures and hands-on exercises, students will gain a solid foundation in GIS principles and techniques, enabling them to effectively utilize spatial data to solve complex geographical problems. Whether pursuing further studies or entering the workforce, students will be well-equipped to leverage GIS tools to make informed decisions and solve spatial problems in a variety of professional contexts.

Course Prerequisite: NIL

Course Outcomes:

		Learning
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FYIMP

CO No.	Expected Outcome	Domains
1	Develop basic understanding and hands-on on GIS software.	U
2	Understand GIS Data Structures and GIS Data Analysis.	An
3	To do analysis and application of geographical data in real world projects.	A

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	✓		✓			
CO 2				✓		
CO 3					✓	✓

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	Introduction to GIS		10
	1	Definition and Components	
	2	Evolution of advanced cartography and GIS	
	3	Terrestrial Data Structure (Coordinates, Datum, Projection)	

2	Data Structures		
	1	GIS Software, Open-source GIS, Web GIS	15
	2	Spatial and Non-spatial data; Raster and Vector Data Structure	
	3	Methods of data input in GIS platform	
3	GIS Data Analysis and Data Display		35
	1	Geo-Referencing	
	2	Vectorization, Data editing, Topological error correction	
	3	Mapping Layout	
4	Preparing Thematic Maps		30
	1	Data collection and sorting	
	2	Data joining	
	3	Thematic Map layout	
5	Teacher Specific Module		
	<i>Directions</i>		
	A project file consisting of 5 exercises on using any GIS Software on above mentioned themes.		5

Essential Readings:

1. Ashish Sarkar (2009) Practical Geography – A systematic approach, Orient Black Swan, Kolkata.
2. Bolstad, P., 2016: GIS Fundamentals: A first text on geographic information systems, Eider Press.
3. Chang, K-T., 2017: Introduction to Geographic Information Systems. McGraw-Hill.
4. Dent, B. D. (1985). Principles of thematic map design. Massachusetts: Addison-Wesley Publishing Co.
5. Heywoods, I., Cornelius, S and Carver, S. 2006: An Introduction to Geographical Information System. Prentice Hall.
6. Konecny, G., 2014: Geoinformation Remote Sensing, Photogrammetry, and Geographic Information Systems, CRP Press.
7. Saha, Pijushkanti (2017) Advanced Practical Cartography, Books and Allied, Kolkata.

Suggested Readings:

1. Gupta K K and Tyagi V C : Working with Map, Survey of India, DST, New Delhi
2. Mishra R P and Ramesh A, : Fundamentals of Cartography, Concept Pub. New Delhi
3. Robinson A H, Elements of Cartography, John Wiley and Sons, New York
4. Sarkar A : Practical Geography: A systematic Approach, Orient Black Swan Pvt. Ltd, New Delhi.

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	
b)	Test Paper-2	
c)	Assignment	

FYIMP

d) Seminar	
e) Book/ Article Review	
f) Viva-Voce	
g) Field Report	
Total	100

KU 6 SEC GEO 301: Environmental Impact and Risk Assessment (Practical)

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	SEC	300-399	KU 6 SEC GEO 301	3	90

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
-	6	-	30	70	100	2

Course Description:

The course is designed to equip students with practical skills and methodologies used in evaluating environmental consequences and identifying potential risks to ecosystems and human health. This course combines classroom instruction with extensive practical sessions, including fieldwork, lab exercises, and project work. Students will work on real-life scenarios and case studies, allowing them to apply theoretical knowledge in practical settings.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	To gain insights into the concept of environmental impact	U

FYIMP

	assessment and its relevance in sustainable development.	
2	To evaluate methodologies to conduct EIA.	E
3	Conduct EIA of any development project.	A
4	Evolve strategies to ensure development and conservation hand-in-hand.	C

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	✓	✓				
CO 2			✓	✓		
CO 3				✓		✓
CO 4					✓	✓

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	Fundamental Concepts of EIA		15
	1	Definition and Concepts, Origin and History with special reference to India	
	2	Objectives and Principles	
	3	Types of EIA and Classification of Impacts	

FYIMP

EIA Procedures		30
2	1 EIA Notification (Draft) 2020- Classification of Projects (Practical exercise- Category A and Category B1 and B2 projects)	
	2 Project Screening and Scoping (Practical exercise- prepare a questionnaire and compilation of primary data to study the scope of the project based on public participation)	
	3 Impact Analysis and Public Consultation (Practical exercise- conduct a public hearing for any project and prepare a draft for the process)	
EIA Methodologies and Case Studies		40
3	1 Ad Hoc Method and Checklist Method (Practical Exercise- Mining Project Impact Assessment)	
	2 Matrix methods and Network Method (Identify the impacts due to a industrial project using the matrix or network method)	
	3 Overlays Method (Practical exercise- Prepare a brief EIA report of a River Valley Project using overlay method)	
Teacher Specific Module		
5	<i>Directions</i>	
	Prepare a Practical File: <ol style="list-style-type: none"> a. Classification of projects into Category A and Category B1 and B2 projects b. Prepare the scope of a recent developmental project of Category A c. Identify the impacts of Mining/River Valley Project using checklist method. d. Prepare a brief EIA report of a River Valley Project using overlay method. 	5

Essential Readings:

1. Glasson, J. and Therivel, R., (2013). Introduction to Environmental Impact Assessment. Routledge.

FYIMP

2. MacKinnon, A.J., Duinker, P.N. and Walker, T.R., (2018). The Application of Science in Environmental Impact Assessment. Routledge
3. Mareddy, A.R. (2017). Environmental Impact Assessment Theory and Practices, Butterworth Heinemann.

Suggested Readings:

1. Ministry of Environment, Forest and Climate Change (2020). Draft Environment Impact Assessment Notification, 2020.
http://environmentclearance.nic.in/writereaddata/om/6998FGGHOI_Gaztte_EIA2020_Co mm ents.pdf

Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	70
Continuous Evaluation	30
a) Test Paper- 1	
b) Test Paper-2	
c) Assignment	
d) Seminar	
e) Book/ Article Review	
f) Viva-Voce	
g) Field Report	
Total	100

KU 3 VAC GEO 101: Environment and Sustainability

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	VAC	100-199	KU 3 VAC GEO 101	3	45

Learning Approach (Hours/ Week)	Marks Distribution
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FYIMP

Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	Duration of ESE (Hours)
3	-	-	30	70	100	2

Course Description:

In the face of global environmental challenges, the course "Environment and Sustainability" offers a comprehensive understanding of the principles and practices necessary for fostering a sustainable future. This value addition course is designed to equip students with the knowledge and skills to address pressing environmental issues and promote sustainable development in various contexts.

This course incorporates lectures, interactive discussions, case studies, and practical projects to provide a well-rounded understanding of environmental and sustainability issues. Students will engage in hands-on activities and real-world problem-solving to develop actionable solutions for sustainable living.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand the dynamisms of ecosystem and various principles governing it.	U
2	Acquire values and attitudes towards understanding complex environmental- economic-social challenges, and active participation in solving current environmental problems and preventing the future ones.	U
3	Think critically on environmental issues and different solutions.	A

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	✓					
CO 2					✓	

CO 3						✓
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COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	Ecosystems		10
	1	Definition, structure and function of ecosystem	
	2	Energy flow in an ecosystem (food chains, food webs and ecological succession)	
	3	Case studies of the following ecosystems (Forest ecosystem, Aquatic ecosystems)	
2	Natural Resources		15
	1	Land and Soil	
	2	Natural Vegetation	
	3	Energy resources (renewable and non-renewable resources)	
3	Sustainability		15
	1	Biological diversity and threats to biodiversity (Habitat loss, poaching of wildlife, human-wildlife conflicts, biological invasions)	
	2	Environmental pollution: types, causes, effects and controls	
	3		

	Sustainable Development: Concept and Components; Measures of Sustainability: SDG	
	Teacher Specific Module	
5	<i>Directions</i>	
	Conduct Field work: <ul style="list-style-type: none"> • 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 simple ecosystems-pond, river, coastal regions etc. 	5

Essential Readings:

1. Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders.
2. World Commission on Environment and Development. 1987. Our Common Future. Oxford University Press.
3. Cunningham W. P. and Cunningham M. A., 2004: Principles of Environmental Science: Inquiry and Applications, Tata Mcgraw Hill, New Delhi.
4. Goudie A., 2001: The Nature of the Environment, Blackwell, Oxford.
5. Miller G. T., 2004: Environmental Science: Working with the Earth, Thomson BrooksCole, Singapore.

Suggested Readings:

1. Dovers, S., & Hussey, K. (2013). Environment and sustainability: a policy handbook. Federation Press.
2. Adams, B. (2008). Green development: Environment and sustainability in a developing world. Routledge.
3. Chiras, D. D. (2009). Environmental science. Jones & Bartlett Publishers.

Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	70

FYIMP

Continuous Evaluation		30
a)	Test Paper- 1	
b)	Test Paper-2	
c)	Assignment	
d)	Seminar	
e)	Book/ Article Review	
f)	Viva-Voce	
g)	Field Report	
Total		100

Course Title : **NOTTUSVARA (P)**
Course Code : **KU1MDCMUS101**
Course Pre-requisite : Aptitude, skill and interest in the concerned area
Semester : **I**
Credits : **Three**

Course Outcome

C01	Identify a Carnatic musical form resembling a form of western music
C02	Analyze the characteristics and structure of Nottusvara
C03	Recognize compositions belong to Nottusvara
C04	Perform Nottu svaras showcasing technical prowess

Mapping of Course Outcomes to PSOs/POs

Co No	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	√	√					√
CO2	√			√			
CO3	√		√				√
CO4	√		√				√

Course Description

This course focuses the distinctive characteristics of Nottusvaras which is a set of 39 compositions in Carnatic music composed by MuthuswamiDikshitar. Nottusvaras are notable as an interaction between the East and the West and the lyrics are composed in Sanskrit language in western C Major Scale whose pitch intervals correspond to that of the Sankarabharana in Carnatic music

Course Objectives

- Introduce a form having Sanskrit lyrics into Western melodic themes

- Familiarize light nature's tunes of Nottusvara and the classical sahityas that adorned them
- Introduce the of Muthuswami Dikshitar

Credit			Teaching Hours		Assessment		
L/T	P/I	Total	L/T/P	Total	CE	ESE	Total
3		3	3	3	30	70	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE =End Semester Evaluation

COURSE OUTCOMES

Course Learning Outcomes: At the end of the Course, the Student will be able to -

C01	Recognize a form resembling a form of western music
C02	Identify the structure of Nottusvara
C03	Gain a clear understanding of the scale used in Nottusvaras
C04	Identify the composer of Nottusvara
CO5	Perform Nottusvara and realize the significance of Nottusvara in Indian music

COURSE CONTENTS

Module 1

Brief Lakshana of the raga, Sankarabharanam

1.1 Arohana and Avarohana

1.2 Svara varieties

Suggested readings specific to the module

1.1-1.2DakshinendianSangitam by VidvanA K Raveendranath, Kerala Bhasha Institute, 2016

Module 2

Varisas in Sankarabharanam

2.1 Saralivarisas

2.2 Madhyasthayivarisas

Suggested readings specific to the module

2.1-2.2DakshinendianSangitam by VidvanA K Raveendranath, Kerala Bhasha Institute, 2016

Module 3

Nottusvaras

3.1 Nottusvaras of MuthuswamiDikshitar – 2 Nos

Suggested readings specific to the module

3.1 <https://sangeet-bharati.org/download/nottuswara-sahitya/>

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. Nottuswara, edited by Frederic P Miller, Agnes V Vandome and McBrewster John, VDM Publishing, Germany 2010

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

1. Sangita Nighandu by Dr. Sunil V T, DC Books, Kottayam 2012

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- Interaction with learners,
- Group presentation
- Individual presentation
- Assignment

MODE OF TRANSACTION

- Practical demonstration
- Black Board
- Power Point
- Smart class room

ASSESSMENT RUBRICS

Marks

	Marks
End Semester Evaluation	70
• Practical Test	60
• Viva	10
Continuous Evaluation	30
• Class Participation and Discussion	5

• Assignment	5
• Record	10
• Practical Test paper	10

Sample Questions to test Outcomes.

