Department of Public Administration

About the Department:

Government College Tral established in 1989 stands as a beacon of academic excellence in the field of Education. The Department of Public Administration, established in 2017, fosters an environment conducive to intellectual growth and critical thinking.

The department's comprehensive course offerings encompass a wide range of disciplines, including An Introductory course on Public Administration, Administrative Thinkers, Panchayati Raj in India, Social Welfare Administration in India, Development Administration and Comparative Public Administration. The curriculum is designed to provide students with a solid foundation in the subject matter, while also encouraging them to develop their own perspectives.

Furthermore, Department of Public Administration hosts a variety of extra- curricular activities and events that enrich the student's experience. These include guest lectures by renowned philosophers, research colloquiums, Seminars, Conferences and student-led discussion groups. The department also maintains a strong alumni network, providing students with opportunities for mentorship and career advancement.

In addition to its academic and extracurricular offerings, Department of Public Administration is committed to fostering a diverse and inclusive environment. The Department welcomes students from all backgrounds and perspectives, creating a rich and dynamic learning space where different viewpoints are valued and respected.

Overall, Department of Public Administration provides an exceptional educational experience that prepares students for careers in academia, public services and other fields that demand critical thinking and analytical skills. Its commitment to intellectual rigor, student support and diversity makes it a premier destination for those seeking to explore the fundamental questions of human existence.

The Department employs and utilises a plethora of pedagogical tools to make learning an interactive experience. ICT tools like smart classroom, Google Meet, Google Classroom, Whatsapp are employed in disseminating information. Lectures are conducted through power point presentations and video based assignments and group presentations features in our teaching- learning practices. Students are encouraged to develop critical thinking through deductive method with the objective of bringing clarity, consistency & coherence

Semester 1, Course Code: PAD122J Credits: Theory: 04, Tutorials: 02
Course Title: Introduction to Public Administration

Course Description: This course offers a comprehensive introduction to the field of Public Administration, covering the fundamental principles, concepts, and practices that define the discipline. Students will explore the role of Public Administration in the context of government

and non-governmental organizations, examining the ways in which public policies are developed, implemented, and evaluated.

Learning Outcome: Public Administration is a field of study that focuses on the implementation of government policies and the management of public programs. An introduction to public administration typically covers a range of topics that help students understand the foundational concepts, structures, and functions of Public Administration.

1. Studenst will understand what Public Administration is, including its role and scope within government and society.
2. Studenst will learn about the evolution of Public Administration as a field of study and practice, including key theories and paradigms.
3. Familiarity with classical theories of Public Administration, such as Weber's Bureaucracy, Taylor' Scientific Management and Fayol's Administrative Theory.
4. Exploration of modern and contemporary theories, governance and public value management.
5. Understanding the organizational structure of government at various levels (federal, state, local) and the roles of different public agencies and departments.
6. Understanding emerging issues affecting public administration

By mastering these learning outcomes, students gain a comprehensive understanding of the principles, practices, and challenges of Public Administration, preparing them for careers in public service or further academic study in the field

Semester 2, Course Code: PAD222J
Course Title: Administrative Thinkers, Credits: Theory = 04; Tutorials = 02

Course Description: This course delves into the seminal theories and contributions of key figures in the field of Public Administration. It aims to provide students with a comprehensive understanding of the evolution of administrative thought and its practical implications. The course covers classical, modern, and contemporary administrative thinkers, analyzing their philosophies, methodologies, and the impact of their ideas on public administration practices.

Learning Outcome: Students will be able to:

1. Learn about the foundational theories of Public Administration and Management, such as those proposed by Max Weber, Frederick Taylor, and Henri Fayol.
2. nderstand the evolution of administrative thought from classical to modern and contemporary theories.
3. Develop the ability to critically analyze and compare different administrative theories and their applicability to modern public administration.
4. Apply theoretical knowledge to real-world case studies to understand the practical implications and limitations of various administrative approaches.

5. Gain insights into how administrative theories can be implemented in practice within public and private sector organizations.
6. Understand how administrative theories influence policy formulation, organizational behavior, and management practices.
7. Learn about the influence of technology on public administration practices and the theories addressing this impact.
8. By studying these administrative thinkers, students and professionals can gain a comprehensive understanding of the theoretical underpinnings of public administration and how these theories can be applied to solve contemporary administrative challenges.

Semester: 3, Course Code: PAD322J

Course Title: Development Administration Credits: Theory=4: Tutorial=2

Course Description: Development Administration courses are crucial for preparing individuals to effectively contribute to the development and improvement of socio-economic conditions in various parts of the world, particularly in developing countries. This course provides an in-depth understanding of the principles, strategies, and challenges involved in the administration and management of development initiatives. It is designed to equip students with the knowledge and skills necessary to effectively design, implement, and evaluate development programs and projects, particularly in the context of developing countries.

Learning Outcome: By the end of the course, students should be able to:

- Analyze and critique various development theories and approaches.
- Develop and implement effective policies and projects aimed at promoting development.
- Understand the role of different actors and institutions in the development process.
- Apply project management techniques to development initiatives.
- Evaluate the impact of development interventions and suggest improvements.

Semester: 4, Course Code: PBA422J1

Course Title: Comparative Public Administration Credits: Theory: 3; Tutorial: 1

Course Description: This course provides students with an understanding of the principles, structures, and functions of public administration in various political, economic, and cultural contexts. It highlights the similarities and differences in administrative practices and how these influence policy implementation and public service delivery. Studenst will be able to:

- Explore the fundamental theories and concepts of public administration and their application in different countries.

- Learn methodologies for comparing administrative systems and practices, including qualitative and quantitative approaches.
- Study the administrative structures and processes of a variety of countries, examining how different political, economic, and social contexts shape public administration.
- Analyze how different administrative systems impact the formulation and implementation of public policies and the delivery of public services.
- Investigate various administrative reforms and innovations around the world, understanding the factors that drive change and the outcomes of these reforms.

Learning Outcome: By the end of the course, students will be equipped with a comprehensive understanding of public administration across different countries, be able to conduct comparative analyses, and develop insights into global administrative challenges and innovations.

Semester: 5, Course Code: PBA422J1

Course Title: Panchayati Raj in India, Credits: Theory: 3; Tutorial: 1

Course Description: This course explores the Panchayati Raj system, a decentralized form of governance in India. It focuses on the historical evolution, constitutional framework, and contemporary practices of Panchayati Raj Institutions (PRIs) at various levels. This course will enable the students to:

- Understand the concept and significance of Panchayati Raj in India.
- Study the historical background and evolution of local self-governance in India.
- Analyze the constitutional provisions related to Panchayati Raj.
- Examine the structure, functions, and powers of Panchayati Raj Institutions.
- Evaluate the role of PRIs in rural development and democratic decentralization.
- Discuss the challenges and future prospects of the Panchayati Raj system.

Learning Outcome: The course aims to provide a comprehensive understanding of the Panchayati Raj system in India, its role in rural governance, and the challenges it faces. It prepares students to critically analyze and contribute to the strengthening of local self-governance in the country.

The course will help in understanding the significance of Panchayati Raj in promoting decentralized governance, fostering local development, and enhancing democratic participation at the grassroots level in India.

Semester: 6, Course Code: PBA422J1

Course Title: Social Welfare Administration in India, Credits:Theory: 3, Tutorial: 01

Course Description: The course aims to provide students with a comprehensive understanding of the complexities involved in social welfare administration in India, equipping them with the knowledge and skills necessary to contribute effectively to policy-making, implementation, and evaluation in this field. The course focuses on the principles, policies, and practices involved in the delivery of social welfare services to various segments of the population. The course aims to equip students with the knowledge and skills necessary to critically assess, design, and manage social welfare policies and programs in India, considering the diverse socio-economic challenges and opportunities in the country.

Learning Outcome: This course compiles the basic meaning of social welfare administration to understand the theoretical and activity perspective. In India, the field of social welfare administration encompasses various policies, programs, and initiatives aimed at promoting the well-being and development of marginalized and vulnerable populations. The course helps students in:

- Understand the administration of welfare organizations and civil society organization / Non Government organization.
- Understand the scope for social work in welfare organizations and NGO's.
- Apply contemporary management theory applicable to social work practice .
- Develop knowledge about registration procedure of organization.
- Remember the management of Human Resource Organization.

Department of Economics

The B. A. (Economics) programme offers a strong foundation for the advanced concepts and theories in the field of Economics. It offers students a coherent framework for modelling and analysing the behaviour and relationships of households, businesses, and government entities. The curriculum provides students with the opportunity to select elective courses from a range of courses that are currently relevant, thereby giving students the flexibility to prepare for jobs in academics, planning and development, Banking, law, management, journalism, government, and various other professions.

Programme Objectives:

1.Provide instruction to students on fundamental principles of economic theory
2. Provide pupils with the mathematical and statistical skills required to get a comprehensive understanding of the subject.
3. Examine current economic challenges and topics that are affecting both the nation and the global community.
4. Provide instruction to students on how to get original data and acquire knowledge of sampling methodologies.
5. Teach students how to utilize statistical and econometric techniques to determine the soundness of economic ideas.
6. Provide students with training in the techniques and principles of economic modelling.

