K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

SCHOOL OF HUMANITIES

(SOHS)

Programme Handbook

(Programme Structure and Evaluation Scheme)

Bachelor of Arts (Honours / Honours with Research) in Economics

Programme Code: 214

Academic Year-2024-25

FOUR YEAR UNDERGRADUATE PROGRAMME

Approved in the 34th Meeting of Academic Council Held on 29th June 2024

Contents

1.Preface

At K.R Mangalam University, we believe in the transformative power of education. Our curriculum is designed to equip the learners with the knowledge, skills, and competencies necessary for success in their chosen fields and to prepare them for the challenges of the ever-evolving global landscape. The foundation of our curriculum is rooted in a Learning Outcomes-Based Curricular Framework (LOCF) that ensures that the programmes are designed with clear learning objectives in mind, guiding the teaching and learning process to facilitate learner's growth and achievement. Our goal is to foster a holistic educational experience that not only imparts disciplinary knowledge but also nurtures critical thinking, problem-solving abilities, communication skills, and lifelong learning. The curriculum is aligned with the needs of the industry and the job market and is flexible enough to adapt to changing trends and technologies. It integrates cross-cutting issues relevant to professional ethics, gender, human values, environment and Sustainable Development Goals (SDGs). All academic programmes offered by the University focus on employability, entrepreneurship and skill development and their course syllabi are adequately revised to incorporate contemporary requirements based on feedback received from students, alumni, faculty, parents, employers, industry and academic experts. We are committed to implementing the National Education Policy (NEP) 2020 in its entirety, and to creating a more inclusive, holistic, and relevant education system that will prepare our students for the challenges of the 21st century. With the focus on Outcome-Based Education (OBE), our university is continuously evolving an innovative, flexible, and multidisciplinary curriculum, allowing students to explore a creative combination of credit-based courses in variegated disciplines along with value-addition courses, Indian Knowledge Systems, vocational courses, projects in community engagement and service, value education, environmental education, and acquiring skill sets, thereby designing their own learning trajectory.

In recognition of the evolving landscape of higher education and the dynamic needs of our students and society, our institution has a long-standing commitment to academic excellence and the holistic development of our students. In pursuit of this commitment, we recognize the pressing need to offer an extended undergraduate program that goes beyond the conventional three-year model, providing students with a more profound and comprehensive education in the field of Economics. In line with the National Education Policy 2020's vision of implementing a curriculum for undergraduate programme emphasis on core content, skills, values, and the enhancement of abilities. The ultimate objective of this syllabus is to equip students with an in-depth understanding of the subject, thereby expanding their employment opportunities at all stages of their academic journey. We recognize that education is a lifelong journey therefore, the four-year undergraduate program is designed not only to prepare our students for immediate career success but also to instill in them a passion for continuous learning, adaptability, and resilience in the face of ever-evolving global challenges. This Programme Handbook serves as a roadmap for students and provides detailed information about the structure, learning outcomes, courses offered and evaluation methods. We encourage all students to utilize this handbook as a valuable resource throughout their academic journey.

2. NEP-2020: Important features integrated in the curriculum

K.R. Mangalam University has adopted the National Education Policy NEP-2020 to establish a holistic and multidisciplinary undergraduate education environment, aiming to equip our students for the demands of the 21st century. Following the guidelines of NEP-2020 regarding curriculum structure and duration of the undergraduate programme, we now offer a Four-Year Undergraduate Programme with multiple entry and exit points, along with re-entry options, and relevant certifications.

• **UG Certificate** after completing 1 year (2 semesters with the required number of credits) of study, and an additional vocational course/internship of 4 credits during the summer vacation of the first year.
• **UG Diploma** after completing 2 years (4 semesters with the required number of credits) of study, and an additional vocational course/internship of 4 credits during the summer vacation of the second year.
• **Bachelor's Degree** after completing 3-year (6 semesters with the required number of credits) programme of study.
• 4-year **Bachelor's Degree (Honours)** with the required number of credits after eight semesters programme of study.
• Students who secure 75% marks and above in the first six semesters and wish to undertake research at the undergraduate level can choose a research stream in the fourth year. Upon completing a research project in their major area(s) of study in the 4th year, a student will be awarded **Bachelor's Degree (Honours with Research)**.

Advantage of pursuing 4-year Bachelor's degree programme with Honours/Honours with Research is that the Master's degree will be of one year duration. Also, a 4-year degree programme will facilitate admission to foreign universities.

S. No.	Broad Categories of Courses	Minimum Credit Requirement for Four Year UG Program
1	Major (Core)	80
2	Minor	32
3	Multidisciplinary	09
4	Ability Enhancement Course (AEC)	08
5	Skill Enhancement Course (SEC)	09
6	Value-Added Course (VAC)	06-08
7	Summer Internship	02-04
8	Research Project/Dissertation	12
9	Total	160

2.1 Categories of Courses

Major: The major would provide the opportunity for a student to pursue in-depth study of a particular subject or discipline.

Minor: Students will have the option to choose courses from disciplinary/interdisciplinary minors and skill-based courses. Students who take a sufficient number of courses in a discipline or an interdisciplinary area of study other than the chosen major will qualify for a minor in that discipline or in the chosen interdisciplinary area of study.

Students have multiple minor streams to choose from. They can select one minor stream from the available options, which will be pursued for the entire duration of the programme.

Multidisciplinary (Open Elective): These courses are intended to broaden the intellectual experience and form part of liberal arts and science education. These introductory-level courses may be related to any of the broad disciplines given below:

- Natural and Physical Sciences
- Mathematics, Statistics, and Computer Applications
- Library, Information, and Media Sciences
- Commerce and Management
- Humanities and Social Sciences

A diverse array of Open Elective Courses, distributed across different semesters and aligned with the aforementioned categories, is offered to the students. These courses enable students to expand their perspectives and gain a holistic understanding of various disciplines. Students can choose courses based on their areas of interest.

Ability Enhancement Course (AEC): Students are required to achieve competency in a Modern Indian Language (MIL) and in the English language with special emphasis on language and communication skills. The courses aim at enabling the students to acquire and demonstrate the core linguistic skills, including critical reading and expository and academic writing skills, that help students articulate their arguments and present their thinking clearly and coherently and recognize the importance of language as a mediator of knowledge and identity.

Skills Enhancement Courses (SEC): These courses are aimed at imparting practical skills, hands-on training, soft skills, etc., to enhance the employability of students.

Value-Added Course (VAC): The Value-Added Courses (VAC) are aimed at inculcating Humanistic, Ethical, Constitutional and Universal human values of truth, righteous conduct, peace, love, non-violence, scientific and technological advancements, global citizenship values and life-skills falling under below given categories:

- Understanding India
- Environmental Science/Education

- Digital and Technological Solutions
- Health & Wellness, Yoga education, Sports, and Fitness

Research Project / Dissertation: Students choosing a 4-Year Bachelor's degree (Honours with Research) are required to take up research projects under the guidance of a faculty member. The students are expected to complete the Research Project in the eighth semester. The research outcomes of their project work may be published in peer-reviewed journals or may be presented in conferences /seminars or may be patented.

3. **University Vision and Mission**

3.1 Vision

K.R. Mangalam University aspires to become an internationally recognized institution of higher learning through excellence in inter-disciplinary education, research, and innovation, preparing socially responsible life-long learners contributing to nation building.