1. Present a brief description of raga, Sankarabharanam
 2. Perform a Nottusvaras with sahitya
-

Employability for the Course / Programme

- Performance
- Teaching
- Music writing

Course Title : **NAMAVALI (P)**
Course Code : **KU2MDCMUS102**
Course Pre-requisite : Aptitude, skill and interest in the concerned area
Semester : **II**
Credits : **Three**

Course Outcome

C01	Enhance the understanding and appreciation of Tyagaraja's Divyanamakritis
C02	Analyze the lyrical richness of Divyanamakritis, savoring the imagery and symbolism employed by Tyagaraja
C03	Delve into the rich variety of emotions and imagery found in these kritis
C04	Uncover the unique characteristics of Divyanama kritis, including their lyrical themes, rhythmic patterns, and melodic structures

Mapping of Course Outcomes to PSOs/POs

Co No	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	√	√	√				√
CO2	√		√	√			√
CO3	√			√		√	
CO4	√			√	√	√	

CourseDescription

This course aims into the exquisite realm of Divyanama kritis of Tyagaraja, where music and devotion intertwine in a celebration of the divine names. It also explore the unique features and compositional techniques employed by Tyagaraja in these compositions. The 12 notes used in Carnatic music is also detailed in this course.

Course Objectives

- Detailing the varieties of notes used in Carnatic music
- Introduction to Tyagaraja and his musical legacy and exploration
- Unravel the essence of Divyanamakritis
- Experience the poetic beauty and musical grandeur of these compositions

Credit			Teaching Hours		Assessment		
L/T	P/I	Total	L/T/P	Total	CE	ESE	Total
3		3	3	3	30	70	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE =End Semester Evaluation

COURSE OUTCOMES

Course Learning Outcomes: At the end of the Course, the Student will be able to -

C01	Enhanced knowledge of Tyagaraja and his Divyanamakritis
C02	Deeper appreciation for the devotional and philosophical aspects of Carnatic music
C03	Explore the theological and philosophical concepts embedded within these compositions
C04	Performe these kritis with authenticity and expression
CO5	Deeply analyze selected Divyanamakritis, dissecting their lyrical content, musical structure, and devotional intent

COURSE CONTENTS

Module 1

Introducing 12 svarasthanas

- 1.1 Saptasvaras
- 1.2 Variety of Saptasvaras
- 1.3 Vocalisation of 12 notes

Suggested readings specific to the module

- 1.1-1.2 DakshinendianSangitam by VidvanA K Raveendranath, Kerala Bhasha Institute, 2016

Module 2

Namavali

2.1 Divyanamakritis of Tyagaraja – 2 Nos

Suggested readings specific to the module

1. Compositions of Tyagaraja by T K GovindaRao, Ganamandir Publications, 1999, Devine books, Delhi

Module 3

Bhajanas

3.1 Bhajanas intended for group rendering-2 Nos

Suggested readings specific to the module

1. <https://ssssoka.org/spiritual-wing/bhajans-nagarsankeertan/>

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. https://www.sangeethapriya.org/tributes/thyagaraja/dl_utsavakrithis.html

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

1. The Spiritual Heritage of Tyagaraja : C Ramanujachari, The President Sri Ramakrishna, 2001

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- Interaction with learners,
- Group presentation
- Individual presentation
- Assignment

MODE OF TRANSACTION

- Practical demonstration
- Black Board
- Power Point
- Smart class room

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	70
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• Practical Test	60
• Viva	10
Continuous Evaluation	30
• Class Participation and Discussion	5
• Assignment	5
• Record	10
• Practical Test paper	10

Sample Questions to test Outcomes.

1. Present a brief description on the 12 notes used in Carnatic music
2. Perform a Divyanamakriti of Tyagaraja
3. Render a Bhajana intended for group singing

Employability for the Course / Programme

- Performance
- Teaching
- Music writing

Course Title : **FUNDAMENTAL EXERCISES OF CARNATIC MUSIC (P)**

Course Code : **KU4SECMUS201**

Course Pre-requisite : Aptitude for singing

Semester : IV

Credits : 3

Course Outcomes

C01	Acquire skill in identifying swaras.
C02	Identify and perform the preliminary Raga of Carnatic music
C03	Identify and reckon the fundamental time measure of Carnatic music
C04	Identify the structure of simple Musical forms

Mapping of Course Outcomes to PSOs/POs

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	√		√				
CO2	√		√				
CO3	√		√				
CO4	√		√			√	

Course Description

This course aims to provide students with a comprehensive understanding and practical application of Carnatic music through the study of the fundamental lessons and simple musical form. This course is divided into three modules. It includes singing of svara exercises like varisas and simple melodies like Gitam.

Course Objectives

1. To have understanding of Swaras and Talas of Carnatic Music.
2. To learn how to sing simple melodies.
3. To develop skill to understand how Swaras (notes) arranged to produce melody(Raga)

Credit			Teaching Hours		Assessment		
L/T	P/I	Total	L/T/P	Total	CE	ESE	Total
3		3	3	3	30	70	100

COURSE OUTCOMES

Course Learning Outcomes: At the end of the Course, the Student will be able to -

C01	Identify and demonstrate fundamental raga and tala of Carnatic Music
C02	Attempt simple melodies
C03	understand how Svaras (notes) arranged to produce melody (Raga)
C04	Identify a musical form having sahitya

COURSE CONTENTS

Module 1

Sarali Varisas in two degrees of speed

Suggested readings specific to the module

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Module 2

Janta varisas in two degrees of speed (3 Nos)

Suggested readings specific to the module

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Module 3

One Gitam in any of the following Ragas.

- 3.1 Malahari
- 3.2 Mohanam

Suggested readings specific to the module

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Core Compulsory Readings

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Core Suggested Readings

1. South Indian Music by Prof. P Sambamoorthy, The Indian Music Publishing House, Chennai 1973
1. Carnatic music Reader (Part I) by Dr. S Bhagyalekshmi, CBH Publications, Thiruvananthapuram 2010

TEACHING LEARNING STRATEGIES

- One to one training in vocal
- Notating compositions
- Group practicing
- Listening sessions.
- Attending performances

MODE OF TRANSACTION

- Vocal classes
- Black board
- Smart class room

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	70
• Pitch alignment	25
• Rhythm alignment	25

• Style of rendering	20
Continuous Evaluation	30
• Improvement in rendering style	10
• Singing test	15
• Notation	5

Sample Questions to test Outcomes

1. Analysis of singing technique

Employability for the Course / Programme

- Performance
- Teaching
- Music writing

Course Title : **DEVARNAMA AND SANKIRTANA (P)**
Course Code : **KU3MDCMUS201**
Course Pre-requisite : Aptitude, skill and interest in the concerned area
Semester : **III**
Credits : **Three**

Course Outcome

C01	Deconstruct the structure, raga, and tala of select Devaranamams, appreciating their musical complexity and beauty
C02	Analyze the lyrical content of Devaranamams, exploring themes of surrender, praise, and philosophical wisdom
C03	Exemplify the lyrical beauties and musical nuances of Sankirtanas and perform it
C04	Identify the poetic and musical excellence of the compositions of Papanasam Sivan

Mapping of Course Outcomes to PSOs/POs

Co No	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	√		√	√			
CO2			√	√		√	√
CO3	√		√			√	√
CO4	√			√		√	

Course Description

Course Objectives

This course is an exploration of the rich and vibrant world of Carnatic music, focusing on the works of three of its most revered composers: Purandaradasa, Papanasam Sivan and Tallapakam composers. Students will gain a deep appreciation for the musical genius of these composers and their lasting impact on South Indian culture.

A journey into devotional music of South India

- Exploring the contributions of Purandaradasa and Annamacharya
- Analyzing the lyrical and musical characteristics of Papanasan Sivan's compositions

Credit			Teaching Hours		Assessment		
L/T	P/I	Total	L/T/P	Total	CE	ESE	Total
3		3	3	3	30	70	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE =End Semester Evaluation

COURSE OUTCOMES

Course Learning Outcomes: At the end of the Course, the Student will be able to -

C01	Gain a comprehensive understanding of the Devaranamams of Purandaradasa and Sankirtanas of Annamacharya
C02	Develop an appreciation for the musical and literary artistry of these two iconic composers
C03 •	Explore the rich devotional traditions of South India and the role of music in Bhakti movement
C04	Identify the musical structure of Papanasam Sivan's compositions
CO5	Analyze the lyrical and musical characteristics of Papanasam Sivan's compositions, focusing on themes, melodies, and rhythmic patterns

COURSE CONTENTS

Module 1

Devarnamas

1.1 Devarnamas of Purandaradasa - 2 Nos

Suggested readings specific to the module

1. Songs of Purandaradasa by MydurRaghunandana published by SahityaAcademi, Delhi 2018

Module 2

Sankirtanas

2.1 Sankirtana of Tallapakam composers – 1 No

Suggested readings specific to the module

1.

https://ia902808.us.archive.org/8/items/SankirtanaLakshanamuByTallapakamChinnaTirumalacharya/TunesOfDivinitySankirtanaLakshanamuTallapakaCinaTirumalacharya_text.pdf

Module 3

Simple kriti

Simple composition of Papanasan Sivan -1 No

Suggested readings specific to the module

1. <https://bestq.info/download/4803425-papanasam-sivan-songs-lyrics>

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. <https://www.scribd.com/doc/23245894/PURANDARADASARU-ENGLISH>
2. https://musicacademymadras.in/catalogue/files/journals/Vol.85_2014.pdf

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

1. PurandaradasaKirtanas with Swara Notations in Traditional Ragas byV N Padmini and JayalakshmiSrinivasasn, VasantaVallabha Music Academi, Bangalore 2000
2. <https://musicresearchlibrary.net/omeka/items/show/735>

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- Interaction with learners,
- Group presentation
- Individual presentation
- Assignment

MODE OF TRANSACTION

- Practical demonstration
- Black Board
- Power Point

- Smart class room

ASSESSMENT RUBRICS

		Marks
End Semester Evaluation		70
• Practical Test		60
• Viva		10
Continuous Evaluation		30
• Class Participation and Discussion		10
• Assignment		10
• Practical Test paper		10

Sample Questions to test Outcomes.