After finishing this Programme, a student will possess the essential skills to comprehensively comprehend and systematically analyze all significant economic phenomena. A student will possess the ability to examine and evaluate government policies and laws, and effectively illustrate their importance. By understanding the mechanics of an economy and the decision-making processes of consumers, producers, and regulators, the student will acquire the essential abilities to recognize, analyze, and resolve problems in a rational and effective manner. The program offers fundamental elements of economic theory and the chance to acquire skills in processing and analysing economic data using reliable statistical techniques, with the aim of reaching economically significant findings.

SEMESTER-I MAJOR / MINOR ECO122J ECONOMICS (BASIC MICROECONOMICS)

CREDITS: 06 THEORY: 04, TUTORIAL: 02

Course Description: This is a core course of 06 credits. The course starts with some basic concepts required for understanding the essence of subject, followed by law of demand and supply along with the concepts like market equilibrium, utility, budget line and consumer's equilibrium. The course concludes with the basic concepts associated with producer's equilibrium. Overall focus of the course is to foster knowledge, comprehension and skills among the learners.

Course Objective: The course is designed to expose the students to the basic principles of microeconomic theory. The course illustrates how microeconomic concepts can be applied to analyse real life situations.

Learning Outcomes: After completing this course, the student is expected to:

LO1: Develop a basic understanding of theoretical concepts in microeconomics.

LO2: Exhibit a broad understanding of the theory of demand and be in a position to calculate demand elasticity under different circumstances.

LO3: Demonstrate an understanding of utility theory and analyse changes in budget and its impact on consumer's equilibrium.

LO4: Acquire the skills to calculate revenue and cost functions of a firm

SEMESTER-2nd MAJOR/Minor COURSE ECO222J ECONOMICS

(BASIC MACROECONOMICS) CREDITS: THEORY: 04; TUTORIAL: 02

Description: This is a core course of 06 credits. The course starts with some basic concepts required for the understanding the essence of subject, followed by consumption and savings function along with the concepts like investment, multiplier and accelerator. The course concludes with the basic concepts associated with money, inflation and unemployment. Overall, focus of the course is to disseminate knowledge, comprehension and skill among the learners.

Course Objective: The course is framed in order to expose the students to basic principles of macroeconomics. The course illustrates how macroeconomic concepts can be applied to analyse real life situations.

Learning Outcomes: After completion of course, the student is expected to:

LO1: Develop a basic understanding of theoretical concepts of macroeconomics.

LO2: Exhibit a broad understanding of the national income concepts and its measurement so that students can calculate national income under different methods.

LO3: Demonstrate an understanding of investment and analyse its impact on macroeconomic.

LO4: Acquire skills to calculate price change through different indices.

3rd SEMESTER MAJOR/ MINOR ECO322J MONETARY ECONOMICS

CREDITS: 6 THEORY: 4; TUTORIAL: 02

Course Description: This is the core course of 06. The course starts with some basic concepts required for understanding the essence of the subject. It covers topics such as money supply, monetary standards, and the structure of Indian financial system. The course also includes tutorials that explore additional aspects such as inflation targeting, credit creation, and the impact of digital money and crypto-currency.

Course Objective: objective of this course "Monetary Economics" is to provide students with a comprehensive understanding of concepts and measures of money supply. The course enables the students to understand the structure of Indian Financial System and conduct of monetary policy by the RBI.

Learning Outcomes: After completing this course, the students are expected to:

L01: Demonstrate a clear understanding of the fundamental concepts of money, its evolution, and the functions it serves in an economy.

L02: Analyse and evaluate how to measure the money supply, and the factors influencing money supply, including high-powered money.

L03: Analyse the structure of Indian Financial System including its various components.

L04: Evaluate the role of the Reserve Bank of India in conducting monetary policy.

4th SEMESTER ECO422J1 ECONOMICS: ECONOMICS OF DEVELOPMENT

CREDITS-THEORY: 3; TUTORIAL: 1

Course Description: This is the first part of a two-part course on economic development. The course begins with a discussion of alternative conceptions of development and their justification. It then proceeds to develop various measures of inequality and connections

between growth and inequality are explored. The course ends by discussing various theories of economic development.

Course Objective:

Learning Outcomes

After completing this course, the students are expected to:

LO1: Demonstrate a good understanding of basic concepts of development, poverty and inequality. **LO2:** Gain a comprehensive idea about historical and contemporary processes of development.

LO3: Understand the role of labour and migration in the process of economic development

4th Semester: HISTORY OF ECONOMIC THOUGHT ECO422J3

CREDITS: THEORY: 4; TUTORIAL: 02

Course Description: This is a core course of 06 credits

Course Objectives: This course aims to survey the history of economic thought, covering Mercantilism and Physiocracy in pre-classical economics, classical theories of Smith, Ricardo, and Malthus, the rise of socialism and Marxian analysis, the Marginalist Revolution, and insights into Welfare Economics and Indian Economic Thought. Students will critically assess key concepts, ideologies, and contributions, fostering a comprehensive understanding of the evolution of economic thinking from early doctrines to modern perspectives.

Learning Outcomes: After completing this course, students are expected to:

L01: Assess early economic doctrines to comprehend their core principles and limitations.

L02: Analyse growth, value, distribution, and population theories proposed by classical economists. **L03:** Investigate the emergence of socialism, delve into Marx's surplus value theory, and understand key concepts from the Marginalist Revolution.

L04: Examine welfare economics, Pareto optimality, and the historical and contemporary insights of Indian Economic Thought.

4th SEMESTER MAJOR / MINOR ECO422J2 MATHEMATICS FOR ECONOMICS

CREDITS: 6 THEORY: 4: TUTORIAL: 2

Course Description: This is a core course of 06 credits (01 credit for each unit with the last two units as tutorials). The course starts with some basic concepts required for understanding the essence of subject, followed by basic calculus with the topics such as differentiation, partial differentiation, and integration. Overall, the focus of the course is to disseminate knowledge, comprehension and skill among the students. Course Objectives: To develop a solid foundation and understanding of mathematical tools and techniques. The course enables

the students to apply mathematical methods to solve economic problems and analyse economic models.

Learning Outcomes: After completing this course, the student is expected to:

L01: Understand the concepts of sets and functions, including different types of functions and their properties, and apply them to economic models and analysis.

L02: Analyse and apply calculus basics, including limit, continuity, differentiability, and integration techniques, in economic contexts, and solve economic problems using these tools.

L03: Apply the concepts of partial derivatives, marginal analysis, Lagrange multipliers, to solve various optimization problems.

L04: Apply concepts of integration to calculate consumer's & producer's surplus

Semester 5th: International Trade (ECO522J1) Credits: (3+1=4)

Course Description: This is a course of 04 credits (03 units of 01 credit each and a tutorial of 1 credit).
Course Objectives: This course is framed to provide the students a detailed understanding about the principles that tend to govern global trade. The course stresses mainly on the theoretical aspects of the subject. Beside trade theories, it deals with trade policy and the working and functions of important international organizations that have become relatively more relevant in the present era of globalization and liberalization.
Learning Outcomes: After completing this course, students are expected to:
L01: Comprehend trade theories, theories of protection, trade strategies and role of global trading organizations and understandd international trade and its role in shaping and improving economic performance of a country.
L02: Uunderstand the economic implications of various instruments of trade policy and have in-depth understanding about the contemporary relevance of various international institutions that promote free trade.
L03: Grasp the basic ideas of terms of trade, trade as engine of growth, and trade strategies adopted by India.

Semester V Microeconomics - I (ECO522J2) Credits: (4+2=6)
Course Description: This is a core course of 06 credits (04 units of 01 credit each and tutorials of 2 credits).
Course Objectives: The course aims to enable students to understand the principles of consumer choice, including budget constraints and utility functions. It also focuses on demand analysis exploring using ordinal approach. Additionally, students will grasp the theory of production and costs, covering production functions and cost analysis in the short and long run. Finally, the course delves into market structures, including competitive markets, monopoly equilibrium, and the concept of natural monopoly.
Learning Outcomes: After completing this course, students are expected to:
L01: Analyze consumer choices and achieve equilibrium using budget constraints and utility concepts.

L02: Interpret indifference curves, assess price change effects, and apply compensating and equivalent variations.
L03: Comprehend production functions, cost theories, and evaluate profit and cost optimization in producer equilibrium.
L04: Examine competitive and monopoly market dynamics, including price discrimination, and understand dead-weight loss implications.

Semester V Public Economics (ECO522J3) Credits: (4+2=6)

Course Description: This is a core course of 06 credits (04 units of 01 credit each and tutorials of 2 credits).
Course Objectives: The objective of the course is to develop an understanding of public sector, financial resources, role and functions of the Government in an economy, issues pertaining to public goods, different aspects of revenue and taxation, distribution of income, etc. Further, the existence of externalities, inequalities in the distribution of income and wealth etc., require political processes for their solution in a manner which combines individual freedom and justice. The course aims to facilitate an understanding of these issues.