3.2 Mission

- Foster employability and entrepreneurship through futuristic curriculum and progressive pedagogy with cutting-edge technology
- Instill notion of lifelong learning through stimulating research, Outcomes-based education, and innovative thinking
- Integrate global needs and expectations through collaborative programs with premier universities, research centres, industries, and professional bodies.
- Enhance leadership qualities among the youth understanding ethical values and environmental realities

4. About the School: The School of Humanities (SOHS), established in 2015, offers a comprehensive range of undergraduate, postgraduate, and doctoral programs across various disciplines, including English, Economics, Psychology, Political Science, and Chinese. At SOHS, we are committed to cultivating a profound understanding of the human experience through the study of literature, arts, philosophy, and related fields. Our vibrant academic community engages in dynamic discussions, critical analysis, and creative exploration, providing students with a rich educational experience that enhances both their personal and professional growth.

We are dedicated to promoting a liberal education that empowers students to develop unique perspectives, strong communication skills, refined social etiquette, and a deep sense of ethical responsibility toward society and the nation. SOHS aims to nurture intellectually astute individuals who confidently represent themselves as thought leaders on global platforms. Our distinguished faculty, experts in their respective fields, are integral to this mission, fostering an environment of academic excellence and intellectual growth.

5. **School Vision and Mission**

Vision

To attain international recognition by excelling in interdisciplinary education, research, and innovation.

Mission

- To foster cross-curricular innovation, focusing on building a strong foundation of knowledge and skills.
- To instill lifelong learning among the students.
- To advance humanitarian goals of global peace, sensitivity, and cooperation through an inclusive and dynamic curriculum.
- To cultivate analytical and critical research skills, scientific inquiry, and creative thinking in students.
- To provide opportunities to students for acquiring language proficiency and socio-cultural-philosophical awareness.

6. About the Programme: Bachelor of Arts (Hons. / Hons. With Research) in Economics

Introduction: The B.A. (Hons. with Research) in Economics is a four-year undergraduate degree designed to combine the rigorous study of economics with specialized research training. This program focuses on the in-depth exploration of economic theories, quantitative analysis, and research methodologies, equipping students with critical thinking and analytical skills for a deeper understanding of complex economic phenomena. With a student-centered approach, the faculty encourages independent thinking, critical inquiry, and a mindset geared toward questioning assumptions. This fosters not only professional development but also the personal growth of each student, preparing them for diverse career pathways.

Nature of the Programme: The B.A. (Hons. with Research) in Economics is a four-year undergraduate degree designed to provide a solid foundation in economic theory, quantitative methods, and applied economics. The programmes are designed to equip students with a deep understanding of economic principles, critical thinking skills, and analytical tools required to evaluate complex economic issues at both national and global levels.

Through a balanced mix of academic learning, research projects, and hands-on experience, the programmes cover a wide range of areas including microeconomics, macroeconomics, development economics, econometrics, public policy, and international economics. The inclusion of research-based components in the BA (Hons. with Research) track encourages students to engage with advanced research methodologies, fostering a deeper understanding of economic trends and policies. With an emphasis on interdisciplinary learning and real-world applications, these programmes prepare students for careers in academia, policymaking, financial institutions, and international organizations. Additionally, internships and exposure to contemporary economic challenges ensure that graduates are not only well-versed in economic theory but also capable of contributing to economic debates and formulating practical solutions in a rapidly changing world.

6.1. Definitions

- **Programme Outcomes (POs)**

  Programme Outcomes are statements that describe what the students are expected to know and would be able to do upon the graduation. These relate to the skills, knowledge, and behaviour that students acquire through the programme.

- **Programme Specific Outcomes (PSOs)**

  Programme Specific Outcomes are statements about the various levels of knowledge specific to the given program which the student would be acquiring during the program.

- **Programme Educational Objectives (PEOs)**

  Programme Educational Objectives of a degree Programme are the statements that describe the expected achievements of graduates in their career, and what the graduates are expected to perform and achieve during the first few years after graduation.

- **Credit**

Credit refers to a unit of contact hours / tutorial hours per week or 02 hours of lab/practical work per week.

6.2 . Programme Educational Objectives (PEO)

PEO1: Pursuing a career as a successful professional in the field of economics and engaged in entrepreneurship.

PEO2: Professionally sound and working at leadership positions

PEO3: Using universal values and adhere to the highest level of professional ethics.

PEO4: Become a responsible citizen contributing to societal development and nation-building.

6.3. Programme Outcomes (PO)

PO1: Problem-solving skills: To equip the students with advanced problem-solving abilities.

PO2: Critical thinking: Apply critical thinking ability to assess information from multiple perspectives.

PO3: Creativity: Able to generate the new ideas for a better life and novel solutions to the problems encountered in their professions.

PO4: Communication and soft skills: Communicate effectively with peers and society at large and able to comprehend complex information.

PO5: Environmental Sensitivity: Protection of environment and biodiversity through sustainable practices in their day-to-day life and profession.

PO6: Team Building and Leadership: Students will be transformed as effective team members and dynamic leaders aligned with culture and values in a multidisciplinary setting.

PO7: Entrepreneurship: Inculcate entrepreneurs' mindset to enhance the employability of youth for a better quality of life.

PO8: Technological advancement: Adapt to new technology and innovation for a universal view on social impact and professional growth.

PO9: Cross-cultural adaptability: Cultivate an understanding of the cultural and social dimensions of environmental issues, recognizing diverse perspectives and sensitivity towards the upliftment of the poor and vulnerable sections of society for inclusive growth.

6.4. Programme Specific Outcomes (PSO)

PSO1: Understanding the basic concepts, theories, models, and functions of the economic system

PSO2: Applying economic concepts and theories in real-life scenarios related to specific areas of economics.

PSO3: Analyzing historical and current events, scenarios, and policies from an economic perspective.

PSO4: Evaluating the validity of economic arguments and drawing conclusions for making optimum decisions.

PSO5: Creating sound research ideas and applying research designs effectively to real-world problems using various software for statistical computing

6.5. Career Avenues: Students pursuing B.A. (Hons. /Hons. with Research) in Economics will have following career opportunities

- **Economics Analyst**: Work in government agencies, think tanks, or private sector firms analysing economic data and trends.
- **Financial Analyst**: Analyse financial data, prepare reports, and advise on investment decisions for companies or banks.
- **Market Research Analyst**: Study market conditions to identify potential sales opportunities for a product or service.
- **Policy Analyst**: Research and analyse policies related to economics, providing insights to government bodies or NGOs.
- **Consultant**: Work with businesses or governments to improve efficiency, profitability, or policy effectiveness.
- **Data Analyst**: Use statistical tools to interpret data and help organizations make informed decisions.

- **Investment Banker**: Assist clients in raising capital, advising on mergers and acquisitions, and financial strategy.

- **Public Sector Roles**: Join various government departments in roles related to economic planning, development, or research.

- **International Organizations:** Work with organizations like the UN, World Bank, or IMF in roles related to development and economic policy.

- **Teaching and Academia**: Pursue further studies to teach economics at schools, colleges, or universities.

- **Nonprofit Sector:** Work in organizations focusing on economic development, poverty alleviation, or social justice.

6.6. Duration

Name of the Programme	Duration
Bachelor of Arts (Hons. /Hons. with Research) in Economics	4 YEARS (8 Semesters)

6.7. Criteria for award of certificates and degree:

Undergraduate Certificate	46 Credits and an additional vocational course/internship of 4 credits to be covered within 6-8 weeks
Undergraduate Diploma	97 Credits and an additional vocational course/internship of 4 credits to be covered within 6-8 weeks during the summer vacation of the second year
Bachelor of Arts in Economics	138 Credits
Bachelor of Arts (Hons/Hons with Research) in Economics	178 Credits

7. Student's Structured Learning Experience from Entry to Exit in the Programme

- **Education Philosophy and Purpose**:
  Learn to Earn a Living:

At KRMU we believe in equipping students with the skills, knowledge, and qualifications necessary to succeed in the job market and achieve financial stability. All the programmes are tailored to meet industry demands, preparing students to enter specific careers and contributing to economic development.