1. Present a composition of Papanasam Sivan
2. Perform a Devarnama of Puranadaradasa
3. Demonstrate a Sankirtana composed by any one of the Tallapakam composers

Employability for the Course / Programme

- Performance
- Teaching
- Music writing

Course Title : **APPLICATION OF FUNDAMENTAL ASPECTS OF MUSIC - (P)**

Course Code : **KU4SECMUS202**

Course Pre-requisite : Aptitude for singing

Semester : IV

Credits : 3

Course Outcomes

C01	Acquire skill in identifying Swaras and varieties.
C02	Identify and perform the Ragas of Carnatic music
C03	Identify and reckon the different time measure of Carnatic music
C04	Identify the structure of Musical forms.

Mapping of Course Outcomes to PSOs/POs

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	√		√				
CO2	√		√				
CO3	√		√				
CO4	√		√			√	

Course Description

This course aims to provide students with an essential foundation and practical application of Carnatic music through the study of various exercises and simple musical form. This course is divided into three modules. It includes singing svara exercises like Madhya sthaya varisas, alankaras and simple melodies.

Course Objectives

1. To have understanding of Notes and Talas of Carnatic Music.
2. To learn how to sing simple melodies.
3. To develop skill to understand how Swaras (notes) arranged to produce melody(Raga)

Credit			Teaching Hours		Assessment		
L/T	P/I	Total	L/T/P	Total	CE	ESE	Total
3		3	3	3	30	70	100

COURSE OUTCOMES

Course Learning Outcomes: At the end of the Course, the Student will be able to -

C01	Identify and demonstrate fundamental scales and rhythm of Carnatic Music
C02	Attempt simple melodies
C03	understand how Svaras (notes) arranged to produce melody (Raga)
C04	Identify a musical form having sahitya

COURSE CONTENTS

Module 1

Janta and Dhattu Varisas in two degrees of speed

Suggested readings specific to the module

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Module 2

Alankaras in two degrees of speed (3 Nos)

Suggested readings specific to the module

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Module 3

Simple compositions of Tyagaraja (2 Nos)

Suggested readings specific to the module

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Core Compulsory Readings

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Core Suggested Readings

1. South Indian Music by Prof. P Sambamoorthy, The Indian Music Publishing House, Chennai 1973
1. Carnatic music Reader (Part I) by Dr. S Bhagyalekshmi, CBH Publications, Thiruvananthapuram 2010

TEACHING LEARNING STRATEGIES

- One to one training in vocal
- Notating compositions
- Group practicing
- Listening sessions.
- Attending performances

MODE OF TRANSACTION

- Vocal classes
- Black board
- Smart class room

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	70
• Pitch alignment	25
• Rhythm alignment	25
• Style of rendering	20
Continuous Evaluation	30

• Improvement in rendering style	10
• Singing test	15
• Notation	5

Sample Questions to test Outcomes

1. Analysis of singing technique

Employability for the Course / Programme

- Performance
- Teaching
- Music writing

Course Title : **APPLICATION OF MAJOR & MINOR RAGAS OF CARNATIC MUSIC (P)**

Course Code : **KU5SECMUS301**

Course Pre-requisite : Aptitude for singing

Semester : V

Credits : 3

Course Outcomes

C01	Acquire skill in differentiate Ragas.
C02	Identify and perform the major and minor Ragas of Carnatic music
C03	Identify and reckon the various time measure of Carnatic music
C04	Identify the structure of Musical forms.

Mapping of Course Outcomes to PSOs/POs

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
C01	√		√				
C02	√		√				
C03	√		√				
C04	√		√			√	

Course Description

This course aims to provide students with a comprehensive understanding and practical application of Carnatic music through the study of major and minor ragas and simple musical form. This course is divided into three modules. It includes singing svara exercises in different ragas and simple compositions.

Course Objectives

1. To have understanding of major and minor ragas of Carnatic Music.
2. To learn how to sing simple melodies.
3. To develop skill to understand how Swaras (notes) arranged to produce melody(Raga)

Credit			Teaching Hours		Assessment		
L/T	P/I	Total	L/T/P	Total	CE	ESE	Total
3		3	3	3	30	70	100

COURSE OUTCOMES

Course Learning Outcomes: At the end of the Course, the Student will be able to -

C01	Identify and demonstrate major and minor ragas of Carnatic Music
C02	Attempt simple melodies
C03	understand how Svaras (notes) arranged to produce melody (Raga)
C04	Identify a musical form having sahitya

COURSE CONTENTS

Module 1

Composition in the raga Sankarabharana or Kalyani.

Suggested readings specific to the module

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Module 2

Composition in the raga Hamsadwani or Abhogi.

Suggested readings specific to the module

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Module 3

Composition in the raga Natta or Hindola.

Suggested readings specific to the module

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Core Compulsory Readings

1. Dakshinendian Sangitam (Vol 1-3) by Vidvan A K Raveendranath, Kerala Bhasha Institute, 2016

Core Suggested Readings

1. South Indian Music by Prof. P Sambamoorthy, The Indian Music Publishing House, Chennai 1973
1. Carnatic music Reader (Part I) by Dr. S Bhagyalekshmi, CBH Publications, Thiruvananthapuram 2010

TEACHING LEARNING STRATEGIES

- One to one training in vocal
- Notating compositions
- Group practicing
- Listening sessions.
- Attending performances

MODE OF TRANSACTION

- Vocal classes
- Black board
- Smart class room

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	70
• Pitch alignment	25
• Rhythm alignment	25
• Style of rendering	20
Continuous Evaluation	30

• Improvement in rendering style	10
• Singing test	15
• Notation	5

Sample Questions to test Outcomes

1. Analysis of singing technique

Employability for the Course / Programme

- Performance
- Teaching
- Music writing

Course Title : **CONTRIBUTIONS OF COMPOSERS OF KERALA (P)**

Course Code : **KU6VACMUS301**

Course Pre-requisite : Aptitude, skill and interest in the concerned area

Semester : **VI**

Credits : **Three**

Course Outcome

C01	• Gain a comprehensive understanding of Kerala's musical heritage and its key composers
C02	• Identify the contributions of the Kerala composers such as K C Kesava Pillai, Irayimman Tampi and Mahakavi Kuttamath
C03	Analyze the unique features of their compositions
C04	Perform selected compositions through hands-on sessions

Mapping of Course Outcomes to PSOs/POs

Co No	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1		√					√
CO2	√	√	√	√			
CO3			√	√		√	
CO4			√		√		

Course Description

This course aims into the rich heritage of Carnatic music through the lens of renowned Kerala composers such as K C Kesava Pillai, Irayimman Tampi and Mahakavi Kuttamath. It will equip the students with a comprehensive understanding of their unique styles, contributions to the genre, and the cultural context that shaped their works. Through a combination of theoretical and practical sessions students will explore their

Course Objectives

- **Introduction to Kerala's Musical Heritage**
- **Understanding the works of iconic Kerala composers like KC Kesava Pillai, Irayimman Tampi, and Mahakavi Kuttamath**
- Exploring the lyrical beauty and musical excellence of these compositions

Credit			Teaching Hours		Assessment		
L/T	P/I	Total	L/T/P	Total	CE	ESE	Total
3		3	3	3	30	70	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE =End Semester Evaluation

COURSE OUTCOMES

Course Learning Outcomes: At the end of the Course, the Student will be able to -

C01	Gain a comprehensive understanding of Kerala's musical heritage and its key composers
C02	Sketch the contributions of notable Kerala composers
C03	Analyse the compositions of KC KesavaPilla, IrayimmanTampi and Mahakavi Kuttamath
C04	Exemplify the unique style and lyrical content of their compositions.
C05	Render kritis from the repertoire of Kerala composers with accuracy and expression

COURSE CONTENTS

Module 1

Composition of K C KesavaPilla - 1 No

Suggested readings specific to the module

1. K C Kesava Pillai by Dr. Vijayalayam Jayakumar, published by the author 1995

Module 2

Compositions of Mahakavi Kuttamath – 1 No

Suggested readings specific to the module

1. Mhakavi Kuttamath by K K N Kurup, published by University of Kerala 2010

Module 3

Compositions of IrayimmanTampi-2Nos

Suggested readings specific to the module

1. IrayimmanTampi-Malayalam literary heroes by V S Sharma published by University of Kerala 2014

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. https://profilpelajar.com/en/K._C._Kesava_Pillai
2. MahakaviKuttamath-Jeevithavum Kritikalum by Pavanan, Mathrubhumi Books, 2007
3. <https://www.swathithirunal.in/composeres/iryimn.htm>

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

1. <https://www.swathithirunal.in/articles/kcbhagyalekshmi.htm>

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- Interaction with learners,
- Student presentation
- Discussions
- Assignment

MODE OF TRANSACTION

- Practical demonstration
- Black Board
- Power Point
- Smart class room

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	70
• Practical Test	60
• Viva	10
Continuous Evaluation	30
• Class Participation and Discussion	10

• Assignment	10
• Practical Test paper	10

Sample Questions to test Outcomes.