Learning Outcomes: After completing this course, students are expected to:
L01: Identify critical key issues in public economics through the principles of public finance.
L02: Identify the tax principles that are relevant to economic development.
L03: Analyze the budget process.
L04: Be familiar with various aspects of public expenditure and debt.

Semester VI: Indian Economy (ECO622J1) Credits: (3+1=4)

Course Description: This is a core course of 04 credits (03 units of 01 credit each and a tutorial 1 credit).
Course Objectives: This course aims at giving students a reasonable introduction to Indian economy and will concentrate on both the achievements and issues of the economy post 1947. The course aims at providing a background to the various undergoing transformations in the Indian Economy.
Learning Outcomes: After completing this course, students are expected to:
L01: Have an overview of the basic characteristics of Indian economy.
L02: Explain the growth trajectory and recent developments in the Indian economy.
L03: Identify the various issues in a developing economy like India.
L04: Have a broad understanding of the policy framework.

Semester VI: Macroeconomics – I (ECO622J2) Credits: (4+2=6)

Course Description: This is a core course of 06 credits (04 units of 01 credit each and tutorials of 2 credits).
Course Objectives: This course provides a comprehensive exploration of macroeconomic theories and their real-world applications. Beginning with an in-depth analysis of the Classical model, students will examine production, labour markets, wage determination, and the concept of monetary neutrality. The focus then shifts to Keynesian Theory, addressing income determination, macroeconomic multipliers, and the Keynesian view of the labour market, with a specific emphasis on involuntary unemployment and post Keynesian theories of demand for money.

Learning Outcomes: After completing this course, students are expected to:
L01: Understand the characteristics of the Classical theory of income determination.
L02: Comprehend the characteristics of Keyne's theory of income determination.
L03: Gain knowledge about various theories of the demand for money.
L04: Understand various theories of trade cycle.

Semester VI: Environmental Economics (ECO622J3) Credits: (4+2=6)

Course Description: This is a course of 06 credits (04 units of 01 credit each and tutorials of 2 credits).
Course Objectives: The course introduces the students to the basic concepts of environmental economics. The students would be familiarized with nature of environmental goods and problems associated with their use as well as various theories associated with the study of environmental economics. The course will also help in developing an understanding of various environmental issues, their consequences, concept of climate change as well as various national and international environmental policies
Learning Outcomes: After completing this course, students are expected to:
L01: Develop understanding about the basic concepts of environmental economics. In addition, students will grasp the concept of environmental accounting and its measurement.
L02: Understand the relationship between environment and market failure, and their remedial measures.
L03: Understand the various methods of environmental valuation.
L04: Develop awareness about the contemporary developments in the field of climate change.

Semester-VII: Economics of Growth (ECO722J1) Credits: (3+1=4)

Course Description: This is a core course of 04 credits (03 units of 01 credit each and tutorial of 1 credit).
Course Objectives: This course aims to provide a concise yet comprehensive understanding of economic growth concepts, measurement techniques, and factors influencing growth. Students will explore economic growth models, including the Harrod-Domar, Robinson's, and Meade's models, addressing issues of instability and capital accumulation. The Solow model will be examined, emphasizing the impact of population, saving, and technology on economic growth, and covering topics such as the Steady State and the Golden Rule of consumption. Overall, the course equips students with essential theoretical knowledge and analytical skills to grasp and evaluate economic growth dynamics.
Learning Outcomes: After completing this course, students are expected to:
L01: Grasp economic growth concepts, measurement methods, and factors shaping growth.
L02: Analyze instability in growth models like Harrod-Domar, Robinson's Golden Rule, and Meade's models.
L03: Understand Solow's model, assessing impacts of population, savings, technology, and long-term growth theories.

Semester VII: Microeconomics- I (ECO822J2) Credits: (4+2=6)

Course Description: This is a core course of 06 credits

Course Objectives: This course is a sequel to Microeconomics I. The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and

reasoning. It covers Game Theory, imperfect markets and topics under factor pricing, and market failure and uncertainty.

Learning Outcomes: After completing this course, students are expected to:

L01: Apply game theory concepts to analyse strategic decision-making, including dominant strategies and Nash equilibrium.

L02: Uunderstand different market structures, focusing on oligopoly and mmonopolistic competition, and analyse market equilibriums.

L03: Grasp factor pricing mechanisms, particularly the mmarginal pproductivity theory, and analyze efficient.

L04: Iidentify market failures, analyze issues of asymmetric information and the principle-agent problem, and assess uncertainty and attitudes towards risk allocations in competitive markets.

Semester VIII: International Finance (ECO822J1) Credits: (3+1=4)

Course Description: This is a course of 04 credits (03 units of 01 credit each and tutorials of 1 credit).

Course Objectives: This course provides the students a thorough understanding about the principles that tend to govern international finance. This course discusses importance aspects of global finance. The underlying topics in the syllabus are of great relevance to a nation in modern liberalized world. The course addresses that foreign exchange market, balance of payments and different phases of international monetary system.

Learning Outcomes: After completing this course, students are expected to:

L01: Analyse foreign exchange markets, demonstrate proficiency in exchange rate determination, quotations, and hedging strategies.

L02: Assess Balance of Payments structures, interpret deficits or surpluses, and propose corrective measures for economic equilibrium.

L03: Evaluate different exchange rate regimes, comparing flexible versus fixed systems, and explain the functioning and roles of international monetary organizations like the IMF

Semester VIII: Macroeconomics – II (ECO822J2) Credits: (4+2=6)

Course Description: This is a core course of 06 credits (04 units of 01 credit each and tutorials of 2 credits).

Course Objectives: This course delves into advanced macroeconomic models and their implications for policy analysis. It focuses on IS-LM model, and central propositions of Monetarist revolution. Finally, the course explores the microeconomic foundations of macroeconomics.

Learning Outcomes: After completing this course, students are expected to:

L01: Develop a comprehensive understanding of the IS-LM model for a closed economy.

L02: Gain proficiency in applying the IS-LM model to an open economy.

L03: Explore the Monetarist counter-revolution by examining the central propositions of Monetarism.

L04: Delve into the microeconomic underpinnings of macroeconomics

Semester VIII: Basic Econometrics (ECO822J3) Credits: (4+2=6)

Course Description: This is a course of 06 credits (04 units of 01 credit each and tutorials of 2 credits).

Course Objectives: The course assumes that students have a basic knowledge of statistics, mathematics as well as basic econometric theory. It builds on the compulsory Introductory Econometrics course and teaches students a broad set of commonly used econometric methods. These include estimating models with limited dependent variables and the use of instrumental variables to estimate models with endogenous regressors.

Learning Outcomes: After completing this course, students are expected to:
L01: Construct and test hypothesises. Explain core concepts and techniques in econometrics, with a special focus on the classical linear regression model.
L03: Estimate and interpret linear regression models and distinguish between economic and Statistical importance.
L03: Understand the violations of the assumptions of the classical linear regression models.
L04: Use a statistical/econometric computer package to estimate an econometric model.

Applied Econometrics (ECO822J1) Semester VIII Credits: (3+1=4)

Course Description: This is a course of 04 credits (03 units of 01 credit each and a tutorial of 01 credit).
Course Description: This advanced paper in econometrics aims at familiarizing students with time series analysis, panel data analysis and discrete choice models, which are widely, applied in empirical research and data analytics.
Learning Outcomes: After completing this course, students are expected to:
L01: Identify and use dummy variables in regression models.
L02: Estimate time series and panel data regression models.
L03: Develop empirical models starting from assumptions, followed by estimation using appropriate models, interpret the results and test their statistical significance.
L04: Use a statistical/econometric computer package to estimate an econometric model.

1st SEMESTER SKILL ENHANCEMENT COURSE (SEC) ECO122S: COMPUTER APPLICATIONS FOR ECONOMICS CREDITS: THEORY: 2, TUTORIAL: 2

Course Description: The course is designed to aim at imparting an understanding of basic computer applications for undergraduate students in economics.

After completing this course the student will be able to

Lo1: use computer in their personal, academic and professional fields.

Lo2: It provides basic soft skills in handling complex data in addition to creation and formatting of word documents and presentations.

2nd SEMESTER SKILL ENHANCEMENT COURSE (SEC) (ECONOMICS) ECO222S: MATHEMATICAL ECONOMICS CREDITS: THEORY: 2, TUTORIAL: 2

Course Description: This course introduces the student to Mathematical techniques to be applied in core subjects of economics like microeconomics, macroeconomics, public economics, and econometrics at advanced stages.

After completing this course the student will be able to:

L01: Analyse and apply calculus basics, including limit, continuity, differentiability, and integration techniques, in economic contexts, and solve economic problems using these tools.

L02: Apply the concepts of partial derivatives, marginal analysis, Lagrange multipliers, to solve various optimization problems.