Learn to Live:
The university believes in the holistic development of learners, fostering sensitivity towards society, and promoting a social and emotional understanding of the world. Our aim is to nurture well-rounded individuals who can contribute meaningfully to society, lead fulfilling lives, and engage with the complexities of the human experience.

➢ University Education Objective: Focus on Employability and Entrepreneurship through Holistic Education using Bloom's Taxonomy

By targeting all levels of Bloom's Taxonomy—remembering, understanding, applying, analysing, evaluating, and creating—students are equipped with the knowledge, skills, and attitudes necessary for the workforce and entrepreneurial success. At KRMU we emphasize on learners critical thinking, problem-solving, and innovation, ensuring application of theoretical knowledge in practical settings. This approach nurtures adaptability, creativity, and ethical decision-making, enabling graduates to excel in diverse professional environments and to innovate in entrepreneurial endeavours, contributing to economic growth and societal well-being.

➢ Importance of Structured Learning Experiences

A structured learning experience (SLE) is crucial for effective education as it provides a clear and organized framework for acquiring knowledge and skills. By following a well-defined curriculum, teaching-learning methods and assessment strategies, learners can build on prior knowledge systematically, ensuring that foundational concepts are understood before moving on to more complex topics. This approach not only enhances comprehension but also fosters critical thinking by allowing learners to connect ideas and apply them in various contexts. Moreover, a structured learning experience helps in setting clear goals and benchmarks, enabling both educators and students to track progress and make necessary adjustments. Ultimately, it creates a conducive environment for sustained intellectual growth, encouraging learners to achieve their full potential. At K.R. Mangalam University SLE is designed as rigorous activities that are integrated into the curriculum and provide students with opportunities for learning in two parts:

- **Inside classroom** (Lectures and Interactive Discussions, Case studies analysis, Data analysis, research paper discussions, Debates on Economic Theories and Policies)

- **Outside Classroom** (workshops, seminars, industrial visits, surveys, primary data collection, Community Engagement and Service Learning, field trips etc.)

➢ Educational Planning and Execution: what, when and how learning will happen

Students enrolled in the FYUP in Economics will engage in a comprehensive curriculum that combines a major focus on Economics with a diverse selection of minor courses, including Data Science, Human Resource Management, Psychology, Education, Media Studies, and Foreign Trade. In addition, skill enhancement courses such as Microsoft Excel, Digital Marketing, and Entrepreneurship are offered to strengthen students' technical competencies. Furthermore, soft skills and life skills development will be supported through ability enhancement and value-added courses, ensuring a well-rounded educational experience.

1. Course Planning: - Define the assessment types and schedule at the start of the semester, tailored to the course requirements.
2. Communication: - Transparently communicate the detailed assessment plan to students, including evaluation rubrics and submission guidelines.
3. Mid-Semester Examination: - Engage with students to receive feedback on the assessment methods and adjust strategies as needed based on their input.
4**. Continuous Assessment:** Students are evaluated through a variety of methods to ensure a holistic learning experience. Projects (individual or group) focus on research, analysis, and practical application of concepts. Quizzes offer regular checks on understanding, while assignments and essays assess critical thinking and problem-solving skills. Presentations evaluate communication and knowledge-sharing abilities, and participation gauges engagement in class activities. Lastly, case studies test the application of theoretical knowledge to real-world situations.
4. End-of-Course Evaluation: - Evaluate the effectiveness of the assessment methods using student feedback and performance data to refine future assessments.
How: Learning will occur both inside and outside the classroom, utilizing diverse teaching-learning methodologies to enhance engagement and understanding. In the classroom, lectures will be used to introduce theoretical concepts, while case studies will offer practical insights and applications. Hands-on projects and collaborative activities will encourage students to work in teams, fostering problem-solving and critical thinking skills.
Innovative approaches such as **blended learning** and **flipped classrooms** will be integrated. Blended learning combines online and in-person sessions, allowing flexibility and self-paced study, while flipped classrooms reverse the traditional model by having students review materials before class, using class time for discussion and practical exercises.
Experiential learning models, such as fieldwork, simulations, and community-based projects, will be employed to connect classroom theory with real-world experience,

catering to diverse learning styles and deepening the understanding of the subject matter. This holistic approach ensures that students not only grasp theoretical knowledge but also develop practical skills for their future professional and personal lives.

Entry Phase

Upon entry, students are introduced to the foundational principles of economics. Orientation sessions focus on understanding the economic landscape and the ethical responsibilities of economists. This initial phase emphasizes the significance of knowledge, not just as a pathway to career success, but as a means to engage meaningfully with society by addressing real-world economic issues.

Core Learning

As students' progress, they delve deeper into both the theoretical and practical dimensions of economics. Courses on microeconomics, macroeconomics, and econometrics equip students with critical analytical skills needed for their future careers. Practical workshops, case studies, and collaborations with industry and research institutions emphasize the connection between learning and earning while fostering a sense of civic responsibility and personal growth. A robust support system, including differentiated learning for diverse learning paces, a mentor-mentee system, and personal counselling, ensures that students continuously improve and succeed in their academic journey.

Skill Development

The programme places a strong emphasis on developing versatile skills such as research, quantitative analysis, economic modelling, and data interpretation—essential for a successful career in economics. Through collaborative projects, industry visits, and networking opportunities, students not only gain professional skills but also learn teamwork and communication, vital for building meaningful relationships in both their professional and personal lives.

Capstone and Exit Phase

In the final phase, student's complete capstone projects that integrate their learning and showcase their analytical abilities and professionalism. These projects culminate in a portfolio that reflects their readiness for the workforce. Additionally, career services assist with job placements, reinforcing the "Learn to Earn" philosophy. However, the emphasis on personal values and lifelong learning remains central, encouraging students to approach their careers as opportunities to contribute positively to society through economic insight and policy impact.

Co-Curricular and Extra-Curricular Activities

Students actively engage in a range of clubs and societies, from economics and research to cultural and social causes. These activities foster peer interaction, teamwork, and leadership skills, helping students develop a well-rounded personality. Regular industry visits, guest lectures, and workshops by economic experts keep students connected to

the latest real-world economic practices, bridging the gap between academic knowledge and professional expectations.

Community Connect

Community engagement programmes enhance students' awareness of social and economic challenges, encouraging them to apply their knowledge to various societal issues. Participation in sports and cultural activities contributes to a balanced lifestyle, promoting teamwork, resilience, and a holistic approach to personal and professional development.

Career Counselling and Entrepreneurship

Career counselling services provide guidance on job placements, internships, and skill development, helping students confidently navigate their career paths. Additionally, the university's incubation centre promotes entrepreneurial and leadership qualities, encouraging students to explore innovative ideas, start their ventures, and apply their economic knowledge to real-world business and social solutions.