1. Render a composition of K C Kesava Pilla
2. Perform a composition of Mahakavi Kuttamath
3. Demonstrate a kriti composed by IrayimmanTampi

Employability for the Course / Programme

- Performance
- Teaching
- Music writing

Course Title : **EXPLORING SANSKRIT COMPOSITIONS (P)**
Course Code : **KU4VACMUS202**
Course Pre-requisite : Aptitude, skill and interest in the concerned area
Semester : **IV**
Credits : **Three**

Course Outcome

C01	•	Develop a deep understanding of the Sanskrit compositions of Tyagaraja, Dikshitar, and Swati Tirunal
C02		Analyze the structure, thematic content, and stylistic features of these kritis
C03	•	Compare and contrast the styles of the three composers, identifying their unique contributions to Carnatic music
C04		Develop skills in chanting and singing selected compositions

Mapping of Course Outcomes to PSOs/POs

Co No	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	√	√					√
CO2	√		√	√			√
CO3		√	√		√		
CO4					√		√

Course Description

Course Objectives

This course delves into the heart of Carnatic music by exploring the richness of Sanskrit compositions by the three pillars of the genre - Tyagaraja, Muthuswami Dikshitar, and Swati Tirunal. Through detailed analysis of their compositions, students of music embark on a journey of devotional lyricism, musical genius, and cultural significance. The course equips the students with the tools to appreciate the nuanced artistry of these

Introduction to Carnatic Music and Sanskrit

- Deepen knowledge of Carnatic music and its Sanskrit language connection
- Refinement of the performance skills through practical engagement with the selected compositions

Credit			Teaching Hours		Assessment		
L/T	P/I	Total	L/T/P	Total	CE	ESE	Total
3		3	3	3	30	70	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE =End Semester Evaluation

COURSE OUTCOMES

Course Learning Outcomes: At the end of the Course, the Student will be able to -

C01	Identify the role of Sankrit language in Carnatic music compositions
C02	Develop an appreciation for the artistic and spiritual depth of the Sanskrit compositions of Tyagaraja, Dikshitar, and Swati Tirunal
C03	Analyze the structure, lyrical content, and musical intricacies of these compositions
C04	Explore the cultural and historical context of their compositions
CO5	Gain practical skills in singing and performing their kritis

COURSE CONTENTS

Module 1

Composition in Sanskriti

1.1 Composition of Tyagaraja - 1 No

Suggested readings specific to the module

1.1Compositions of Tyagaraja by T K GovindaRao, Ganamandir Publications, 1999, Devine books, Delhi

Module 2

Sanskrit Kriti

2.1 Compositions of MuthuswamiDikshitar – 2Nos

Suggested readings specific to the module

2.1 Compositions of Mudduswami Dikshitar by T K Govinda Rao, Ganamandir Publications, 2003, Devine books, Delhi

Module 3

Kriti in Sanskrit

3.1 Composition of Swati Tirunal-1 No

Suggested readings specific to the module

3.1 Golden Treasury of Swathi Tirunal Kritis : S Bhagyalekhsmy, CBH Publications, Thiruvananthapuram 1999

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. Great Composers by Prof P Sambamoorthy (Vol. I & II), The Indian Music Publishing House, Chennai 1960
2. Indian Music and Swati Tirunal : Vasanthi Krishna Rao, Sanjay Prakashan, Delhi 2006

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

1. Great Composers by Dr. Gowri Kuppaswamy & Dr. Hariharan, B R Rhythms, New Delhi 2016

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- Interaction with learners,
- Student presentation
- Discussions
- Assignment

MODE OF TRANSACTION

- Practical demonstration
- Black Board
- Power Point
- Smart class room

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	70
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• Practical Test	60
• Viva	10
Continuous Evaluation	30
• Class Participation and Discussion	10
• Assignment	10
• Practical Test paper	10

Sample Questions to test Outcomes.

1. Present a Sanskrit composition of Tyagaraja
2. Illustrate a Sanskrit composition of Muthuswami Dikshitar
3. Demonstrate a kriti composed by Swati Tirunal in Sanskrit

Employability for the Course / Programme

- Performance
- Teaching
- Music writing

Course Title : **MUSIC AND NATIONHOOD (P)**

Course Code : **KU3VACMUS201**

Course Pre-requisite : Aptitude, skill and interest in the concerned area

Semester : **III**

Credits : **Three**

Course Outcome

C01	Recognize the power of music as a tool for shaping national integration and influencing emotions
C02	Develop critical thinking skills through analyzing lyrics, musical elements, and historical contexts of patriotic songs
C03	Discuss the ethical considerations surrounding the use of patriotic songs in contemporary society
C04	Gain critical thinking and analysis skills regarding the lyrics, melody, and performance of patriotic compositions

Mapping of Course Outcomes to PSOs/POs

Co No	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	√	√		√		√	√
CO2	√	√	√	√		√	√
CO3		√	√			√	√
CO4		√	√	√		√	√

CourseDescription

Course Objectives

This interdisciplinary course delves into the captivating world of patriotic songs, exploring their historical, cultural, and musical significance. Through active engagement with iconic songs from various eras, students will analyze their lyrics, melodies, and performance styles, uncovering the stories and emotions they evoke. Students can investigate the role of patriotic music in shaping national identity, fostering

Identifying common tropes and exploring how they influence individual and

collective identities

- Investigating the evolution of musical styles and genres utilized in patriotic music, highlighting the influence of poems, classical compositions, and popular music trends
- Uncovering the performance aspects of patriotic songs, examining its use in public ceremonies, political rallies, and cultural events

Credit			Teaching Hours		Assessment		
L/T	P/I	Total	L/T/P	Total	CE	ESE	Total
3		3	3	3	30	70	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE =End Semester Evaluation

COURSE OUTCOMES

Course Learning Outcomes: At the end of the Course, the Student will be able to -

C01	Trace the emergence of patriotic music within specific historical contexts, examining the role of wars, independence movements, and social revolutions in shaping national narratives
C02	Understand the complex relationship between patriotism and culture through musical expressions
C03	Appreciate the rich diversity of patriotic music
C04	Explore the concept of patriotism across cultures and time periods, examining how it manifests in music and its connection to national identity and social movements
CO5	Explore the musical elements of patriotic songs and analyze how these elements contribute to the emotional impact and cultural significance of the music

COURSE CONTENTS

Module 1

Bharatiyar kriti

1.1 Composition of Subramanya Bharati - 1 No

Suggested readings specific to the module

1.1 Subramanya Bharati by S Vijaya Bharati, Publication Division, Ministry of Information and Broadcasting, 2014

Module 2

Poem on Patriotism

2.1 Poem of Mahakavi Vallathol – 1 No

Suggested readings specific to the module

2.1 Mahakavi Vallathole by K P Sankaran, published by University of Kerala, 2014

Module 3

Malayalam kriti

3.1 Composition of K C Kesavapilla-1 No

Suggested readings specific to the module

3.1 K C Kesava Pillai by Dr. Vijayalaya Jayakumar, published by the author 1995

Core Compulsory Readings (Books, Journals, E-sources Websites/ weblinks)

1. Mahakavi Vallathol by Malayath Appuni, Mathrubhumi Books 2012
2. https://profilpelajar.com/en/K._C._Kesava_Pillai

Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)

1. <https://www.swathithirunal.in/articles/kcbhagyalekshmi.htm>

TEACHING LEARNING STRATEGIES (Classroom activities / Lab activities / Field Activities)

- Interaction with learners,
- Group presentation
- Individual presentation
- Assignment

MODE OF TRANSACTION

- Practical demonstration
- Black Board
- Power Point
- Smart class room

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	70
• Practical Test	60
• Viva	10
Continuous Evaluation	30
• Class Participation and Discussion	10
• Assignment	10
• Practical Test paper	10

Sample Questions to test Outcomes.

1. Present a patriotic composition of SubramanyaBharati
2. Recite a poem of Mahakavi Vallathole composed in Carnatic raga
3. Demonstrate a Malayalam kriti composed by K C KesavaPillai

Employability for the Course / Programme

- Performance
- Teaching
- Music writing

KANNUR UNIVERSITY

DEPARTMENT OF MALAYALAM

AEC COURSE-FYIMP

SL.NO.	SEMESTOR	COURSE CODE	COURSE NAME
1	2	KU02AECMAL101	ROMANTIC LITERATURE
2	2	KU02AECMAL102	ART AND TECHNIQUES OF WRITING
3	2	KU02AECMAL103	LITERATURE READING AND APPRECIATION

KU02AECMAL101 കാല്പനികതാസാഹിത്യം

KU02AECMAL101 ROMANTIC LITERATURE

Semester	Course Type	Course Level	Course Code	Credits	Total Hours/Week
11	AEC	100-199	KU02AECMAL101	3	3

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
45	3		50	50	100	1 ½ hr

Course Description:

ഒരു ഭാവുകത്വപ്രസ്ഥാനം എന്നതിലുപരി, വ്യക്തിസ്വാതന്ത്ര്യത്തിന് പരമോന്നത പദവി നൽകിയ പ്രത്യയശാസ്ത്രം എന്ന നിലയിൽ കാല്പനികതയ്ക്ക് എക്കാലത്തും പ്രസക്തിയുണ്ട്. കാല്പനികത മലയാള സാഹിത്യത്തിൽ ഏത് വിധത്തിലാണ് ആവിഷ്കരിക്കപ്പെട്ടത് എന്ന് പഠിക്കുകയാണ് ഈ കോഴ്സിന്റെ ലക്ഷ്യം. അതിലൂടെ പഠിതാക്കളുടെ സാഹിത്യാഭിരുചി വർദ്ധിപ്പിക്കുക എന്നതോടൊപ്പം സാഹിത്യവും സമൂഹവികാസവും തമ്മിലുള്ള ബന്ധത്തെക്കുറിച്ച് പുതു കാഴ്ചകൾ രൂപപ്പെടുത്താനും കഴിയും.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	ഭാവുകത്വപ്രസ്ഥാനങ്ങളുടെ സാംസ്കാരികാടിസ്ഥാനങ്ങൾ തിരിച്ചറിയുന്നു	
2	ആധുനികീകരണ പദ്ധതികൾ സൗന്ദര്യശാസ്ത്രത്തെ എങ്ങനെ സ്വാധീനിക്കുന്നു എന്നു മനസ്സിലാക്കുന്നു.	
3	മലയാള കാല്പനികതയുടെ വളർച്ചയും പരിണാമവും മനസ്സിലാക്കുന്നു.	
4	മലയാളത്തിലെ കാല്പനികതയുടെ പ്രകാരഭേദങ്ങൾ മനസ്സിലാക്കുന്നു	
5	ആത്മ (self) ത്തിന്റെ രൂപീകരണവും കാല്പനികതയും തമ്മിലുള്ള ബന്ധം തിരിച്ചറിയുന്നു.	