3rd SEMESTER SKILL ENHANCEMENT COURSE (SEC) (ECONOMICS)
ECO322S: FINANCIAL ECONOMICS CREDITS: THEORY: 2, TUTORIAL: 2

Course Description: This course introduces students to the economics of finance. The course is designed to impart the essential aspects of financial asset valuation. The course will impart skills that will be useful in a variety of business settings including investment banks, asset management companies and in the field of financial and business journalism.

LO1: Increase theoretical knowledge in portfolio risk management and capital asset pricing

LO2: Understand the terms and concepts related to financial markets

LO3: Understand the operation of financial derivatives. CO4 Understand how real life investment decisions are made CO5 Able to comprehend business news/articles better.

Department of Kashmiri

Course outcomes as per semester wise

The Department of Kashmiri offers a six-semester course in Kashmiri Language as a core/Major/Minor subject in Arts stream as well as offers skill,MIL,Generic Electives and Multidisciplinary courses in respective semesters.The objectives of any programme at higher education institution is to prepare their students for the society at large.Here are the detailed objectives/ outcomes of Kashmiri courses taught at under Graduate level.

Ist semester

(1) Course Title: Kashmiri Literature(i)

After the culmination of the course,the students will be able:

(1) To learn the art and sytle of Gazal and Nazam.

(2)To read Kashmiri Gazal and Nazam and to know famous Kashmiri writers of Kashmiri Gazal and Nazam .

(3) To know the history,development and literary tenets of Kashmiri short story.

(4) To write creative prose in Kashmiri language.

(ii) Skill enhancement courses(From Semester Ist to Third)

Course Titles are(i) Tarjama Kari (ii) communication skills of Kasmiri language (iii) Kashmiri Language and its origin.

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

(1) To translate Kashmiri Scripts in English

(2)

(3)

Language.

(4) To translate English and Urdu Scripts in Kashmiri Language.

(5) And have become professional well trained translaters.

(6) Have become acquainted with the various methods for coining of terms in the process of translation.

(7) Aware the Students about the fields of Journalism and make them conversant about the techniques/ language Skills in it.So that they can choose it as their career.

(8) They should be made fully professional that how to write news,articles and editorial for newspaper.

(9) Defining news and understanding its elements,news sources and different types of news.

(10) Defining column,Its importance and different types.

(11) To know the Origin of Kashmiri language and its different dialects.

(12) To know the influence of other Indian languages on Kashmiri language.

Semester II

Kasmiri Literature (ii)

After the culmination of the course,the students will be able:

(1)To know the history of Kashmiri Language and Literature.

(2)To know the contribution of various Kashmiri poets and short story writers.

(3)To analyze the poetry of famous Kashmiri poets by using various tools of critism.

(4) To have gained vast knowledge of non-fictional genres of Kashmiri prose.

Semester III

Kashmiri Literature(iii)

The objectives of this course paper will enable our students :

(1)To understand informative literature.

(2)To know about Kashmiri short story.

(3) To get acquainted with history,tradition,form and experimentation of kashmiri poetry.

(4) To get familiarized with the tenets of Kashmiri Gazal as well as Kashmiri Nazam.

Semester iv

Kashmiri Literature(J1){Major+Minor}

After the culmination of the course,the students will be able:

(1)To get well grasp of the poetic tenets of Kashmiri Nazam.

(2)To get information about different aspects of our culture.

(3)To know the history of Kashmiri Literature.

(4) To know about the basic features of short story in Kashmiri.

Kashmiri Literature (J2){Major}

By the end of this course paper,the students shall be able :

(1) To get good grasp of the tenets of Ghazal.
(2) To get familiarized with the growth and development of Gazal in Kashmiri.
(3) Learn about the art and both forms Ghazal as well as Nazam and their technique and kinds.
(4) Know about their history and development of these genres over the years.

Kashmiri Literature(J3){Major}

After the culmination of the course ,the students will be able:

(1)To learn the art and sytle of Rubaiye.

(2) To know famous kashmiri Rubaiyees as well as Translated Rubaiyes from persion language in Kashmiri language.

(3)Acquaint with kashmiri Nazam and its different Kinds like paband,Azad,free verse etc.

(4) To know about Kashmiri Fiction writers.

Kashmiri Literature (5th semester)

Course name:NASR TE NAZAM:I

By the end of this Course paper ,our students will be enable:

(1) To know the classical Genres and poets like Lal Arifa and Sheikh ul Alam.
(2) To Know the Four sufi orders and their influence on Kashmiri Sufi Poetry.
(3) To get information about history of Kashmiri Drama and its types like Band e pather,watal pather,Bhuhir Pather etc.
(4) To know the contribution of progressive movement Writers .

Kashmiri Literature (6th Semester)

Course name:NASR TE NAZAM:II

After the culmination of this course,the students will be able:

(1)Acquaint with ,the Role of kashmiri Women folk to develop Kashmiri Literaure as well as Kashmiri language.

(2) To know the Kashmiri Modern poetry.

(3)To analyze Kashmiri Modern poetry of various Kashmiri Modern poets like Rehman Rahi,Amin Kamil,Gh Nabi Firaq,Gh Nabi Khayal etc. by using various tools of criticism.

(3)To understand the art of drama.

(4) To gain knowledge of Kashmiri Grammar such as script of kashmiri language, phonetics of Kashmiri language etc

SubJect : Kashmiri

Programme outcomes

The Department of Kashmiri is one of the leading centre for development of Kashmiri language by integrating modern and contemporary concepts, skills and technology. The main aim of the subject is to acquaint the students the value of kashmiri language as a subject (one of the oldest languages of the region). The programme outcomes of the said subject are given below.

(1) To enhance the learners with an in-depth knowledge of Kashmiri language and literature.
(2) To preserve the rich cultural heritage of the Kashmiri languge and literature.
(3) To develop the communication skills through LSRW skills and creative thinking of learners.
(4) To prepare the students for lifelong learning.
(5) To instil human values of literature in learners moulding them to be responsible citizens of society.
(6) To inculcate positive human values through the study of Kashmiri literature.
(7) To creat awareness our valuable and and rich litrary heritage.
(8) To give an insight into the unity of mankind on emotional level.
(9) To develop the students the values of self-reliance and service.
(10) After the culmination of the programme, they can avail their job opportunity in different fields of life such as education institutions, TV, Radio Kashmir Srinagar,Journalism,electronic media as well as in private education institutions.

Department of Computer Applications

SKILL COURSE

Semester 1st

WDP-1: Internet Basics and HTML

- Gain a comprehensive understanding of how the Internet works, including key concepts such as IP addresses, DNS, and protocols like HTTP/HTTPS
- Understand the structure and functioning of the World Wide Web, web servers, and web clients.
- Learn the foundational structure of HTML documents, including the use of tags, attributes, and elements.
- Understand the hierarchy and proper nesting of HTML elements to create well-structured web pages.

Semester 2nd

WDP-2: Java Script and CSS Basics

- Learn to integrate JavaScript and CSS to create dynamic and interactive web pages.
- Understand how JavaScript can manipulate CSS properties and classes to create visual effects.
- Apply JavaScript and CSS skills to develop simple web projects.
- Enabling students to build interactive and visually appealing web pages.

Semester 3rd

WDP-3: Introduction to PHP and MYSQL

- Learn to connect PHP scripts to a MySQL database using extensions like MySQLi and PDO.
- Understand how to perform database operations (CRUD) from PHP scripts.
- Equip students with foundational skills in PHP and MySQL, enabling them to build dynamic, data-driven web applications.

COURSE SPECIFIC OUTCOMES

At the end of the three semesters, the student shall be able to develop client-side scripting as well as learn and implement the server-side scripting. The Course will prepare students to become proficient web developers, capable of building robust, scalable, and user-friendly web applications.

Front-End Development:

Create well-structured and semantically correct HTML documents.

Use CSS to design and layout web pages, ensuring responsive and visually appealing interfaces.

Understand JavaScript fundamentals and write scripts to add interactivity to web pages

Back-End Development:

Understand server-side programming languages such as PHP.

Write server-side scripts to handle client requests, process data, and generate dynamic content.

Department of Chemistry

About the Department:

1st SEMESTER CHM123J ,CHM123N

FUNDAMENTALS OF CHEMISTRY AND CHEMICAL ANALYSIS-I CREDITS: THEORY-4, LAB-2 Credits

Course Objectives: • To introduce students to the basic concepts of Inorganic chemistry, chemical bonding, acid base theories and fundamental aspects of s block elements. • To understand the basic concepts of organic chemistry, electron displacements, stereo chemistry and reactive intermediates • To have knowledge about the gaseous, liquid and solid states of matter.

Learning outcomes: On completion of the course, the student should be able to: • Understand the nature of different theories of chemical bonding, MO treatment of some molecules, bonding in electron deficient molecules, strength of forces between chemical constituents and different acid

base concepts. • Understand how periodic trends affect the reaction chemistry, complexing ability of s-block elements. • Applications of s- block elements. • Recognize the key reactive intermediates in organic chemistry and understand different aspects of stereochemistry. • Understand the structural and behavioral aspects of states of matter.