➢ Course Registration and Scheduling

- **Major and Minor Selection:** – Every student must register at the beginning of each semester for the courses offered in the given semester. Major courses are registered centrally for the students. However, for other multidisciplinary courses (Minor, VAC, OE) the students must register by themselves through ERP.
  Students of B.A. (Hons. With Research) Economics will do major in Economics and can choose any one minor from the pool of Minor courses offered by School of Humanities e.g. Data Science, Foreign Trade, Human Resource Management, Education, Psychology and Media Studies.
- **Internships/Projects/Dissertations/Apprenticeships**: Students need to do summer internship after second and fourth semesters, which carries 2 credits each, duration being 4-6 weeks per internship, during the summer breaks. The same will be evaluated in the upcoming odd semester. The seventh and eighth semester or fourth year focus on research component and in the eighth semester students will do Dissertation of 12 credits.
- **Co-Curricular Activities Credit Choices:**

Participation in Co/ Extracurricular activities is part of outside classroom learning.

Students must earn 2 credits from co/ extracurricular activities. One credit from participation in co-curricular activities like Club/Society activities and another credit from Community Service (1 credit each) through participation in NSS/ Redcross activities or NGOs that contribute to their personal development, leadership skills, and community engagement.

- Under the category of Club/Society, 1 credit can be earned by registration in one of the Club/Societies of university and active participation in the events organized by the club/society OR
- 15 hours of active engagement in any of the recreational/sports activities

Under the category of Community Service, 1 credit can be earned by

- 15 hours active engagement in community service through NGO/NSS/Redcross or any other society approved/ empanelled by the university

At the end of the semester, students are required to submit a log of hours, a report, and a certificate of participation/ completion summarizing their activities followed by a presentation.

- **Academic Support Services:** School of Humanities provides academic support to ensure students achieve their academic and professional goals. This support system includes:

Mentoring and Guidance: Faculty members provide personalized academic mentorship to guide students in their coursework, project work, and career aspirations. Regular one-on-one meetings help students navigate academic challenges and plan their future pathways.

Tutorials and Workshops: Supplementary tutorials and skill-based workshops are conducted to reinforce conceptual understanding. These sessions focus on key areas such as quantitative techniques, econometrics, and economic theory, ensuring students grasp core concepts with clarity.

Peer Learning and Discussion Groups: Collaborative learning is encouraged through peer study groups and discussion forums, enabling students to engage in critical analysis and share insights on complex topics. These initiatives foster a deeper understanding of economic theories and their practical applications.

Access to Learning Resources: The program offers access to a rich repository of academic resources, including textbooks, research journals, and digital platforms. These are provided to support independent learning and research through LMS Moodle

Focus on Research Methodology and Data Analysis: Faculties also make the students involve in research methodology, data analysis, and the use of statistical tools help students develop essential research skills, preparing them for advanced academic work and industry roles.

Soft Skills and Career Development: To complement academic knowledge, students receive training in soft skills, communication, and professional development. Workshops on CV building, interview preparation, and entrepreneurship help bridge the gap between academics and industry readiness are provided in collaboration with career development centre (CDC).

Continuous Evaluation and Feedback: Regular assessments, feedback sessions, and mock exams are integrated into the curriculum to ensure students are continually progressing and improving in their academic journey.

- **Differential Learners: Identification, remedial strategy & reassessment:**

Identification: To cater to the diverse learning needs of its student body, K.R. Mangalam University employs a comprehensive assessment framework to identify both slow and advanced learners. Students' learning levels are continually assessed based on their performance at various stages. If a student's performance in internal assessments falls below or equal to 55%, they are categorized as slow learners. Conversely, if a student's performance score in internal assessments is greater than or equal to 80%, they are identified as advanced learners. Such students are encouraged to participate in advanced learning activities. Through periodic evaluations and the utilization of modern management systems, the institution adeptly tracks students' performance across various courses, allowing for targeted interventions and support mechanisms.

Remedial Strategies: For slow learners, the university offers a range of remedial measures designed to provide tailored assistance and foster academic progress. From specialised tutorials and remedial classes to access to digital resources and peer-led support initiatives, faculty members leave no stone unturned in ensuring that every student receives the attention and resources they need to succeed.

Advanced learners, on the other hand, benefit from enriched learning experiences and opportunities for academic acceleration. Many advanced learners work alongside faculty members on joint projects and product and prototype design. They are also encouraged to participate in national and international conferences to present research papers.

- **On-line Learning Support System:** Faculties integrates LMS and digital collaboration tools to facilitate communication, content delivery, assessment, and feedback between students and instructors. faculty members to incorporate multimedia presentations, interactive simulations, online quizzes, and virtual labs into their teaching methods to enhance engagement and learning outcomes.

- **Student Career & personal Support Services**

  - **Mentor-Mentee: Process, Scheduling & Recording Meetings & Observations**

Mentor-Mentee program serves as a vital bridge between faculty and students, offering crucial emotional and instrumental support, guidance, and encouragement. By facilitating mentorship relationships, the university aims to enhance students' academic success, personal development, and career exploration. Both mentors and mentees have specific responsibilities within the program. Mentors are tasked with introducing the mentor-mentee system, holding regular group meetings, monitoring academic progress, advising on career development, maintaining contact even post-graduation, and

ensuring adherence to university instructions. On the other hand, mentees are expected to define their goals, be proactive in initiating meetings, maintain open communication, practice active listening, seek advice, and remain open-minded to new perspectives. The implementation procedure of the Mentor-Mentee Program involves organizing students into groups, assigning each group a mentor, and mentors maintaining diaries containing essential student information. Mentor-mentee meetings are scheduled regularly to encourage activities fostering a comfortable relationship. Reports on these interactions are compiled and forwarded to respective deans for further consideration. By providing a structured framework for mentorship, we aims to empower students academically, professionally, and personally, thereby equipping them with the tools necessary for success both during their university years and beyond.

- **Counselling and Wellness Services**

Counseling and Mental Wellness Center, (WeDost) at KR Mangalam University in Sohna, Gurgaon, is committed to providing comprehensive mental health support to students, and staff. Our mission is to foster a nurturing and inclusive environment that promotes emotional well-being, personal growth, and academic success. The Counselling & Mental Wellbeing Centre aims to provide quality mental health care and support to students and staff, helping them address personal, educational, and psychological challenges. It focuses on enhancing coping skills, self-esteem, and awareness of individual potential while offering guidance for academic, vocational, and life choices.

Services Offered: The Counselling Cell will offer a range of services including, but not limited to:

1. **Individual Counselling:** Students and staff members can schedule private sessions with counsellors to discuss personal, academic, or emotional concerns.
2. **Group Counselling:** Small group sessions will provide students and staff members with a platform to connect with peers facing similar challenges, fostering a sense of community and shared support.
3. **Workshops and Seminars:** The Counselling Cell will organize workshops and seminars on topics such as stress management, time management, study skills, building resilience and etc.
4. **Crisis Intervention:** Trained counsellors will be available to address urgent and critical situations that may arise.

CONTACT PERSON: Dr Nudrat Jahan (Associate Professor, SOHS)

EMAIL ID: counseling@krmangalam.edu.in

VENUE: Counselling Cell, Ground Floor, A Block, K.R. Mangalam University.

- **Career Services and Training**

Career Development Centre at K.R. Mangalam University is a dedicated centre to provide students with placement assistance, career guidance and training. The CDC acts as a link between the students and the industry. We make sure that each student receives the proper exposure and training through interactive sessions, workshops, industrial visits, mock interviews, live projects, etc. with top practitioners that

prepares them for the industry. The students can better align themselves with their chosen sector and the academic environment thanks to these interactions and the insights and lessons they learn from them.