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1							
CO 2							
CO 3							
CO 4							
CO 5							

COURSE CONTENTS

Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
1	MODULE TITLE : കാല്പനികത: സാമാന്യ പരിചയം		
	1	കാല്പനികതാപ്രസ്ഥാനം - അടിസ്ഥാനലക്ഷണങ്ങൾ - നിർവചനങ്ങൾ	

		മലയാള കാല്പനികത: കാലഗണനയും പ്രാരംഭപ്രവണതകളും	
	2	വില്യം വേഡ്സ്വർത്ത്, കോളറിഡ്ജ്: കവിതാവിശദീകരണങ്ങൾ - കല്പന ഭാവന - പ്രാഥമിക, ദ്വിതീയ ഭാവനകൾ	
		ഷെല്ലി - A Defense of Poetry സാമാന്യപരിചയം - കാല്പനികതയോടുമുള്ള വിമർശനങ്ങൾ	
	3	കേരളീയ വിശദീകരണങ്ങൾ - മനം നോക്കി പ്രസ്ഥാനം എന്ന സങ്കല്പനം - നവോത്ഥാന കാല്പനികത, ഉച്ചകാല്പനികത എന്ന വിഭജനം	
	4	വിലാപകാവ്യങ്ങൾ - അർച്ചനാഗീതങ്ങൾ - ഭാവഗീതം എന്നിവയുടെ പ്രത്യക്ഷപ്പെടൽ - ഗദ്യാഖ്യാനത്തിലെ കാല്പനിക പരീക്ഷണങ്ങൾ - പ്രഥമപുരുഷാഖ്യാനം, ബോധധാരാസമ്പ്രദായം	

	MODULE TITLE : കവിയും കാല്പനികതയും		
2	1	വീണപ്പുവ് കുമാരനാശാൻ	
	2	മണിനാദം ഇടപ്പള്ളി	
	3	കൃഷ്ണാ നീയെന്നെയറിയില്ല സുഗതകുമാരി	
	4	ദിവ്യദുഃഖത്തിന്റെ നിഴലിൽ ആർ.രാമചന്ദ്രൻ	

	MODULE TITLE : കഥാസാഹിത്യത്തിലെ കാല്പനികത		
3	1	നളിനി കാശ്ശൂർ	
	2	രമണി കെ. സരസ്വതിയമ്മ	
	3	ഒട്ടകം എസ്.കെ.പൊറ്റക്കാട്ട്	
	4	ഗൗരി ടി.പത്മനാഭൻ	

	MODULE TITLE : നോവലും കാല്പനികതാചർച്ചകളും		
4	1	ഇന്ദുലേഖ ഒന്നാം അച്ചടിപ്പിന്റെ അവതാരിക ചന്ദ്രമേനോൻ	
	2	മഞ്ഞ് എം.ടി.വാസുദേവൻ നായർ	

	3	നളിനിയുടെ അവതാരിക ഏ.ആർ.രാജരാജവർമ്മ	
	4	നീ മറന്നാലും തിരയടിക്കും നീലക്കയിലേ നിൻ ഗാനമെന്നും വി.ഗോവിന്ദപ്പിള്ള	

	Teacher Specific Module	5
മൊഡ്യൂൾ5	<i>Directions</i>	
	1. കാല്പനികതയ്ക്ക് മുമ്പും പിമ്പുമുള്ള പ്രസ്ഥാനങ്ങളിലുൾപ്പെട്ട സാഹിത്യമാതൃകകൾ പരിചയപ്പെടുത്തുകയും വായനാക്കുറിപ്പ് എഴുതാൻ നിർദ്ദേശം നൽകുകയും ചെയ്യുക	
	2. ഇമ്മാനുവൽ കാന്റ്, ഹെഗൽ തുടങ്ങിയ ദാർശനികരുടെ സൗന്ദര്യശാസ്ത്ര ആശയങ്ങളെ പരിചയപ്പെടുത്തുക.	
	3. മലയാളത്തിൽ കാല്പനികത വർത്തമാനകാലത്തും തുടരുന്നതെങ്ങനെ എന്ന കാഴ്ച രൂപപ്പെടുത്തുക	
		5

Essential Readings:

1. Romanticism A Very Short Introduction ,Michael Ferber
2. കാല്പനികത,ഏദയകുമാരി

സഹായ ഗ്രന്ഥങ്ങൾ

- 1.കാല്പനികത മലയാളകവിതയിൽ,ഡോ.ഡി.ബഞ്ചമിൻ
- 2.കേസരിയുടെ സാഹിത്യവിമർശനം ,കേസരി
- 3.മലയാളകവിതാപഠനങ്ങൾ,സച്ചിദാനന്ദൻ

Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	50
Continuous Evaluation	50

a)	Test Paper- 1	
b)	Test Paper-2	
c)	Assignment	
d)	Seminar	
e)	Book/ Article Review	
f)	Viva-Voce	
g)	Field Report	
Total		100

KU02AECMAL102 സാഹിത്യം: കലയും രചനാതന്ത്രവും

KU02AECMAL102 Literature: Art and Techniques of Writing

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
2	AEC	100-199	KU02AECMAL102	3	3

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
45	3		50	50	100	1 ½ hr

Course Description:

പഠിതാക്കളിൽ സർഗാത്മക രചനാവാസന പോഷിപ്പിക്കുക എന്ന ലക്ഷ്യത്തോടെ വിഭാവനം ചെയ്ത അഭിരുചി വർദ്ധനാ കോഴ്സാ (Ability Enhancement Course) ന്നിത്. സർഗസാഹിത്യരചനയുടെ സാങ്കേതികത പരിചയപ്പെടുന്നതോടൊപ്പം ഭിന്നസാഹിത്യ രചനാരീതികളിലേക്ക് പഠിതാക്കളെ ആകർഷിക്കുകയും ചെയ്യേണ്ടതുണ്ട്. രചനാശേഷിയുള്ള പഠിതാക്കളെ പ്രോത്സാഹിപ്പിക്കുക, സർഗരചനയിൽ ഏർപ്പെടാത്തവരെ അതിനായി പ്രേരിപ്പിക്കുക, എഴുത്തിൽ സ്വന്തമായ ശൈലി രൂപീകരിക്കാൻ വഴികാട്ടുക എന്നിവയാണ് കോഴ്സ് കൈകാര്യം ചെയ്യുന്ന ഫാക്കൽറ്റി അംഗം മുൻഗണന നൽകേണ്ടത്. സർഗാത്മകരചനക്ക് പിന്തുണ നൽകാനുതകും വിധം സന്ദർഭാനുസരണമുള്ള പ്രായോഗിക പരിശീലനങ്ങൾക്ക് മുൻഗണന നൽകിവേണം. ക്ലാസുകൾ വിഭാവനം ചെയ്യേണ്ടത് പഠിതാവ് തയ്യാറാക്കുന്ന സർഗരചനകൾ ഓൺലൈൻ/ ഓഫ് ലൈൻ

മാധ്യമങ്ങളിൽ എവിടെയെങ്കിലും പ്രസിദ്ധപ്പെടുത്താനുള്ള ശ്രമം ഡിപ്പാർട്ട്മെന്റിന്റെ ഭാഗത്തുനിന്നുണ്ടാവേണ്ടതുണ്ട്.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	സൂഷ്മവ്യവസ്ഥയിൽ താൽപര്യമുള്ളവർക്ക് പ്രോത്സാഹനം ലഭിക്കുന്നു.	
2	വിവിധ സാഹിത്യരചനാരീതികൾ പരിചയിക്കുകയും എഴുത്തിൽ സ്വന്തമായ ഒരു വഴി സൃഷ്ടിക്കുകയും ചെയ്യുന്നു.	
3	സാഹിത്യകൃതികളുടെ വായനയ്ക്കും ആസ്വാദനത്തിനും വിശകലനത്തിനുമുള്ള ശേഷി ആർജ്ജിക്കുന്നു.	
4	എഴുത്തിന്റെ സാങ്കേതികതകൾ മനസ്സിലാക്കി വിശകലനം ചെയ്യുന്നു .	
5	എഴുത്തുകാരുടെ രചനാനുഭവങ്ങളെ വിശകലനം ചെയ്യുന്നു .	

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1							
CO 2							
CO 3							
CO 4							
CO 5							

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	D E S C R I P T I O N	H O U R S
1	MODULE TITLE : സാഹിത്യം: അടിസ്ഥാനതത്വങ്ങൾ		
	1	സാഹിത്യം/സാഹിത്യേതരം എന്ന വിഭജനത്തിന്റെ യുക്തി സാഹിത്യത, കാവ്യഭാഷ, രൂപം/ഭാവം,ചരിത്രപരത സാമാന്യപരിചയം ഭാവുകത്വപ്രസ്ഥാനങ്ങളും വിഭജനയുക്തിയും	
	2	ആധുനിക മലയാളകവിത സാമാന്യപരിചയം കുമാരനാശാൻ, വള്ളത്തോൾ, ചങ്ങമ്പുഴ, വൈലോപ്പിള്ളി, ഇടശ്ശേരി, ബാലാമണിയമ്മ കെ.ജി.എസ്., സച്ചിദാനന്ദൻ, ബാലചന്ദ്രൻ ചുള്ളിക്കാട്, എസ്.ജോസഫ്, അനിതാ തമ്പി	
	3	മലയാളനോവൽ സാമാന്യപരിചയം ചന്ദ്രമേനോൻ, തകഴി, ബഷീർ, ഉറൂബ്,എം,ടി എസ്.കെ.പൊറ്റെക്കാട്, ഒ.വി.വിജയൻ, ആനന്ദ്, എൻ.എസ്.മാധവൻ, സാനാജോസഫ്, സുഭാഷ് ചന്ദ്രൻ, എസ്. ഹരീഷ്	
	4	മലയാള ചെറുകഥ: സാമാന്യപരിചയം കാരൂർ, ബഷീർ, എം.ടി., ടി.പത്മനാഭൻ, മാധവിക്കുട്ടി, സക്കറിയ, കെ.ആർ.മീര,വി . ഷിനിലാൽ വിശദ പഠനം: 1.പാത്തുമ്മയുടെ ആട് -വൈക്കം മുഹമ്മദ് ബഷീർ , 2.അച്ചാമ്മക്ക് സമ്പവിച്ചത് -കെ . അർ. മീര (കെ . ആർ . മീരയുടെ കഥകൾ ,കറന്റെ ബുക്സ് ,തൃശൂർ 3. വേടൻ തൊടി -വി . ഷിനിലാൽ,ബുദ്ധപദം ,ഡി . സി . ബുക്സ് കോട്ടയം	