2nd SEMESTER CHM223J CHEMISTRY, CHM223N

FUNDAMENTALS OF CHEMISTRY AND CHEMICAL ANALYSIS-II CREDITS: THEORY-4, LAB-2 Credits

Course Objectives: ● To introduce general trends in chemistry of p- block elements. ● To understand the scenarios Involving Alkenes, alkynes and Alkyl Halides ● To have knowledge aromaticity and aromatic substitution. ● To provide a good platform to students to understand concepts of thermodynamics.

Learning Outcomes: On completion of the course, the student should be able to: ● comprehend various aspects of p block elements ● understand basic concepts of organic reaction mechanisms. ● describe the basic principles of thermodynamics.

3rd Semester CHM322J: CHEMISTRY, CHM223N

FUNDAMENTALS OF CHEMISTRY AND CHEMICAL ANALYSIS-III Credits: Theory-4, Lab-2 Credits

Course Objectives: ● To understand the chemistry of transition elements. ● To understand the chemistry of oxygen bearing compounds. ● To understand the fundamentals of electrochemistry. ● To understand different theories of kinetics. ● To study about rates and mechanisms of chemical reactions.

Learning outcomes: On completion of the course, the student should be able to: ● Appreciate and contrast chemistry of transition elements. ● Understanding of electronic, magnetic, spectral and bonding properties of their complexes ● Applications of transition elements. ● Learn the chemistry of oxygen bearing compounds. ● Evaluate fundamentals of conduction and electrochemical cells ● Understand the kinetics of chemical processes.

4th SEMESTER CHM422J1

CONCEPTS IN ANALYTICAL CHEMISTRY CREDITS: THEORY-3, PRACTICAL-1

Course Objectives: As the course is introductory the students will study and appreciate the new methods of separation and analyses, besides learning about reporting the data with accuracy and precision. The students will also learn about quantitative methods (gravimetery, titrimetry and column chromatography) and qualitative methods (paper and thin layer chromatography) of estimation.

Learning outcomes: After completing this course, the student is expected to learn the following • Analytical chemistry and its significance and scope. • About significant figures and errors, essential for reporting data/results in scientifically correct way. • Different types of separation methods and their scope and limitations. • Theory of gravimetry and titrimetry, which are important component of their laboratory courses • Different methods of chromatography, its working and scope.

4th Semester CHM422J2

SELECTED TOPICS IN INORGANIC CHEMISTRY Credits: Theory-4, Lab-2

Course Objectives: This course covers basics and theories of bonding for coordination complexes and a brief discussion on bioinorganic chemistry. To provide students with basic understanding of redox and nuclear chemistry and understand the chemistry of inner transition elements.

Learning outcomes: • Provide basic understanding of coordination compounds, their bonding and applications. • Importance of metal ions in biology and knowledge of various enzymes and their activities • Understand the structure and importance of metalloproteins, synthetic oxygen carrier model compounds • Understand balancing of redox reactions, trends in standard potentials, redox indicators, nuclear forces and application of radioisotopes • Understanding of electronic, magnetic, and spectral properties of inner transition elements and applications ofthese elements

4th Semester CHM422J3

STEREOCHEMSTRY AND REACTION MECHANISM Credits: Theory-4, Tutorials-2

Course Objectives: To impart advanced knowledge of stereochemistry and stereochemical implications of mechanisms based on addition to double bonds, carbonyl groups, pericyclic and rearrangement reactions. **Learning outcomes:** Students will be expected to gain knowledge about basic concept of symmetry and chirality in the molecules, their spatial arrangement, properties and reactivity of stereoisomers, importance of the configuration of chiral organic compounds which

will be useful in pharmaceutical industry where chemists works on stereoselective synthesis of compounds. The students will also gain knowledge about reaction mechanism and stereochemistry involved in formation of products. The knowledge about controlling the stereochemical pathways of the reaction is very useful in pharmaceutical industry. The broad spectrum of pericyclic reactions involved in organic synthesis, mechanism and applications

4th SEMESTER CHM422N

CONCEPTS IN ANALYTICAL CHEMISTRY CREDITS: THEORY-3, PRACTICAL-1

Course Objectives: As the course is introductory the students will study and appreciate the new methods of separation and analyses, besides learning about reporting the data with accuracy and precision. The students will also learn about quantitative methods (gravimetery, titrimetry and column chromatography) and qualitative methods (paper and thin layer chromatography) of estimation.

Learning outcomes: After completing this course, the student is expected to learn the following • Analytical chemistry and its significance and scope. • About significant figures and errors, essential for reporting data/results in scientifically correct way. • Different types of separation methods and their scope and limitations. • Theory of gravimetry and titrimetry, which are important component of their laboratory courses • Different methods of chromatography, its working and scope.

5th SEMESTER CHM522J1

ENVIRONMENTAL & GREEN CHEMISTRY CREDITS: THEORY-3, LAB-1

Course Objectives: To impart understanding of Chemistry in Environment and green chemistry principles and applications.

Learning outcomes: • The students will acquire knowledge of: 1. Principles of green chemistry. • 2. Alternative reaction conditions and their applications. • 3. Designing greener processes. • 4. Chemistry of environmental segments. • 5. Chemistry, monitoring and control of environmental contaminants. • 6. Chemistry behind treatment applications

5th SEMESTER CHM522J2:

SELECTED TOPICS IN PHYSICAL CHEMISTRY THEORY, Theory-4, Tutorials-2

Course Objectives: ● To make students to learn the applied aspects of thermodynamics. ● To introduce the basic concepts of phase equilibria and learn how to sketch and read the phase diagrams of one and two component systems. ● To introduce some basic physico-chemical aspects of, solid-liquid, liquid-liquid and liquid-air interface. ● To introduce the qualitative and quantitative aspects of photochemistry

Learning outcomes: ● Students shall learn to derive some important equations of thermodynamics and understand the implications of these equations. ● Students shall be able to make use of thermodynamic relations for the thermochemical estimations ● Students will understand the basic concepts of Phase transformations and Phase rule ● Students shall be able to sketch and read the phase diagrams of one and two component systems ● Understand some basic concepts of surface chemistry, thermodynamic implications of equilibrium across solid/liquid, solidgas and liquid-air interfaces, like adsorption. ● To understand the basic aspects of interactions of light with matter and laws of photochemistry.

5th SEMESTER CHM522J3

ADVANCED INORGANIC CHEMISTRY CREDITS: THEORY-4, TUTORIALS-2

Course Objectives: To provide exposure of various biomolecules containing metal ions that comprises many important enzymes and proteins and fundamental understanding of organometallic compounds and pi-acid complexes. Furthermore, students will have a basic understanding of Molecular symmetry. Learning outcomes: After completing this course, the student is expected to learn the following • Importance of metal ions in biology and knowledge of various enzymes and their activities • Advanced applications of bioinorganic chemistry in the field of medicine. • Basic understanding of organometallic compounds, preparation, properties and structural analysis of pi-acid complexes • Knowledge of molecular symmetry and point groups.

5TH SEMESTER CHM522N

ENVIRONMENTAL & GREEN CHEMISTRY CREDITS: THEORY-3, LAB-1

Course Objectives: To impart understanding of Chemistry in Environment and green chemistry principles and applications.

Learning outcomes: • The students will acquire knowledge of: 1. Principles of green chemistry. • 2. Alternative reaction conditions and their applications. • 3. Designing greener processes. • 4. Chemistry of environmental segments. • 5. Chemistry, monitoring and control of envir

6th SEMESTER CHM622J1: CHEMISTRY

BIOLOGICAL CHEMISTRY CREDITS: THEORY-3, TUTORIAL-1

Course Objectives: • To provide exposure of various biomolecules containing metal ions that comprise many important. • To understand structure of various biomolecules. • To understand the working of ATP and providing us the energy on demand. • To understand the membrane transport and nerve conduction process.

Learning outcomes: On completion of the course, the student should be able to: • Importance of metal ions in biology • Knowledge of various enzymes and their activities • Advanced applications of bioinorganic chemistry in the field of medicine • Knowledge of various bioorganic molecules • Knowledge of biological process in the realm of thermodynamics and ion transport

6th SEMESTER CHM622J2

SELECTED TOPICS IN ORGANIC CHEMISTRY CREDITS: THEORY-4, LAB-2

Course objectives: To impart knowledge to the students about molecular rearrangement reactions, general organic chemistry, heterocyclic chemistry, natural products and medicinal chemistry.

Learning Outcome: On completion of the course the student should be able to: • Understand the fundamentals of various types of organic reactions, their mechanism and applications. • Importance of heterocyclic chemistry and cyclization processes • Recognize the importance of the chemical aspects of rearrangements, natural products and chemistry involved in medicine.