Support Provided by CDC:

- Internship opportunities to the students
- Placement Opportunities to the students
- Career Counseling & Guidance
- Conducting Seminars and Workshops with top Companies
- Training and Development of the students
- Providing PBL (Project Based learnings)
- Corporate connects

Contact: enquiry.placement@krmangalam.edu.in

➢ Assessment and Evaluation

Grading System

1. Every 'Academic Year' is divided into two semesters - Odd semester and Even Semester.
2. The medium of instruction is English.
3. **GRADING SYSTEM**: Based on the performance in all evaluation components of a Course, each student is awarded a grade in the Course(s) registered, at the end of the semester. The total marks obtained by a student in the Course are converted to a corresponding letter grade. The 'Letter Grade' and its 'Grade Points' indicate the student's performance in a Course.

Marks Range (%)	Letter Grade	Grade Points	Description of the Grade
> 90% marks	O	10.0	**Outstanding**
>80 %marks to ≤ 90% marks	A+	9.0	**Excellent**
>70 %marks to ≤ 80% marks	A	8.0	**Very Good**
>60 %marks to ≤ 70% marks	B+	7.0	**Good**
>55 %marks to ≤ 60% marks	B	6.0	**Above Average**
>50 %marks to ≤ 55% marks	C	5.5	**Average**
>40 %marks to ≤ 50% marks	P	5.0	**Pass**

(For B.Arch.=50)			
%marks ≤40 (For B.Arch.<50)	F	0	**Fail**
-	AB	0	**Absent**
≥ 50%marks	S	-	**Satisfactory**
< 50%marks	U	-	**Unsatisfactory**
A student is declared to have passed/cleared a Course, if he/she has earned any one of the following grades: A, B+, B, C or P.			

4. The SGPA is the ratio of the sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.

SGPA (Si) = ∑(Ci x Gi) / ∑Ci

Where Ci is the number of credits of the i^{th} course and Gi is the grade point scored by the student in the i^{th} course. The Cumulative Grade Point Average (CGPA) is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

CGPA = ∑(Ci x Si) / ∑ Ci

where Si is the SGPA of the i^{th} semester and Ci is the total number of credits in that semester.

5. Degree Eligibility: For successful completion of programme, the student should secure a minimum CGPA of 5.0 at the end of final year of the programme.

6. AWARD OF DIVISIONS: Division is awarded on the based on final CGPA as follows:

First Division With Distinction	CGPA of 8.50 and above
First Division	CGPA of 6.50 or more but less than 8.50
Second Division	CGPA of 5.00 or more but less than 6.50

7. The overall percentage for a semester can be obtained by multiplying SGPA by 10 and overall percentage up to a semester can be obtained by multiplying CGPA by 10.

- **Feedback and Continuous Improvement Mechanisms:** Teaching-learning is driven by outcomes. Assessment strategies and andragogy are aligned to course outcomes. Every CO is assessed using multiple components. The attainment of COs is calculated for every course to know the gaps between the desired and actual outcomes. These gaps are analysed to understand where does the student lags in terms of learning levels. Thereafter each student's learning levels are ascertained, if found below desirable level, and intervention strategy is effected in the following semester to make necessary corrections.

- **Academic Integrity and Ethics**

Academic integrity forms the cornerstone of ethical conduct in education. It involves being truthful and accountable for your academic work. This means refraining from plagiarism, accurately citing sources, avoiding cheating or any form of academic dishonesty, and submitting original work. Maintaining academic integrity is essential for preserving your credibility, respecting the contributions of others, and promoting fairness within the academic community.

Objectives:

- Raise awareness about responsible research practices, academic integrity, and preventing plagiarism among students, faculty, researchers, and staff.
- Implement institutional mechanisms through education and training to promote integrity and discourage plagiarism in academic writing.
- Develop systems to detect and prevent plagiarism, with penalties for violations.

Curbing Plagiarism:

- Implement technology-based plagiarism checks for theses, dissertations, and publications at submission.
- Require students to submit an undertaking stating their work is original and checked for plagiarism.
- Supervisors must certify that their students' work is plagiarism-free.
- Soft copies copies of dissertations will be submitted on INFLIBNET for hosting in the "Shodh Ganga" repository and establish an institutional repository on the university website for research publications.

Programme Structure

Semester-I								
S. No.	**Category of Course**	**Course Code**	**Course**	**L**	**T**	**P**	**C**	**Multiple Entry and Exit**
1	**Major-I**	HUES101	Micro Economics-I	3	1	0	4	
2	**Major-II**	HUES103	Macro Economics-I	3	1	0	4	
3	**Major-III**	HUES105	Mathematical Methods for Economics-I	3	1	0	4	
4	**Minor -I**		Minor-I	3	1	0	4	
5	**Skill Enhancement Course SEC-I**	SEC001	Microsoft Excel - Refresher to Advanced	1	0	4	3	
6	**Value Added Course VAC-I**	VAC151	Environmental Studies and Disaster Management	2	0	0	2	
Total							**21**	

Semester-II								
S. No.	**Category of Course**	**Course Code**	**Course**	**L**	**T**	**P**	**C**	
1	**Major-IV**	HUES102	Microeconomics-II	3	1	0	4	
2	**Major-V**	HUES104	Macro Economics-II	3	1	0	4	
3	**Major-VI**	HUES106	Mathematical Methods for Economics-II	3	1	0	4	
4	**Minor-II**		Minor-II	3	1	0	4	
5	**Skill Enhancement Course SEC-II**	SEC002	Digital Marketing	1	0	4	3	
6	**Open Elective OE-I**		Open Elective-I	3	0	0	3	
7	**Value Added Course VAC-II**	VAC168	Service Learning for Social and Rural Development	-	-	-	2	
8	**CS001**		Club/Societies	-	-	-	1	
Total							**25**	
Summer Internship-I								

Award:
UG Certificate
[after completing 1 year of study (2 semesters with credits as prescribed), and an additional vocational course/internship of 4 credits to be covered within 6-8 weeks during the summer vacation of the first year]

Semester-III								
S. No.	**Category of Course**	**Course Code**	**Course Title**	**L**	**T**	**P**	**C**	**Multiple Entry and Exit**
1	**Major-VII**	HUES201	Economics of Growth & Development-I	3	1	0	4	**Award: UG Diploma** [after completing 2 years of study (4 semesters with credits as prescribed), and an additional vocational course/internship of 4 credits during the summer vacation of the second year]
2	**Major-VIII**	HUES203	Statistical Methods for Economics	3	1	0	4	
3	**Minor-III**		Minor-III	3	1	0	4	
4	**Major (Practical)**	HUES251	Statistical Methods for Economics-Practical	0	0	1	1	
5	**Ability Enhancement Course AEC-I**	AEC006	Verbal Ability	3	0	0	3	
6	**Open Elective OE-II**		Open Elective-II	3	0	0	3	
7	**Value Added Course VAC-III**	VAC179	Public Policy Analysis	2	0	0	2	
8	**Skill Enhancement Course SEC-III**	SEC003	Entrepreneurship	1	0	4	3	**Entry** The student who took exit after completion of the first year (UG Certificate) is allowed to enter the diploma programme within five years from the first entry in the programme, four years in case of degree program and three years in case of Hons. degree so as to complete the programme within the stipulated time period of seven years.
9	**Summer Internship Evaluation**	SIES001	Summer Internship	-	-	-	2	
10	**Community Service**	CS002	Community Service	-	-	-	1	
Total							**27**	
Semester-IV								
S. No.	**Category of Course**	**Course Code**	**Course**	**L**	**T**	**P**	**C**	
1	**Major-IX**	HUES202	Economics of Growth & Development-I	3	1	0	4	
2	**Major-X**	HUES204	Basic Econometrics	3	1	0	4	
3	**Major-XI Discipline Specific Elective**		Discipline Specific Elective DSE-I	3	1	0	4	
4	**Minor-IV**		Minor-IV	3	1	0	4	
5	**Ability Enhancement Course AEC-II**	AEC007	Communication & Personality Development	3	0	0	3	