MODULE TITLE : കവിത: പരിചയവുംപരിശീലനവും	
1	കവിതാരചന - കവിതയിലെ ഭാഷാപയോഗം-ഭാഷയും താളവും - പദഘടന -പദചേർച്ച -പ്രതീകം(symbol)ബിംബം (Image)-രൂപകം (Metaphor)ഉപാദാനം(Metonymy)അപരിചിതവൽക്കരണം -സ്റ്റൈലിസ്റ്റിക്സ് -അലങ്കാരം - കാവ്യപ്രചോദനം - അനുഭവവും കാവ്യാവിഷ്കാരവും
2	2 പ്രമേയവും ഭാഷയുടെ തിരഞ്ഞെടുപ്പും - സൂക്ഷ്മതയും സംക്ഷിപ്തതയും - വാക്കിന്റെ ആർഥികമണ്ഡലവും പാഠാന്തരസാധ്യതകളും.
3	3 മാനുഷത്തിന്റെ കഥ, വൈലോപ്പിള്ളി ശ്രീധരമേനോൻ (കാവ്യലോകസ്മരണകൾ)
4	4 ഒരു ക്ഷമാപണത്തിന്റെ ഓർമ്മ ബാലചന്ദ്രൻ ചുള്ളിക്കാട് (ചിദംബരസ്മരണ) വിശദ പഠനം : കറുത്തചെട്ടിച്ചികൾ-ഇടശ്ശേരി വായനാന്തം കവിത്വം -ഡോണ മയ്യൂര
MODULE TITLE : കഥാസാഹിത്യം: പരിചയവുംപരിശീലനവും	
1	1 ഫിക്ഷന്റെ ഘടകങ്ങൾ - പ്രമേയം, ഇതിവൃത്തം, കഥാപാത്രസൃഷ്ടി
2	2 ആഖ്യാനരീതികൾ - പരിണാമഗുഹി - വ്യത്യസ്തകഥാഗണങ്ങൾ (genres),ആഖ്യാന കോണുകൾ:ഉത്തമ പുരുഷൻ ,മധ്യമ പുരുഷൻ , പ്രഥമപുരുഷൻ ,ഭാഷാ ഭേദങ്ങൾ ,രചനാശൈലി രൂപകം കവിതയിലും കഥയിലും -ഡി . വിനയചന്ദ്രൻ
3	3 ഖസാക്കിലെ സുന്ദരി -ഒ.വി.വിജയൻ (ഇതിഹാസത്തിന്റെ ഇതിഹാസം)
4	4 കഥയുടെ രൂപം -എം . ടി (വാക്കുകളുടെ വിസ്മയം)
MODULE TITLE : ഇതരസാഹിത്യഗണങ്ങൾ	
4	1 ആത്മകഥ, അനുഭവമെഴുത്തു: രചനയിൽ പാലിക്കേണ്ട അടിസ്ഥാനതത്വങ്ങൾ, ആത്മകഥയും അനുഭവമെഴുത്തും: ബന്ധവ്യത്യാസങ്ങൾ

2	<p>പാളത്തിൽ വച്ച പന്ത് -മുഹമ്മദ് അബ്ബാസ്</p> <p>ആത്മഹത്യക്കും ഭ്രാന്തിനുമിടയിൽ ,ഡി . സി . ബുക്സ് .</p>	
3	<p>യാത്രാവിവരണ രചന, അടിസ്ഥാന തത്വങ്ങൾ</p>	
4	<p>അകലങ്ങളിലെ മനുഷ്യർ രവീന്ദ്രൻ</p> <p>(തിരഞ്ഞെടുത്ത ഭാഗം)</p>	

മൊഡ്യൂൾ 5	<p>Teacher Specific Module</p>	5
	<p><i>Directions</i></p> <p>1. കവിതാരചനയും ചർച്ചയും</p> <p>(പഠിതാക്കൾ മൗലികമായ ഒരു കവിത തയ്യാർ ചെയ്യുകയും ഓരോ രചനയും പൊതുവായി ചർച്ച ചെയ്ത് ദുർബലങ്ങൾ പരിഹരിക്കുന്നതെങ്ങനെ എന്നാലോചിക്കുകയും ചെയ്യുക)</p> <p>2. കഥാരചനയും ചർച്ചയും</p> <p>(പഠിതാക്കൾ മൗലികമായ ഒരു കഥ തയ്യാർ ചെയ്യുകയും ഓരോ രചനയും പൊതുവായി ചർച്ച ചെയ്ത് ദുർബലങ്ങൾ പരിഹരിക്കുന്നതെങ്ങനെ എന്നാലോചിക്കുകയും ചെയ്യുക)</p> <p>3. ഇതരരചനകളും ചർച്ചയും</p> <p>(ഉപന്യാസം, സിനിമാനിരൂപണം, വികി ആർട്ടിക്കിൾ, സാഹിത്യനിരൂപണം, തിരക്കഥാരചന, ഓർമ്മയെഴുത്ത്, അനുഭവക്കുറിപ്പ് എന്നിവയിലേതെങ്കിലും ഒന്ന് പഠിതാക്കൾ തയ്യാർ ചെയ്യുകയും ഓരോ രചനയും പൊതുവായി ചർച്ച ചെയ്ത് ദുർബലങ്ങൾ പരിഹരിക്കുന്നതെങ്ങനെ എന്നാലോചിക്കുകയും ചെയ്യുക).</p>	5

Essential Readings:

1. How To Read A Poem ,Terry Eagleton, Black Well Publishing
2. How to Read Literature, Yale University Press.
3. കവിയുടെ കലാതന്ത്രം,ദേശമംഗലം രാമകൃഷ്ണൻ,കേരള ഭാഷാ ഇൻസ്റ്റിറ്റ്യൂട്ട്

സഹായഗ്രന്ഥങ്ങൾ

- 1.കൈരളിയുടെ കഥ,എൻ.കൃഷ്ണപിള്ള
- 2.കവിയുടെ കാല്പാടുകൾ,പി .കുഞ്ഞിരാമൻ നായർ
3. കവിയും ഭാഷയും -കെ . എം . പ്രഭാകര വാര്യർ ,വള്ളത്തോൾ വിദ്യാപീഠം .
4. കവിയുടെ ജീവചരിത്രം -കല്പറ്റ നാരായണൻ ,മാതൃഭൂമി ബുക്സ്.
5. കാവ്യ ഭാഷയിലെ പ്രശ്നങ്ങൾ -ഡോ . ദേശമംഗലം രാമകൃഷ്ണൻ (എഡി .),കേരള ഭാഷാ ഇൻസ്റ്റിറ്റ്യൂട്ട്
- 6 . കവിതാ ഹൃദയം -കെ . പി . ശങ്കരൻ ,കേരള ശാസ്ത്ര സാഹിത്യ പരിഷത്ത്
7. സപ്തകം -കെ. പി . ശങ്കരൻ ,കേരള സാഹിത്യ അക്കാദമി
8. കാവ്യപാഠാവലി -സജയ് . കെ . വി ,ഇൻസൈറ്റ് പബ്ലിക്ക
9. താളം വിതയിലും കവിതയിലും -എം . എം. സജീന്ദ്രൻ ,കേരള സാഹിത്യ അക്കാദമി .
- 10.ചെറുകഥയുടെ ഛന്ദസ്സ് -വി . രാജകൃഷ്ണൻ ,ഡി . സി . ബുക്സ് .
11. കഥയുടെ കഥ -കെ . എസ് . രവീകുമാർ ,ചിന്ത പബ്ലിക്കേഷൻ
12. വാക്കുകളുടെ വിസ്തൃതം -എം . ടി ,പാപ്പിയോൺ
- 13 അടയാൾ കീഴ്ചരം മറ്റ് അസാധാരണ ജീവിതങ്ങളും ,താഹ മാടായി ,ഡി . സി . ബുക്സ് .
14. വേറിട്ട കാഴ്ചകൾ -വി . കെ . ശ്രീരാമൻ ,ഡി .സി . ബുക്സ്
15. പെൺ രാത്രികൾ -കെ . അഷ്റഫ് (എഡി),ഒലിവ്
16. സ്വാതന്ത്ര്യത്തിലേക്ക് എഴുപ്പവഴികളില്ല -നെൽസൺ മണ്ടേല ,എൻ . കെ . രവീന്ദ്രൻ (വിവ),ഫേബിയൻ ബുക്സ്
17. പ്രിയപ്പെട്ട തിയോക്ക് -വാൻഗോഗ് ,ബാലസുന്ദരൻ (വിവ -),മാതൃഭൂമി ബുക്സ് .

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper- 1	
b)	Test Paper-2	
c)	Assignment	
d)	Seminar	
e)	Book/ Article Review	

f)	Viva-Voce	
g)	Field Report	
Total		100

KU02AECMAL103 സാഹിത്യവായനയും ആസ്വാദനവും

KU02AECMAL103 LITERATURE READING AND APPRECIATION

Semester	Course Type	Course Level	Course Code	Credits	Total Hours/week
2	AEC	100-199	KU02AECMAL103	3	3

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
45	3		50	50	100	1 ½ hr

Course Description:

പഠിതാക്കളിൽ സാഹിത്യവായനയിലും ആസ്വാദനത്തിലും അഭിരുചി വർദ്ധിപ്പിക്കുക എന്ന ലക്ഷ്യത്തോടെ വിഭാവനം ചെയ്ത കോഴ്സാണിത്. വ്യത്യസ്ത സാഹിത്യരൂപങ്ങളെക്കുറിച്ചുള്ള സാമാന്യധാരണ പഠിതാക്കൾ കൈവരിച്ചിരിക്കണം. സൗന്ദര്യാത്മകവികാസത്തിന്റെ പ്രാധാന്യം തിരിച്ചറിഞ്ഞിരിക്കണം. പാഠഭാഗങ്ങളെ ആസ്വാദനതലത്തിൽ നിന്നു പരിചയപ്പെടുത്തുന്നതോടൊപ്പം സാഹിത്യവായനയുടെ സാമൂഹിക/രാഷ്ട്രീയ/ സാംസ്കാരിക ശേഷിയെക്കുറിച്ചുള്ള അവബോധം പഠിതാക്കളിൽ രൂപപ്പെടുത്തണം. സിലബസിന് പുറത്തു നിന്നുള്ള സാഹിത്യപാഠങ്ങളുടെ വിപുലവായനയിലേക്കും പഠിതാക്കളെ ക്ഷണിക്കണം.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains

1	വായനയുടെ ഭിന്നരീതികൾ പരിചയിക്കുന്നു	
2	സാഹിത്യവായനയുടെ സാമൂഹികപ്രാധാന്യം തിരിച്ചറിയുന്നു	
3	വായനയും സമൂഹരൂപീകരണവും തമ്മിലുള്ള ബന്ധം തിരിച്ചറിയുന്നു	
4	ആസ്വാദന വായനയിലൂടെ സൗന്ദര്യാത്മക ശേഷി വർദ്ധിപ്പിക്കുന്നു	
5	സർഗാത്മക വായനയിലേക്ക് കൂടുതൽ ആകർഷിക്കുന്നു	

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1							
CO 2							
CO 3							
CO 4							
CO 5							

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	H O U R S
		MODULE TITLE : വായന: സങ്കല്പനങ്ങളും രാഷ്ട്രീയവും	
1	1	വായന - പാരായണത്തിൽ നിന്ന് വായനയിലേക്കുള്ള പരിണാമം - പദ്യ വായനയിലെ ചൊൽവടിയും ഗദ്യവായനയിലെ പ്രകടനപരതയും	