6th SEMESTER CHM622J3:

ADVANCED CONCEPTS IN PHYSICAL CHEMISTRY CREDITS: THEORY-4, PRACTICALS-2

Course Objectives: ● To introduce the concepts of fast reactions and kinetic investigations of fast reactions. ● To make students to understand the reason for need and role of solvent and solvent characteristics on the kinetics of solution phase reactions. ● To introduce the basic concepts of enzyme kinetics ● To introduce students to basic concepts of statistical thermodynamics and learn how to use of concepts for estimation of thermodynamic parameters of simple systems. ● To introduce the basic concepts of X-Ray crystallography and interpretation of the X-Ray diffractograms.

Learning outcomes: ● Students shall learn what are fast reactions and how the kinetic investigations are carried out for such reactions. ● Students will learn about the ways a solvent shall affect the kinetics of reactions in solution ● Students shall appreciate the difference between the solution and gas phase reactions ● Learn how to use the activated complex theory for the estimation of rate constants for gas phase, solution phase and surface reactions. ● Students shall understand how reaction kinetics of ionic reactions can be changed through use of salt addition and solvent change ● Students shall learn the basic concepts of statistical thermodynamics and how to use these concepts for the estimation of thermodynamic parameters of simple systems ● Students learn the

6th SEMESTER CHM622N:

BIOLOGICAL CHEMISTRY CREDITS: THEORY-3

Course Objectives: • To provide exposure of various biomolecules containing metal ions that comprise many important. • To understand structure of various biomolecules. • To understand the working of ATP and providing us the energy on demand. • To understand the membrane transport and nerve conduction process.

Learning outcomes: On completion of the course, the student should be able to: • Importance of metal ions in biology • Knowledge of various enzymes and their activities • Advanced applications of bioinorganic chemistry in the field of medicine • Knowledge of various bioorganic molecules • Knowledge of biological process in the realm of thermodynamics and ion transport.

Department of Geography

1st Semester,

Title: Physical Geography

Course Outcome:

This course offers an in-depth study of physical geography, covering the Earth's structure, geological processes, and dynamic systems such as plate tectonics, earthquakes, and landform development. It also delves into climatology and oceanography, exploring atmospheric phenomena, oceanic features, and their global significance.

Learning Outcome:

Students will acquire a comprehensive understanding of Earth's physical systems, including geological structures, climatic patterns, and oceanic processes. They will analyze natural phenomena, such as earthquakes and cyclones, understand the development of various landforms, and evaluate the significance of oceans as future resource reserves.

2nd Semester

Title: Human Geography

Course Outcome:

This course provides an extensive exploration of human geography, focusing on the relationships between people, places, and environments. It covers population dynamics, cultural diversity, and the distribution of human activities. Additionally, it addresses global development patterns and the concept of sustainability.

Learning Outcome:

Students will gain insights into the nature and significance of human geography, understanding population trends, migration, and cultural distributions. They will explore concepts of development, sustainability, and human adaptation, enabling them to analyze global patterns of human activity and regional variations in development.

3rd Semester

Title: Geographical Thought

Course Outcome:

This course explores the evolution and foundational concepts of geography, examining key paradigms, methodologies, and significant contributions from various civilizations and geographical thinkers. It fosters an understanding of the discipline's changing nature, dualisms, and schools of thought, providing a comprehensive view of geography's development and its modern-day relevance.

Learning Outcome:

Students will gain an understanding of geography's historical development, key concepts, and various approaches. They will analyze geographical paradigms, the impact of historical theories, and the contributions of different cultures and scholars, leading to a nuanced understanding of the discipline's evolution.

4th Semester

Title: Geomorphology

Course Outcome:

This course offers an in-depth study of geomorphology, exploring the processes, principles, and theories that shape the Earth's surface. It covers the historical development of geomorphology, key concepts like uniformitarianism and dynamic equilibrium, and the influence of geomorphic agents such as fluvial, aeolian, and glacial forces.

Learning Outcome:

Students will gain a comprehensive understanding of geomorphological processes and landform evolution, examining major theories, models, and the concept of time and space in geomorphology. They will develop the ability to critically analyze the factors controlling landform development and apply this knowledge to interpret and predict geomorphic changes in diverse environments.

4th Semester

Title: Fundamentals of Remote Sensing

Course Outcome:

This course provides a thorough examination of remote sensing, including its development, types, and data acquisition stages. It covers electromagnetic radiation principles, interactions with the atmosphere and Earth's surface, and resolution types. The course also explores aerial photography, image interpretation techniques, and digital image processing.

Learning Outcome:

Students will understand remote sensing concepts, including the different types of sensors and platforms, and how electromagnetic radiation interacts with various surfaces. They will gain practical skills in interpreting aerial photographs, processing digital images, and performing radiometric and geometric corrections. Proficiency in image enhancement and classification methods will be developed.

4th Semester

Title: Urban Geography

Course Outcome:

This course offers a detailed exploration of urban geography, including urbanization processes, land use theories, and environmental issues. It examines global urban growth trends, urban sprawl, and the concept of smart cities.

Learning Outcome:

Students will gain insights into urban geography, understanding urbanization processes, land use theories, and environmental challenges such as pollution and waste management. They will explore urban growth patterns and trends, particularly in India, and become familiar with policies and master plans shaping urban development. Proficiency in analyzing urban issues and strategies for sustainable development will be developed.

5th Semester

Title: Economic Geography

Course Outcome: This course provides a comprehensive study of economic geography, focusing on economic activities, industrial location theories, and regional development. It includes an analysis of global and Indian industrial policies, market linkages, and international trade theories.

Learning Outcome: Students will acquire knowledge of economic geography, including economic activities, industrial location theories, and global and regional industrial patterns. They will understand India's industrial policies and trade theories, and gain practical insights into J&K's economy through a tutorial and a field visit.

5th Semester

Title: Hydrology and Oceanography

Course Outcome:

This course provides a comprehensive overview of hydrology and oceanography. It covers fundamental hydrologic concepts, including runoff processes and groundwater dynamics, as well as oceanographic aspects such as ocean topography, water properties, and marine resources. It also addresses ocean hazards and the impacts of climate change on marine environments.

Learning Outcome:

Students will understand key hydrological processes, including the hydrologic cycle, runoff mechanisms, and groundwater movement. They will analyze oceanographic features, including ocean floor topography and water dynamics, and assess marine deposits, resources, and hazards. The course will also enable them to evaluate the effects of climate change on oceans, including sea level rise and ocean acidification.

5th Semester

Title: Glaciology

Course Outcome:

This course provides a detailed study of the cryosphere, focusing on glaciers, their distribution, and their role in climate science. It covers glacier dynamics, including mass balance, flow, erosion, and landforms, and addresses glacier-related hazards and their environmental impacts. Special emphasis is placed on Himalayan glaciers and methods for studying glacier hydrology.

Learning Outcome:

Students will understand the significance of the cryosphere and global glacier distribution, including classification and the role of glaciology in climate science. They will learn about glacier mass balance, movement, and erosion, and the impact of glaciers on the environment. The course will also cover the inventory and significance of Himalayan glaciers, paleoclimatic reconstruction, and techniques for studying glacier hydrology.

6th Semester

Title: Climatology

Course Outcome:

This course offers a comprehensive understanding of climatology, covering key concepts such as atmospheric structure, heat distribution, and global climate patterns. It delves into temperature variations, air masses, and monsoon theories, providing students with a solid foundation in atmospheric science and climate classification.

Learning Outcome:

Students will grasp the fundamental concepts and scope of climatology, including the composition and structure of the atmosphere. They will understand temperature distribution, atmospheric circulation patterns, and the origins and types of jet streams and air masses. Additionally, students will learn to apply climatic classification schemes and analyze the theories of the Indian monsoon and the significance of Western disturbances.

6th Semester

Title: Fundamentals of GIS & GPS

Course Outcome:

This course provides an in-depth understanding of Geographic Information Systems (GIS) and Global Positioning Systems (GPS), focusing on their concepts, components, and applications. It covers spatial data analysis, geospatial databases, and the fundamentals of geodesy, offering practical knowledge in modern geospatial technologies.

Learning Outcome:

Students will understand GIS concepts, data types, and spatial analysis techniques, gaining skills in geospatial database management and the latest GIS technology trends. They will learn about GPS development, components, and positioning fundamentals, along with error sources and real-world applications in fields such as natural resource management, land surveying, and civil engineering.

6th Semester

Title: Regional Planning & Sustainable Development

Course Outcome: This course provides a comprehensive exploration of regional planning and sustainable development, covering regional concepts, planning processes, and the history of regional planning in India. It also delves into sustainable development frameworks and global environmental issues.

Learning Outcome: Students will understand regional planning concepts, levels, and approaches, with a focus on India's planning history and problem regions. They will also grasp sustainable development principles, key frameworks like MDGs and SDGs, and analyze global environmental issues such as carrying capacity and ecological footprints.

DEPARTMENT OF ARABIC

LEARNING OUTCOME OF THE PROGRAMME

• Demonstrate a set of basic skills in literary & linguistic communications & explication of literary practices & process with clarity.