6	**Open Elective OE-III**		Open Elective-III	3	0	0	3	
7	**Value Added Course VAC-III**		VAC-III	2	0	0	2	
Total							**24**	
Summer Internship II								

Semester-V								
S. No.	**Category of Course**	**Course Code**	**Course Title**	**L**	**T**	**P**	**C**	**Multiple Entry and Exit**
1	**Major-XII**	HUES301	Public Economics	3	1	0	4	**Award: Bachelor's Degree** [after completing 3-year of study (6 semesters with credits as prescribed)] **Entry** The student who took exit after completion of two years of study (UG Diploma) are allowed to re-enter the degree programme within three years and complete the degree programme within the stipulated
2	**Major-XIII**	HUES303	Indian Economy	3	1	0	4	
3	**Major-XIV-Discipline Specific Elective**		Discipline Specific Elective DSE-II	3	1	0	4	
4	**Minor-V**		Minor-V	3	1	0	4	
5	**Ability Enhancement Course AEC-III**	AEC010	Arithmetic and Reasoning Skills-III	3	0	0	3	
6	**Summer Internship**	SIES002	Summer Internship				2	
Total							**21**	

Semester-VI							
S. No.	**Category of Course**	**Course Code**	**Course**	**L**	**T**	**P**	**C**
1	**Major-XV**	HUES302	Behavioural Economics	3	1	0	4
2	**Major-XVI**	HUES304	Indian Economy-II	3	1	0	4
3	**Major-XVII**	HUES306	International Economics	3	1	0	4
4	**Major-XVIII-Discipline Specific Elective**		Discipline Specific Elective DSE-III	3	1	0	4
5	**Minor-VI**		Minor-VI				4
Total							**20**

								maximum period of seven years.

Bachelor's Degree (Honours) Semester-VII								
S. No.	**Category of Course**	**Course Code**	**Course**	**L**	**T**	**P**	**C**	**Multiple Entry**
1	**Major-XIX**	HUES401	Research Methodology	3	1	0	4	**Entry: The student who took exit after completion of three years of study (UG degree) is allowed to re-enter the degree programme maximum within three years and complete the degree programme within the stipulated maximum period of seven years.**
2	**Major-XX-**	HUES403	Digital Tools for Data Analysis in Research	3	1	0	4	
3	**Major-XXI-Discipline Specific Elective**		Discipline Specific Elective (DSE)-IV	3	1	0	4	
4	**Minor-VII**		Minor-VII	3	1	0	4	
5	**Minor-VIII**		Minor-VIII	3	1	0	4	
Total							**20**	
Bachelor's Degree (Honours) Semester-VIII								
1	**Major-XXII**	HUES402	Research Ethics & Report Writing	3	1	0	4	
2	**Major-XXIII**	HUES404	Environmental Economics	3	1	0	4	
3	**Major-XXIV Discipline Specific Elective**		Discipline Specific Elective (DSE)-V	3	1	0	4	
4	**Major-XXV-Discipline Specific Elective**		Discipline Specific Elective (DSE)-VI	3	1	0	4	
5	**Major-XXVI-Discipline Specific Elective**		Discipline Specific Elective (DSE)-VII	3	1	0	4	
Total							**20**	

*Bachelor's Degree (Honours with Research) Semester-VII							
S. No.	**Category of Course**	**Course Code**	**Course**	**L**	**T**	**P**	**C**
1	**Major-XIX**	HUES401	Research Methodology	3	1	0	4
2	**Major-XX-**	HUES403	Digital Tools for Data Analysis in Research	3	1	0	4
3	**Major-XXI-Discipline Specific Elective**		Discipline Specific Elective (DSE)-IV	3	1	0	4
4	**Minor-VII**		Minor-VII	3	1	0	4
5	**Minor-VIII**		Minor-VIII	3	1	0	4
Total							**20**
***Bachelor's Degree (Honours with Research) Semester-VIII**							
1	**Major-XXII**	HUES402	Research Ethics & Report Writing	3	1	0	4
2	**Major-XXIII**	HUES404	Environmental Economics	3	1	0	4
3	**Dissertation**	HUES206	Dissertation				12
Total							**20**
Grand Total = 178 Credits							

Entry: The student who took exit after completion of three years of study (UG degree) is allowed to re-enter the degree programme maximum within three years and complete the degree programme within the stipulated maximum period of seven years.

Pool of Discipline Specific Elective Courses

Pool of Discipline Specific Courses (DSE)							
S.No	**Category of Course**	**Course Code**	**Course Title**	**L**	**T**	**P**	**C**
1	DSE	HUES001	Demography	3	1	0	4
2	DSE	HUES002	Political Economy	3	1	0	4
3	DSE	HUES003	Economics of Education	3	1	0	4
4	DSE	HUES004	Health Economics	3	1	0	4
5	DSE	HUES005	Economic History of India (1857-1947)	3	1	0	4
6	DSE	HUES006	Gender Economics	3	1	0	4
7	DSE	HUES007	Industrial Economics	3	1	0	4
8	DSE	HUES008	International Finance	3	1	0	4
9	DSE	HUES009	Economics of Public Sector	3	1	0	4
10	DSE	HUES010	Society, culture and social change	3	1	0	4
11	DSE	HUES011	Rural Economy	3	1	0	4
12	DSE	HUES012	Urban Economy	3	1	0	4
13	DSE	HUES013	Contemporary Economic Issues	3	1	0	4
14	DSE	HUES014	Applied Econometrics	3	1	0	4
15	DSE	HUES015	Labour Economics	3	1	0	4
16	DSE	HUES016	Monetary Economics	3	1	0	4

1. DATA SCIENCE							
Semester	**Category**	**Course Code**	**Course Title**	**L**	**T**	**P**	**C**
I	Minor-I	UDT101	Data Analytics Using SQL	2	0	2	4
II	Minor-II	UDT102	Data Analytics Using R	2	0	2	4
III	Minor-III	UDT103	Python For Data Science	2	0	2	4
IV	Minor-IV	UDT104	Data Preprocessing and Visualization Using Python	2	0	2	4
V	Minor-V	UDT105	Time Series Analysis & Forecasting Using Python	2	0	2	4
VI	Minor-VI	UDT106	Fundamental Of Machine Learning	2	0	2	4
VII	Minor-VII	UDT107	Data Driven Applications	2	0	2	4
VIII	Minor-VIII	UDT108	Project And Case Study	2	0	2	4
2.Media Studies							
I	Minor-I	UMS101	Understanding Media	3	1	0	4
II	Minor-II	UMS102	Media Ethics and Laws	3	1	0	4
III	Minor-III	UMS103	Reporting and Editing for Print	3	1	0	4
IV	Minor-IV	UMS104	Advertising and Integrated Marketing Communication	3	1	0	4
V	Minor-V	UMS105	Public Relation and Corporate Communication	3	1	0	4
VI	Minor-VI	UMS106	Media, Development and Society	3	1	0	4
VII	Minor-VII	UMS107	Film Appreciation and Cinema Studies	3	1	0	4
VIII	Minor-VIII	UMS108	Global Media Scenario	3	1	0	4
3.EDUCATION							
I	Minor-I	UED101	Foundations of Education	3	1	0	4
II	Minor-II	UED 102	Educational Psychology	3	1	0	4
III	Minor-III	UED 103	Measurement and Evaluation of Learner	3	1	0	4
IV	Minor-IV	UED 104	Diversity and Inclusive Education	3	1	0	4
V	Minor-V	UED 105	Guidance and Counselling	3	1	0	4
VI	Minor-VI	UED 106	Applied Behaviour Analysis in Education	3	1	0	4
VII	Minor-VII	UED 107	Educational Intervention and Teaching Strategies: Intellectual Disability	3	1	0	4