		സാഹിത്യവായനയുടെ സാമൂഹ്യപ്രാധാന്യം - സൗന്ദര്യാത്മകത - സാഹിത്യത്തിന്റെ ധാർമികാടിസ്ഥാനങ്ങൾ
	2	വിദൂരവായന (distant reading), ഗാഢവായന (close reading), ആസ്വാദനവായന, വിമർശനാത്മകവായന Skimming, Scanning, Extensive Reading, Intensive Reading
	3	വ്യാഖ്യാനവും വിവരവും: സമകാലികവായനയുടെ രാഷ്ട്രീയം സുനിൽ പി.ഇളയിടം (നാനാർത്ഥങ്ങൾ)
	4	അതുകൊണ്ട് ഞാൻ പുസ്തകം വായിക്കുക തന്നെ ചെയ്യും പി.കെ.രാജശേഖരൻ (ബുക്സ്റ്റാൾജിയ)

MODULE TITLE : കവിത: വായനയും ആസ്വാദനവും		
2	1	കവിതാവായന - താളം, ചൊൽവടിവ് - ഹൃദിസ്ഥത - കവിതയും ജീവിതസന്ദർഭങ്ങളും
	2	ആസ്വാദനവായന: ആത്മരഹസ്യം ചങ്ങമ്പുഴ കൃഷ്ണപിള്ള
	3	ആസ്വാദനകേൾവി: ശശിധരൻ, വി.കെ., പൂതപ്പാട്ട് അവതരണം, <i>You Tube</i> , https://youtu.be/RllpEYGp7r4
	4	വിമർശനാത്മക/ അപഗ്രഥനാത്മകവായന: സംക്രമണം ആറ്റൂർ രവിവർമ്മ

MODULE TITLE : ഫിക്ഷൻ: വായനയും ആസ്വാദനവും		
3	1	കഥ, നോവൽ വായന - ക്ലാസിക്കു വായനയും പോപ്പുലർ ഫിക്ഷൻ വായനയും: വ്യത്യസ്തങ്ങൾ - ക്ലാസിക്കുകളും മനുഷ്യാനുഭവങ്ങളും - ജനപ്രിയസാഹിത്യം: ഉപരിപ്ലവതയും ഫോർമുലകളും
	2	ആസ്വാദനവായന: നെയ്പ്പായസം മാധവിക്കുട്ടി

	3	ആസ്വാദനവായന: രണ്ടാമുഴം (ആദ്യ അധ്യായം മാത്രം) എം.ടി.	

4 വിമർശനാത്മക/ അപഗ്രഥനാത്മകവായന: ദുരവസ്ഥ വീണ്ടും വന്നപ്പോൾ സി.വി.ശ്രീരാമൻ

MODULE TITLE : വിമർശനാത്മക വായന				
4	1	ആസ്വാദനവും വിമർശനവും ബന്ധവ്യത്യാസങ്ങൾ - നിരൂപണത്തിന്റെ മുന്നൊരുക്കങ്ങൾ - കുറിപ്പ് തയ്യാറാക്കൽ - പുസ്തകറിവു എഴുത്ത് - മാധ്യമഭേദം - താളിയോല - പുസ്തകം - സൈബർ ഇടം		
	2	അപഗ്രഥനാത്മകവായന: പൂവനം ഓറഞ്ചും ആർ.വിശ്വനാഥൻ		
	3	വിവർത്തനങ്ങളുടെ വായന- വിവർത്തനം നിർമ്മിച്ച ഭാവുകത്വവിചേദങ്ങൾ- പാവങ്ങൾ വിവർത്തനവും മലയാളിയുടെ വായനയും - ലാറ്റിനമേരിക്കൻ ബും		

4 സാങ്കേതികവിദ്യയും പുത്തൻ വയനസംസ്കാരവും - ഇ റീഡർ, ഓഡിയോ ബുക്ക്, സോഷ്യൽ മീഡിയ വായന, ഇന്റർ നെറ്റിലെ വായന

Teacher Specific Module		5
മൊഡ്യൂൾ 5	<i>Directions</i>	
	1. വായനയ്ക്കായി നിർദ്ദേശിച്ച പാഠഭാഗങ്ങളുടെ ആസ്വാദനക്കുറിപ്പുകൾ തയ്യാർ ചെയ്തിപ്പിച്ച് അവ പൊതുവായി ചർച്ച ചെയ്യുക.	
	2. വ്യത്യസ്ത സാഹിത്യകൃതികളുടെ വായനാചർച്ച സംഘടിപ്പിക്കുക.	
	3. വായനക്കാരായ മുതിർന്നവരുമായി അഭിമുഖസംഭാഷണങ്ങൾ തയ്യാർ ചെയ്യാൻ നിർദ്ദേശിക്കുക.	
		5

Essential Readings:

1. A History of Reading , Alberto Manguel

2. ആദിമുദ്രണം ഭാരതത്തിലും മലയാളത്തിലും

സഹായ ഗ്രന്ഥങ്ങൾ

1 .മലയാളകവിതാസാഹിത്യചരിത്രം ഡോ.എം ലീലാവതി

2.കവിയുടെ നൂറ്റാണ്ട്, എം.എൻ.വിജയൻ(എഡി.)

3.നമ്മുടെ സാഹിത്യം നമ്മുടെ സമൂഹം ,എം.എൻ.വിജയൻ(എഡി.)

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper- 1	
b)	Test Paper-2	
c)	Assignment	
d)	Seminar	
e)	Book/ Article Review	
f)	Viva-Voce	
g)	Field Report	
Total		100

KANNUR UNIVERSITY



OutcomeBasedEducation(OBE) Curriculum

**ABILITY ENHANCEMENT COURSE
FOR
FIVE YEAR INTEGREATED MASTERS
PROGRAMME**

Offered by
DEPARTMENT OF HINDI

PREFACE

Ability Enhancement Course in Hindi is an introductory level literature course designed with the goal to aid students, who may not be familiar or versed in the various genres of literature. This course is designed to provide students with a comprehensive understanding of the Hindi language, its literary traditions, and its practical applications in various fields. By enhancing language skills, we aim to equip students with the tools necessary to excel in both academic and professional environments.

The curriculum covers a wide array of topics, from basic language skills and grammar to advanced literary analysis and creative writing. Through a balanced mix of theoretical knowledge and practical exercises, students will develop a nuanced understanding of Hindi, enabling them to express themselves clearly and effectively. By exploring Contemporary issues and themes through the lens of Hindi literature, students will gain insights into the socio-cultural dynamics of India and the broader Hindi-speaking world.

Ability Enhancement Course in Hindi is not just about learning a language; it is about fostering a deeper connection with our cultural roots and developing the skills to navigate an increasingly interconnected world. We hope that this course will inspire and empower you to achieve new heights in your academic and professional journey.

Dr. Preethi K
Associate Professor and Head
Department of Hindi,
Kannur University.

SYLLABUS COMMITTEE

1. Dr. Preethi. K
Associate Professor & Head
Department of Hindi, Kannur University
2. Dr. Manikandan C.C
Assistant Professor
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3. Dr. JesnaRehim
Assistant Professor
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PROGRAMME OUTCOMES (PO)

PO1	Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.
PO2	Problem Solving: Identify, formulate, conduct investigations, and find solutions to problems based on in-depth knowledge of relevant domains.
PO3	Communication: Speak, read, write and listen clearly in person and through electronic media in English/language of the discipline, and make meaning of the world by connecting people, ideas, books, media and technology.
PO4	Responsible Citizenship: Demonstrate empathetic social concern, and the ability to act with an informed awareness of issues.
PO5	Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.
PO6	Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio- technological changes.
PO7	Environmental Sustainability and Global Perspective - Develop an understanding of global standards to foster legal environment. Learn and practice to critically analyze the legal issues from local, national and international concerns.

PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1	To understand the various trends of Hindi Literature and to analyze the social, political, economic and cultural life as depicted in the Hindi literature. Analyze the relation between society and literature and evaluate the role played by Hindi literature in past and present. To analyze different discourses in Hindi literature.
PSO2	To understand the various functional usage of Hindi especially in the fields of administration, media, banking, science, teaching and Official Language implementation and able to develop skill in Hindi computing. Build up Language as instrument of production, development and critic of power and to acquire a thorough knowledge in linguistics, grammar and language studies.
PSO3	Developing philosophy of life inspiring by the vision of eminent writers and Analyze the multicultural, gender sensibility of Indian society through Hindi Literature.
PSO4	To understand the basic theories and principles of translation and to achieve a thorough practical knowledge in the translation of texts related to science, technology and creative literature.
PSO5	The program enables students to think creatively and critically and to write effectively within all areas of Hindi literature. Developing skill for writing Independent scholarly articles.

ABILITY ENHANCEMENT COURSE (AEC)

SL. No.	SEMESTER	COURSE CODE	COURSE TITLE	CREDITS
1.	II	KU02AECHIN 101	CREATIVE LITERATURE IN HINDI	3
2.	II	KU02AECHIN 102	CONTEMPORARY HINDI SHORT STORIES	3
3.	II	KU02AECHIN 103	COMMUNICATIVE HINDI	3

KANNUR UNIVERSITY

FIVE YEAR INTEGRATED MASTERS PROGRAMME (FYIMP)

SEMESTER - II

ABILITY ENHANCEMENT COURSE (AEC)

Course Name : CREATIVE LITERATURE IN HINDI

Course Code : KU02AECHIN 101

Credits : 3

Course Description

Creative Literature in Hindi acts as a powerful tool for social awakening. This course delves into various genres such as poetry, fiction, drama and essays, highlighting the innovative techniques and thematic richness that define Hindi Literature.

Course Objectives

1. This course will familiarize the students with the world of creative Literature.
2. To create awareness among students on different trends of Hindi Literature.
3. To create awareness among the students about the different streams of the Hindi Literature.
4. To develop conscious about social literary works and writers of Hindi literature.
5. To enhance the reading ability in the area of creative Literature.

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	50	50	100

Lecture/Tutorials, P/I=Practical/Internship, CE = Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

CO1	Understand the trends and streams of Hindi literature.
CO2	Understand the concept of creative Literature and its impact in Society.
CO3	Understand the contribution of popular writers of Hindi Literature.
CO4	Analyze the social life as depicted in the One act plays, poetry, essays and short stories under study.
CO5	Apply critical thinking independent judgment, inter cultural sensitivity and regional, national, and global perspectives to identify and solve problems in Hindi Literature.
CO6	Develop complex reading, writing and research skills.