• Demonstrate a coherent & systematic knowledge of the field of Arabic literature & other literature translated into Arabic, showing & understanding of the contemporary world.

• Cultivate ability to look at & evaluate the language of literary texts as field of study & as part of the wider network of the local & global culture by using digital resources

• Display knowledge to cultivate a better understanding of values- both in the use of different language registers & literary forms & geners to arrive at transparent understanding of values of life at all stages

• Recognize employability options in Arabic literature & language studies programme as part of skill development & as a carrier avenues open to graduates in today's global world such as professional writing, translation, teaching Arabic at different levels, mass media, journalism, & personality development.

COURSE TITLE : ARABIC LITERATURE; Elementary course in Arabic (Major/Minor)

COURSE OUTCOME

Semester I: In this student will

CO1: recognize, read and write Arabic Alphabets correctly

CO2: learn the basic vocabulary of things around him/her in Arabic

CO3: understand the basics of Arabic Writing

CO4: learn simple constructions in Arabic Language

Semester II: Arabic Lierature; Essential Arabic (Major/Minor)

In this student will:

CO1: learn elementary grammar

CO2: understand the structure of nominal and verbal sentences in Araic

CO3 : speak, read and write the language more efficiently

CO4 : learn usage of Arabic Numerals.

Semester III: Arabic Lierature; Proficiency in Arabic (Major/Minor)

In this student will be able to:-

CO1, read and understand the intermediate level of Arabic text and grammar.

CO2: improve the communicative skills in Arabic.

CO3 : improve the accuracy, fluency and art of language expression.

Semester IV: course title Arabic Litrature J1/Minor (Arabic

Text and applied Grammar.1)

In this student will be able to:-

After completing the course students will be able to:-

CO1: learn practical and applied grammar.

CO2 : translate the test from Arabic into English and vice-versa.

CO3 : gain efficiency in Arabic morphology and syntax.

Semester IV: Arabic literature J 2 (Introduction to Contemporary Arab World)

In this student will be able to:-

CO1 : gain acquaintance with Arabic language, geography and culture of Arab world.

CO2: understand Arab economy and its influence on the World trade.

CO3 : acquire the knowledge of important organizations and educational institutions of modern Arab World.

Semester 1V: Arabic literature J 3(modern Arabic Prose)

In this student will be able to:-

CO1: Comprehend the art, style, techniques, and language used by modern prose writers.

CO2: explore the literary master pieces of some renowned poets and prose writers.

CO3: understand the different genres of prose and poetic literature produced by modern Arabic writers.

CO4:comprehend the most prevalent styles and themes in the modern Arabic literature along with their significance.

Semester V: Arabic text and applied grammar II (J1)

In this student will be able to:-

CO1: Learn advanced practical and applied grammar.

CO2: Translate the text from Arabic into English and vice versa of advanced level.

CO3: Gain efficiency in advanced Arabic grammar.

Semester V: Literary history of Arabic (Classical to Modern) J 2

In this student will be able to:-

CO1: Gain knowledge of Arabic prose writers and poets during pre-Islamic and Islamic period.

CO2: Understand development of Arabic literature during Umayyad period and Abbasid periods

CO3: Learn about the history, origin and development of the short story, novel and drama in Arabic.

Semester V: Modern Arabic Prose (J 3)

In this student will be able to:-

CO1: Gain a comprehensive understanding of evolution of modern Arabic poetry and its various genres.

CO2: Comprehend the emergence, role and significance of new literary schools and trends in shaping modern Arabic poetry.

CO3: Appreciate the contribution of modern Arabic poets to the Arabic poetry, and seek inspiration from their creative poetic pursuits.

Semester VI: Arabic syntax and morphology (J 1)

In this student will be able to:-

CO1: Demonstrate the knowledge and concept of Arabic syntax and structure of language.

CO2: Create and structure text that effectively conveys the ideas

CO3: Evaluate the written text grammatically.

CO4: Have an understanding of the advanced concepts in morphology and syntax.

CO5: Identify and analyse the word and sentence structure of Arabic language.

CO6: Have an understanding of morphology as an important branch of linguistics.

Semester VI: Mahjary Arabic literature (J 2)

In this student will be able to:-

CO1: Understand the distinct features of Mahjar literature in Arabic.

CO2: Estimating the scope of various genres of Mahjar literature in Arabic.

CO3: Know about the new literary schools and trends in American Arabic literature.

CO4: Asses the influence of western literature and culture in Mahjary literaure.

CO5: Understand the style of writing of Mahjary poets and prose writers by reading some of their texts.

Semester VI: Arabic literature in India (J 3)

In this student will be able to:-

CO1: Know the historical connections between India and the Arab world since ancient times.

CO2: Understand the emergence, and development of Arabic language and literature in India.

CO3: Gain knowledge of some famous literary works produced by Indian Arabic writers.

Department of History

The B.A. (Hons.) History is a four-year (8 Semester) full time programme. This programme aims at developing an understanding of the growing discipline of History and promoting skill-based education. The objective of this programme is to prepare the students with a new vision to all the Under Graduate courses of History. It offers students access to recent historiography in the field organized in a pedagogical form that is accessible and interesting. It is structured for students in an inter-disciplinary programme providing them with a concise and thorough introduction to the discipline of History and remaining sensitive to the cognate discipline that they are also studying. It is designed to bring out the best intellect of the student and also allow the student to keep pace with the contemporary development.

The total number of seats for admission to the B.A. (Hons.) History programme shall be 40.

The structure and duration of the either three or four years undergraduate programmes of study with multiple entry/exit options within this period with appropriate certifications as proposed by the NEP 2020 include:

- a certificate after completing 1 year (2 semesters) of study in the chosen discipline or field, including vocational and professional areas;

- a diploma after 2 years (4 semesters) of study;

- a Bachelor's degree after a 3-year (6 semesters) programme of study;

- a Bachelor's degree with honours after a 4-year (eight semesters) programme of study;

- a Bachelor's degree 'with research' after a 4-year (eight semesters) programme of study if the student completes a rigorous research project in his/her the major area(s) of study as specified by the College.

On completion of the course students are expected to have acquired the skills of critical thinking, rational enquiry, effective communication, and exploring the relationship between the past and the present while remaining sensitive to the larger historiographical debates that is important in the study of human society. The learning outcomes that a student should be able to demonstrate on completion of a degree level programme in History are given below:

Course Learning Outcomes:

After successful completion of the course the learners are expected:

- To understand the significance of various categories of sources.
- To understand the origin, growth and development of various cultures in Indian subcontinent.
- To appreciate the importance of various processes of interaction and accommodation in the making of Indian plural culture.
- To appreciate the value of heritage.
- Engage with the medieval period in Indian History
- Develop an understanding of power relations and administrative structures
- Understand the negotiation between the monarchy and nobility that accounted for changes in Polity and administrative mechanisms
- Evaluate the rise and working of supra-regional kingdoms and emergence of regional resistance to empires.

- Understand socio-economic forces that shaped the medieval ways of life.
- Develop proper understanding of the historical processes and dynamics that led to the establishment of British rule in India
- Understand the nature and purpose of British rule in India
- Develop a nuanced understanding of the different events and episodes in Modern India history by locating them [events/ episodes] in a space-time context.
- Appreciate the contribution of masses and leaders in the struggle for freedom
- Understand the significance of various categories of sources for writing the history of ancient Kashmir
- Develop an understanding of the origin and growth of various cultures, civilizations, kingdoms and empires of ancient Kashmir.
- Know about the nature of relations between Kashmir and the neighbouring regions
- Develop understanding among learners about the political and administrative setup in medieval Kashmir.
- Appreciate the role of devotional movements in making composite culture in medieval Kashmir.
- Develop a holistic understanding of the changes and continues in economy, society and culture throughout the period.
- Critically engage with some of the important contemporary political, economic and social issues.
- Appreciate the contribution of the common masses and political leaders in bringing changes.

Department of Education

The Bachelor of Arts in Education program is designed to prepare students for careers in teaching and education-related fields. These program outcomes are designed to ensure that graduates of a Bachelor of Arts in Education program are well-prepared to become effective educators and make a positive impact on the lives of their students. This Program prepares them for Careers in Teaching, Educational Administration, Curriculum Development and other related fields in the Education Sector.