VIII	Minor-VIII	UED 108	Educational Intervention and Teaching Strategies: Learning Disability	3	1	0	4

4.HUMAN RESOURCE MANAGEMENT

I	Minor-I	UHR101	Foundations in Organizational Behaviour	3	1	0	4
II	Minor-II	UHR102	Professional HRM Practices	3	1	0	4
III	Minor-III	UHR103	Psychological Assessment in Organizations	3	1	0	4
IV	Minor-IV	UHR104	Learning and Development in Organizations	3	1	0	4
V	Minor-V	UHR105	Leadership and Talent Development	3	1	0	4
VI	Minor-VI	UHR106	Counseling at Workplace	3	1	0	4
VII	Minor-VII	UHR107	Change Management and OD Interventions	3	1	0	4
VIII	Minor-VIII	UHR108	Total Rewards Management	3	1	0	4

5.FOREIGN TRADE

I	Minor-I	UFT101	Basics of Business	3	1	0	4
II	Minor-II	UFT102	The Global Economy	3	1	0	4
III	Minor-III	UFT103	International Business Environment	3	1	0	4
IV	Minor-IV	UFT104	Macroeconomics of open economies	3	1	0	4
V	Minor-V	UFT105	Global Political Economy	3	1	0	4
VI	Minor-VI	UFT106	Growth Inequality and Conflict	3	1	0	4
VII	Minor-VII	UFT107	Foreign Trade	3	1	0	4
VIII	Minor-VIII	UFT108	International Financial Institutions	3	1	0	4

6.PSYCHOLOGY

I	Minor-I	UPS101	Foundations of Psychology	3	1	0	4
II	Minor-II	UPS102	Fundamentals of Social Psychology	3	1	0	4
III	Minor-III	UPS103	Developmental Psychology	3	1	0	4
IV	Minor-IV	UPS104	Counseling and Guidance	3	1	0	4
V	Minor-V	UPS105	Health Psychology	3	1	0	4
VI	Minor-VI	UPS106	Environmental Psychology	3	1	0	4
VII	Minor-VII	UPS107	Positive Psychology	3	1	0	4

VIII	Minor-VIII	UPS108	Media Psychology	3	1	0	4

Syllabi

Semester I					
HUES101	**Micro Economics-I**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-I**				
Total Contact Hours	**60**				
Pre-requisites/Co-requisites	Principles of Economics				

Course Perspectives:

This course provides students with essential concepts and analytical tools to understand the economic behavior of individuals and firms. Studying Microeconomics is vital for understanding how individuals, households, and firms make decisions regarding the allocation of limited resources. It provides insights into how markets function, how prices are determined, and how supply and demand interact to shape economic outcomes. Microeconomics also helps in analyzing consumer behavior, production costs, and the strategies businesses use to maximize profit and efficiency. This knowledge is essential for making informed decisions in both personal and professional contexts, influencing everything from pricing strategies to policy design. Additionally, microeconomic principles form the foundation for more advanced economic studies and real-world applications in business and government.

Course Outcomes

CO1: Understanding the basic principles of microeconomic theory, important terms and concepts used in microeconomics.
CO2: Applying the theories of microeconomics in application to individual decision making.
CO3: Analysing the consumer and producer decision-making processes using microeconomic theories.
CO4: Evaluating the effects of government policies such as taxes, subsidies, and regulations on market efficiency and welfare.

Course Content:

Unit 1: 15 Hrs

Introduction to Microeconomics – Definition, Meaning, Scope and Limitation of Microeconomics; Approaches to Economic Analysis., Scarcity and problem of choice, basic economic problems, fundamental concepts of equilibrium: partial, general, static and dynamic analysis, Positive vs Normative economics.

Demand and Supply Analysis: Introduction to demand and quantity demand, law of demand, individual v/s market demand, and factors affecting demand, movement along the demand curve and shifting of demand curve. Introduction to supply and quantity supply, law of supply, factors affecting supply, movement along the supply curve and shifting of supply curve. Elasticity of demand: concept, types, measurement and application, overview of elasticity of supply.

Unit 2: Market Equilibrium and Consumer behaviour 15 Hrs

Equilibrium and disequilibrium in the market, price ceiling and price floor. Utility Analysis-Cardinal Approach; Law of Diminishing Marginal Utility, law of Equi-Marginal utility, Consumer's Equilibrium, Indifference Curve: Properties; Budget constraints, Consumer equilibrium, Hicks and Slutsky income and substitution effect; concept of consumer surplus;

Unit 3: Theory of production 15 Hrs

Concept of production function: short and long run, Law of variable proportion, three stages of production, law of diminishing marginal product, Isoquants ; concepts, Characteristics of Isoquants, Isocost curve, Producer Equilibrium; Expansion Path, ridge lines; Returns To Scale: Constant, Increasing, and Decreasing.

Unit 4: Costs of Production: 15 Hrs

Short-Run cost curve: total and marginal approach; relationship between cost and production curves. The Long-Run Cost Curve: Traditional and modern approach. Economies and diseconomies of scale and scope.

Textbooks:

1. N. Gregory Mankiw, (2022) Principles of Microeconomics ; 8th edition, Cengage Learning
2. Salvatore Dominick (2018) Microeconomics: Theory and Applications; 5th Edition, Oxford University Press

Reference Books

1. Bernheim, B., Whinston, M. (2009). Microeconomics. Tata McGraw-Hill.

2. Karl E. Case and Ray C. Fair, Principles of Economics, Pearson Education, Inc., 8th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, Economics, W.W. Norton & Company, Inc.,New York, International Student Edition, 4th edition, 2007.

Open Educational Resources (OER):

- **https://asccc-oeri.org/open-educational-resources-and-economics/**
- **https://ocw.mit.edu/**
- **https://www.coursera.org/**
- **https://lumenlearning.com/**
- **https://oercommons.org/**
- **https://www.merlot.org/**

Learning Experience: The course will be conducted through a blend of interactive lectures, discussions, and hands-on activities that foster experiential learning. Students will engage in case studies and group projects to apply concepts such as demand and supply analysis, utility theory, and production functions. Technology will be utilized through online simulations and data analysis tools to visualize economic models. Assessments will include quizzes, group presentations, and reflective assignments to reinforce understanding. The course instructor will be available for additional support, while students will be encouraged to collaborate and provide peer feedback, enhancing their learning experience through shared insights and teamwork.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Macro Economics

Semester I					
HUES103	**Macro Economics-I**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-II**				
Total Contact Hours	**60 Hrs**				

Pre-requisites/Co-requisites	Adequate knowledge of micro economic concepts. Further the students must be abreast with the latest developments in domestic and international markets.