Mapping of Course Outcomes to PSOs/POs

	Program Specific Outcomes					Program Outcomes						
	O1	O2	O3	O4	O5	O1	O2	O3	O4	O5	O6	O7
CO1	✓					✓		✓	✓	✓	✓	
CO2	✓		✓		✓	✓		✓	✓	✓	✓	
CO3	✓		✓		✓	✓		✓	✓		✓	
CO4	✓		✓		✓	✓		✓	✓	✓	✓	
CO5	✓		✓		✓	✓		✓	✓	✓	✓	
CO6	✓		✓		✓	✓		✓	✓	✓	✓	

COURSE CONTENTS

Module 1- Kavita

- 1.1 Patdharki Bench - ChandrakanthDevathale
- 1.2 Is sthree se daro –Kathyayani

Module 2- Kahani

- 2.2 Kafan - Premchand
- 2.2 SayaniBua – MannuBantari.

Module 3- Ekanki

- 3.1 Lipstick Ki Muskan– Vishnu Prabhakar
- 3.2 Reed Ki Haddi– Jagadeesh Chandra Mathur

Module 4 - SansmaranAurNibandh

- 4.1 Vah CheeniBai – MahadeviVarma
- 4.2Bhagat Ki Gat – HarishankarParsai

Practicum

Creative Writing, Group Discussion, Presentation, Poster Making,Debate.

BOOKS FOR STUDY

1. SampoornaKahaniyam – MannuBandari,RadhakrishnaPrakashan, New Delhi
2. AndekeChilke Anya EkankithathaBeejNatak – Mohan Rakesh, RadhakrishnaPrakashan, New Delhi
3. SampoornaKahaniyam – MannuBandari ,RadhakrishnaPrakashan

4. Patdharki Bench-

<https://www.hindisamay.com/content/1444/1/%E0%A4%9A%E0%A4%82%E0%A4%A6%E0%A5%8D%E0%A4%B0%E0%A4%95%E0%A4%BE%E0%A4>

<https://www.hindisamay.com/content/430/1/%E0%A4%B9%E0%A4%B0%E0%A4%BF%E0%A4%B6%E0%A4%82%E0%A4%95%E0%A4%B0-%E0%A4%A%E0%A4%B0%E0%A4%B8%E0%A4%BE%E0%A4%88-%E0%A4%B5E0%A5%8D%E0%A4%AF%E0%A4%82%E0%A4%97%E0%A5%8D%E0%A4%AF-%E0%A4%AD%E0%A4%97%E0%A4%A4-%E0%A4%95%E0%A5%80-%E0%A4%AC%E0%A5%88%E0%A4%82%E0%A4%9A.cspk>

5. Bhagat Ki Gat

<https://www.hindisamay.com/content/430/1/%E0%A4%B9%E0%A4%B0%E0%A4%BF%E0%A4%B6%E0%A4%82%E0%A4%95%E0%A4%B0-%E0%A4%A%E0%A4%B0%E0%A4%B8%E0%A4%BE%E0%A4%88-%E0%A4%B5E0%A5%8D%E0%A4%AF%E0%A4%82%E0%A4%97%E0%A5%8D%E0%A4%AF-%E0%A4%AD%E0%A4%97%E0%A4%A4-%E0%A4%95%E0%A5%80-%E0%A4%AC%E0%A5%88%E0%A4%82%E0%A4%9A.cspk>

6. Vah

CheeniBhai<https://www.hindisamay.com/contentDetail.aspx?id=2399&pageno=1>

7. Kafan

https://www.hindwi.org/story/kafan-munshi-premchand-story?gad_source=1&gclid=CjwKCAjw5ImwBhBtEiwAFHDZxwrVGu7GemI5KaZ_i-NnMG86YUIDQ3PAmeRxKZZprzHzDJHI4dqAOxoCNIEQAvD_BwE

8. Is Sthree se daro -

<https://www.hindwi.org/kavita/is-istri-se-daro-katyayani-kavita>

KANNUR UNIVERSITY

FIVE YEAR INTEGRATED MASTERS PROGRAMME (FYIMP)

SEMESTER - II

ABILITY ENHANCEMENT COURSE (AEC)

Course Name : CONTEMPORARY HINDI SHORT STORIES

Course Code : KU02AECHIN 102

Credits : 3

Course Description

Contemporary Hindi short stories represent a vibrant and dynamic facet of Modern Hindi Literature. These stories capture the essence of Contemporary life, reflecting the rapid social, cultural and economic changes in Indian Society.

Course Objective

- To give general awareness of contemporary Hindi short stories.
- To explore the socio cultural and political background of Indian society through contemporary Hindi short stories.
- To analyze the different trends of contemporary Hindi short stories.

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	50	50	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE =End Semester Evaluation.

Course Outcomes

CO1	Understand eminent writers of Contemporary Hindi short stories.
CO2	Understand the creative works of the period under study.
CO3	Interpret the social life as reflected in Contemporary Hindi short stories.
CO4	Achieve the critical ability to analyze the language of Contemporary short stories of Hindi literature.

Mapping of Course Outcomes to PSOs/POs

	Program Specific Outcomes					Program Outcomes						
	O1	O2	O3	O4	O5	O1	O2	O3	O4	O5	O6	O7
CO1	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
CO2	✓		✓		✓	✓	✓	✓	✓	✓	✓	
CO3	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
CO4	✓		✓		✓	✓	✓	✓	✓	✓	✓	

COURSE CONTENT

Module 1

- 1.1 Hindi Kahani Sahitya: Ek Samshipt Parichay - Thakur Ka Kuva (Premchand)
- 1.2 Khel (Jainendra)

Module 2

- 2.1 Akeli - Mannu Bhandari
- 2.2 Swimming Pool - Azhar Wajahat

Module 3

- 3.1 Salam - Om Prakash Valmiki
- 3.2 Kottari Meim Ladki - Mrunal Pandey

Module 4

- 4.1 Rahogi Tum Vahi - Sudha Aroda
- 4.2 Paul Gomeraka Scooter - Udaya Prakash

Practicum

Creative Writing, Group Discussion, Presentation, Poster Making, Debate, skit.

Books for Study

1. Katha Parikrama- Dr. Namdev M. Gauda (Ed.), Jawahar Pustakalaya, Uttar Pradesh.

2. Dalit Kahani Sanchayan- Ramanika Gupta (Ed.), Kendreey Academy, Delhi
3. Nayee Kahani Ki Bhumika – Kamaleswar, Akshar Prakashan, New Delhi.
4. Hindi Kahani Ka Shilp Vidhan – Dr. Lakshmi Narayan Lal
5. Khel
<https://www.hindwi.org/story/khel-jainendra-kumar-story>
6. Thakur Ka Kuva
<https://hindikahani.hindi-kavita.com/ThakurKaKuanMunshiPremchand.php>
7. Akeli
https://www.hindikunj.com/2022/06/akeli-by-mannu-bhandari.html#google_vignette
8. swimming-pool
<https://poshampa.org/swimming-pool/>

KANNUR UNIVERSITY

FIVE YEAR INTEGRATED MASTERS PROGRAMME (FYIMP) **SEMESTER - II**

ABILITY ENHANCEMENT COURSE (AEC)

Course Name : COMMUNICATIVE HINDI

Course Code : KU02AECHIN 103

Credits : 3

COURSE DESCRIPTION

Hindi, being one of the most widely spoken languages in the world and the principal language of India, plays a vital role in various spheres of life including business, education, and culture. This course focuses on practical language skills, emphasizing the ability to communicate effectively in real-life situations. It covers essential aspects such as speaking, listening, reading, and writing, with a strong emphasis on conversational Hindi. The course aims to break down language barriers and open up new opportunities for personal, academic, and professional growth and also provide you with a solid foundation in communicative Hindi.

COURSE OBJECTIVE

- To give general awareness of Hindi language and Communicative Skills in Hindi.
- Apply Language skills in practical scenarios such as travel, business and social interactions, enhancing the ability to navigate real life situations effectively.

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	50	50	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE =End Semester Evaluation.

COURSE OUTCOMES

CO1	Develop communicative skills in Hindi.
CO2	Develop creative writing skills in Hindi.
CO3	Understand the features and techniques of letter writing and to make students proficient to prepare certain basic kinds of letters independently in their personal and their professional life.
CO4	Develop skills in translation. Understand the importance of translation as a tool for communication.
CO5	Enabling students to participate actively in dialogues, discussions and presentations.

Mapping of Course Outcomes to PSOs/POs

	Program Specific Outcomes					Program Outcomes						
	O1	O2	O3	O4	O5	O1	O2	O3	O4	O5	O6	O7
CO1	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
CO2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
CO3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CO4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CO5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

COURSE CONTENT

Module 1

- 1.1 Abhivadan/Pratyabhivadan – Parichay Dena /Lena- Badayiyaam/
Shubhkamanayem-KrutanjathaGyapan/ KshamaPrarthana-
SevakaPrastav-Aadesh/Nimatran- Anurodh-Anumati - GhareluShabdomkaParichay.
- 1.2 VaartalapAbhyas – VibhinnSandarbhomMeim- Railway Station- Bazar- Ghar –
College- Yatra- Ginti –PhalAurSabjiyomkeParichay.

Module 2

- 2.1.1 Hindi PatraLekhan – PaarivarikPatra, SamajikPatra, VyavsayikPatra, KaryalayPatra
–Rishtom se SambandhitShabd.
- 3.2.1 Anuvaad – Mahatva - AnuvaadakKe Gun – Angrezi se Hindi Mein Aur Hindi se
Angrezi Mein AnuvaadAbhyas - NaukareePesha se SambandhitShabd

Module 3

- 3.1 Hindi KahaniAurKavitaKaAbhyas – SahayakBinduonKeAadhar Par
KahaniLekhan- Choti Si Vishay keAdhar Par KavitaRachna- Dainik
Jeevan se SambhandhitKriyaShabdomkaParichay.
- 3.2 Sanshepan- Diary Lekhan- DainikJeevan se SambhandhitSangyavom
kaParichay.

Module 4

- 4.1 VigyapanTaiyaarKarna- Poster TaiyaarKarna – RapatTaiyaarKarna - DainikJeevan se SambhandhitKriyaShabdomkaParichay.
- 4.2 Sakshatkar – NibandhLekhan- DainikJeevan se Sambhandhit SangyavomkaParichay.

Practicum

Creative Writing, Group Discussion, Presentation, Poster Making, Debate.

BOOKS FOR STUDY

1. Vyavharik Hindi VyakaranAnuvaadTathaRachana, Dr. HParameshwaran, RadhakrishnaPrakashan , New Delhi
2. Kamkaji Hindi, Dr. P. M Thomas, Samiksha Publication, New Delhi.
3. VyakaranEvamRachana, GirijaKumari R, Rajpal and Sons, Delhi.
4. Vyavharik Hindi VyakaranTathaRachana, Dr. HardevBahari, LokbharatiPrakashan, Ilaahabad.