PO No.	Program Outcomes
PO1	**Critical Evaluation:** Graduates will be able to Critically analyze the reports of various committees and commissions, national policies of education. Students are also encouraged to evaluate the

	contribution of western and eastern educators and national leaders. This Program enables to comprehend the development in physical, cognitive, social and emotional areas, contemporary issues and educational policies of education system in India.
PO2	**PO2 Pedagogical Knowledge:** Graduates will possess a solid foundation in educational theory and pedagogy, including knowledge of various teaching methods, curriculum development, and assessment techniques.
PO3	**Differentiated Instructions:** Graduates will be able to adapt their teaching methods to meet the diverse needs of students, including those with varying abilities, learning styles, and backgrounds.
PO4	**Technology Integration:** Given the increasing role of technology in education, Graduates will be able to integrate educational technology tools and resources into their teaching practices.
PO5	**Cultural Competence:** Graduates will be culturally competent, understanding and respecting the diverse backgrounds and become sensitive to others by appreciating cultural differences.
PO6	**Self-Sufficiency and Life-long Learning:** Developing self-sufficiency, sincerity, independent thinking as education is a lifelong process for empowering the students to face all challenges in their future endeavours.
PO7	**Data Collection and Analysis skills:** Graduates will have a strong grasp of fundamental statistical concepts and and be proficient in collecting, organizing educational data using statistical methods.
PO8	**Understanding of Educational Psychology:** Graduates will be equipped with a deep understanding of how Psychological Principles are applied to the field of Education. Students will be able to conduct Research related to Educational Psychology including Data Collection and Analysis to inform educational practices and policies.
PO9	**Curriculum Design:** Graduates will learn how to design Curriculum, lesson plans and Teaching Strategies that cater to different learning styles and abilities.
PO10	**National Integration, International Understanding and Peace:** Students will be able to Develop concern for the society, nation, as well as promote the feelings of internationalism. Various educational policies for the eradication of illiteracy,

	equalization of educational opportunity, UEE, inclusion, population education are taught in order to sensitize the students.

Course Outcome

Course Name	Expected Course Outcome
Educational Philosophy	The paper deals with the Philosophical base of Education. The content of the course will abreast the students with the concept of Philosophy and its influence on the Education System. The Course will enable the students to understand the educational implications of different schools of Philosophy. The paper also aims at enabling the students to understand the Educational contribution of different educational thinkers and their relevance in the contemporary Education Systems.
Educational Sociology	The course deals with the Sociological base of Education. The course will enable the students to understand the influence of Sociology on Education and the contribution of different sociologists and their relevance to the contemporary education system. The content will also abreast the students with the culture, dimensions of culture and role of Education vis-a-vis culture. The course will also make the students understand the social interaction process and the Elements of Social Structure.
Psychological Foundation in Education	The Course shall make the learners understand about the concept and theories of learning, understand the various theories and tests of intelligences, abreast the students with dynamics and theories of personality, understand the growth and development of adolescents and various defense mechanisms and help the learners to get practical experience of preparing the seminar presentation.
J1: Indian Education in Historical Perspective	Shall make the students understand about the education system in India during Ancient and Medieval period ¬ Shall abreast the learners about different educational policies during British period ¬ Shall make the students understand the recommendations of various committees and commissions during post-independence period ¬ Shall help the learners to prepare the seminar presentation and book review.
J2: Inclusive Education	Shall make the students understand about the nature of inclusive education ¬ Shall make the students understand exceptionality and different types of impairment ¬ Shall help the learners to get knowledge about the policies and legislation governing for inclusion ¬ The learners shall understand different Teaching and evaluative strategies in inclusive education.
J3: Environmental Education	The Course Content shall help the learners to explore the knowledge of environmental education and it is importance in present life. ¬ Shall make the students understand the environmental hazards and its consequences in our day to day life. ¬ Shall develop environmental awareness and ethics among the learners that promote an understanding of the ecological interdependence of the social and economic spheres. ¬ Shall help the learners to understand various environmental

	legislations. ¬ Shall help the learners to get practical knowledge about the environment.
J1: Educational Technology & ICT	Educational Technology & ICT" generally aim to equip students with the knowledge and skills necessary to effectively integrate technology into educational settings. Demonstrate proficiency in using various educational technologies and ICT tools, Design and implement technology-enhanced learning experiences that align with educational goals and curriculum standards. Integrate ICT tools to support differentiated instruction and address diverse learning needs. Apply principles of instructional design to create effective and engaging e-learning materials. Foster a mindset of lifelong learning and adaptability in the rapidly changing field of educational technology
J2: Issues and Trends in Education.	The course shall develop a clear understanding of the contemporary challenges, policies, and innovations within the Indian education system. Understand the historical evolution of the Indian education system. Critically examine key educational policies and reforms in India. Assess the effectiveness of innovative teaching methods and curricular reforms. Analyze challenges and strategies for integrating students with diverse learning needs into mainstream education. Analyze issues related to educational administration, funding, and policy implementation.
J3: Health Education	Understand the basic principles and concepts of health education and health promotion. Explain the importance of health education in preventing disease and promoting wellness. Promote health literacy among diverse populations to enable informed health decisions. Conduct community health assessments to identify health needs and resources. Understand the impact of environmental factors on health and well-being.
JI: Educational Guidance & Counselling	Shall make the students understand key theories and models of guidance and counselling. Understand the role and importance of guidance and counselling in promoting student development and well-being. Develop and demonstrate effective counselling skills, including active listening, empathy, and questioning techniques. Provide effective career guidance, including assessment of interests, skills, and career options. Implement strategies to help students improve study skills, time management, and academic performance. Develop self-care strategies to maintain personal well-being
J2: Creativity & Education	Grasp the fundamental concepts, theories, and models of creativity. Recognize the significance of creativity in enhancing learning and fostering student development. Identify and address challenges that hinder creativity in educational settings. Encourage collaborative learning and creative problem-solving among students.
J3: Social Psychology	understanding how individuals' thoughts, feelings, and behaviors are influenced by the social environment. Grasp fundamental concepts and theories of social psychology, including social cognition, social influence, and social behavior. Understand Group Dynamics. Analyze factors affecting attraction, relationships, and interpersonal communication.

EDU722J1: Teacher Education	Prepare future educators with the knowledge, skills, and dispositions necessary to effectively teaching. Develop Pedagogical Skills. Develop effective classroom management techniques to create a positive learning environment. to prepare future teachers to be effective, reflective, and responsive educators.
EDU722J2: Methodology of Research in Education	Shall equip students with the necessary skills to design, conduct, and analyze educational research. Grasp the basic principles and philosophies underlying educational research. Design rigorous and ethical research studies. Employ various data collection methods. Analyze qualitative and quantitative data using appropriate statistical and thematic analysis techniques.
EDU722J3: Measurement & Evaluation in Education	Students will be able to define and explain key concepts related to measurement and evaluation in education and develop the ability to design and implement various assessment tools
EDU822J1: Educational Administration and Supervision	the course outcomes should focus on developing leadership, management, and supervisory skills including decision-making, problem-solving, and conflict resolution, tailored to the educational context and to understand the roles, responsibilities and duties of educational administrators and supervisors
EDU822J2: Value Education	Exploration of the concept of values, including moral, ethical, spiritual, and social values, and their importance in personal and professional life and to instill moral and ethical values in students, fostering their overall development as responsible and conscientious individuals.
EDU822J3: Gender Education	Understanding the basic concepts of gender, sex, gender identity, and gender roles. Addressing the issues of gender-based violence, including its causes, effects, and strategies for prevention and intervention. Developing practical approaches and initiatives to foster gender equality in various spheres of life,
EDU122S: Early Childhood Care and Education	The course is designed to provide students with the knowledge, skills, and understanding necessary to support the holistic development of young children; Study of the physical, cognitive, social, and emotional development of children from birth to eight years, with a focus on the stages of development and the factors that influence growth and learning.
EDU022I Education MD	The course will enable the students to understand the objectives of Education at different levels of Education. The content will also abreast the students with the recommendations of National Education Policies on different stages of Education.

Department of Veterinary Technology

Subject Veterinary Technology was introduced by Higher Education Department Jammu and Kashmir after Government of India notified National Educational Policy 2020, wherein emphasis was laid on the skill development, entrepreneurship and employment generation oriented curricula. After allocation of the post by JKHED, Department of Veterinary Technology with permanent faculty member was established in Government Degree College Tral in 2024, which offers following Skill Enhancement Courses 2+2 credits each to its students in first three semesters of FYUG programme:

1. **DAIRY TECHNOLOGY**

Learning Objective: To impart knowledge and skill about milk composition, its quality and preservation, To impart knowledge and skill about dairy operations and dairy plant sanitation, To impart knowledge and skill about milk product processing techniques and quality control of milk products

Learning Outcome: Knowhow about basics of milk composition and its quality, Knowhow and skill development about different dairy plant practices, Skill up-gradation about milk product processing and their quality control

2. **COMMERCIAL BROILER FARMIMNG**

Learning objective: To deal with different scientific management practices of commercial broilers for higher production and better profitability.

Learning outcome: Development of poultry management skills among stakeholders; Generation of employment among the beneficiaries

3. **SHEEP AND GOAT FARMING**

Learning objectives: Imparting scientific knowledge to different beneficiaries in order to equip budding entrepreneurs with a comprehensive skill of sustainable and profitable sheep and goat farming.

Learning outcome: Development of technical know-how about sheep and goat farming, Improvement in practical skill needed for sheep and goat management on scientific lines. Learn to analyse the economics and monitor profit-loss of these start-ups. Employment and income generation