Course Perspectives

This Macroeconomics course offers an in-depth exploration of national and global economic forces. It covers the fundamentals of measuring economic activity through GDP and other income aggregates, highlighting their limitations and alternatives like Green GDP. It focuses on aggregate indicators such as GDP, inflation, unemployment, and interest rates, helping to analyze overall economic performance and stability. Macroeconomics provides insights into government policies, such as fiscal and monetary measures, and their impacts on economic growth, inflation control, and employment levels. By understanding macroeconomic concepts, individuals can better assess economic trends, make informed decisions, and contribute to discussions on economic policy. It is crucial for careers in finance, policy analysis, and international economics, where understanding large-scale economic dynamics is key.

Course Outcomes: After undergoing this course, student will be:

CO1: Understanding general economic concepts and the working of the economy in the national and global context.
CO2: Applying the principle of Macroeconomics in explaining the behaviour of Macroeconomic variables.
CO3: Integrating knowledge and ideas in a coherent and meaningful manner.
CO4: Developing an analytical framework to understand the inter-linkages among the crucial macroeconomics variables and various segments of an economy.

Course Content

Unit 1 : Introduction to Macro Economics and National Income Aggregates 15 Hrs

Introduction to Economics: Introducing the Economic Way of Thinking. Macro Economics: Meaning, emergence and Macro Economic models. Circular Flow of Economic activities. Measuring the Value of Economic Activity: Gross Domestic Product . Components of GDP . Rules for Computing GDP . Approaches to the Measurement of GDP: Income, expenditure, product or Value-added Methods, Difficulties of Estimating National Income; Does GDP Measure what we want it to measure –Limitations of GDP. Real Vs Nominal GDP. GDP deflator. Concepts of Green GDP and Green Accounting. Other Measures of Income.

Unit 2: Determination of Income and Employment 15 Hrs

Classical Theory of Employment - Say's Law of Market - Wage - Price Flexibility (Pigou's Version) - Saving and Investment Equality - Evaluation of the Classical Theory of Employment; Keynesian model of national income determination; Keynesian Theory of Employment;

Unit 3: Aggregate Spending **15 Hrs**

Theories of Consumption spending: Absolute, Relative, Permanent income and Lifecycle hypotheses; Investment Function and Theories of investment spending; Investment Multiplier-static & Dynamic

Unit 4: Monetary Approach: Demand & Supply of Money **15 Hrs**

What Is Money? The Functions of Money .FOR YOUR INFORMATION :How Do Credit Cards and Debit Cards Fit Into the Monetary SystemTheories of Demand for Money: Quantity Theory and Keynes approach- Equilibrium in Money Market . Baumol and Tobin Contributions and Friedman's restatement of quantity theory. Two Interest Rates: Real and Nominal . The Cost of Holding Money .

CASE STUDY: Nominal Interest Rates in the Nineteenth Century .

Recommended Textbooks

1. N.GREGORY MANKIW, " Macro Economics" Harvard University , Worth Publishers, Largest Edition.
2. R . Glen Hubbard and Anthony Patrick O' Brien , Macroeconomics , Pearson 5th Edition , Pearson Publication

Reference Books

1. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, Macroeconomics, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, Macroeconomics, Pearson Education, 2009.
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, International Economics, Pearson Education Asia, 9th edition, 2012.

Open Educational Resources:

- https://www.rbi.org.in/
- https://www.indiabudget.gov.in/
- https://www.weforum.org/
- https://www.worldbank.org/
- https://www.imf.org/
- https://www.mospi.gov.in/
- https://pib.gov.in/

Learning Experience:

This macroeconomics course will utilize a dynamic blend of teaching methods to promote active participation and deep understanding. Instruction will include engaging lectures paired with real-world case studies, such as the historical analysis of nominal interest rates. Students will collaborate in groups to explore concepts like GDP measurement and income determination theories, fostering peer learning. Technology will support learning through interactive simulations that illustrate macroeconomic models and data analysis tools for interpreting economic indicators. Assessments will consist of quizzes, group presentations, and reflective essays to consolidate learning. The course instructor will provide regular feedback and be available for one-on-one support, encouraging students to seek help as needed and work together to enhance their understanding of macroeconomic principles.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Mathematical methods for Economics-I

Semester I					
HUES105	**Mathematical Methods for Economics-I**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-III**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	Basic Algebra				

Course Perspectives

Mathematical Economics uses mathematical tools to represent, analyze, and solve economic problems by formalizing economic theories into models. This structured approach aids in precise communication, prediction of outcomes, and improved decision-making. The course covers a broad scope, applying mathematical methods to both microeconomic and macroeconomic topics, including consumer behavior, production, market equilibrium, and economic growth. Students will learn optimization, input-output analysis, game theory, and econometric modeling, allowing them to address complex issues like pricing, resource allocation, and policy analysis. It enhances forecasting accuracy, informs policy recommendations, and deepens insights into market behavior, making it essential for careers in research, academia, finance, and policymaking. Through this course, students are equipped with the skills to approach economic challenges with rigor and precision.

Course Outcomes

CO1: Understand fundamental mathematical concepts such as variables, equations, matrices, and calculus used in economic analysis.
CO2: Apply mathematical techniques like matrix operations, differentiation, and optimization to solve economic problems and model economic behaviour.
CO3: Analyse economic models and functions using calculus and matrices to determine relationships and dependencies among variables.
CO4: Evaluate the effectiveness of mathematical methods in solving optimization problems in economics, including cost, revenue, and production scenarios.

Course Content

Unit-1**: Basic Concepts of Mathematical Economics** **15 Hrs**
Variables and Parameters; Sets; Functions and their graphs; Limits; Equations – simple, quadratic and simultaneous and Identities; Equations of a straight line, concept of slope; Equation and interpretation of Rectangular Hyperbola.

Unit 2**: Metrices & its Economic Application** **15 Hrs**
Matrices and Determinants : Types; Transpose, Trace, Adjoint and Inverse of matrices; Solution of a system of two and three equations by Matrix Inverse and Cramer's methods; Linear independence and Linear dependence of vectors; Rank of a matrix; Simple Application questions. Application in Input-Output analysis.

Unit 3**: Calculus** **15 Hrs**

Differentiation: Simple Differentiation, partial and total derivative Economic Applications: Elasticity of Demand, Average and Marginal functions, partial elasticities, Homogeneous function, Euler's Theorem, Utility function, Production Function, cobb Douglas and CES, Cost function etc.

Unit 4**: Optimization Problem** **15 Hrs**

Maxima and Minima of Functions of one and two variables; Constrained Optimization Problem (with maximum three variables). optimization problems in costs and revenue, constrained optimization; Langrangian Method.

Textbooks:

- Chiang, Alpha C : Fundamental Methods of Mathematical Economics (3rd Ed.)
- Weber, Jean E : Mathematical Analysis: Business and Economic Applications (4^{th} Ed.)
- Yamane, Taro: Mathematics for Economists

Reference Books:

- Allen, R G D (1983) : Mathematical Analysis for Economists Macmillan & Co. ltd., 1965
- Kooros, A (1965) : Elements of Mathematical Economics
- Monga, G S (2000) : Mathematics and Statistics for Economists Vikas Publishing House, N Delhi
- Arora, P N & Arora S (2000) : CA Foundation Course in Mathematics.
- Bose, D C (1996) : An Introduction to Mathematical Economics. Himalaya Publishing House, Bombay
- Dorfman, R et.el. (1968) : Linear Programming and Economic Analysis McGraw Hill, New York
- Baumol, W J (1978) : Linear Programming and Economic Analysis McGraw Hill, New York

Open Educational Resources (OER):

- **https://asccc-oeri.org/open-educational-resources-and-economics/**
- **https://ocw.mit.edu/**
- **https://www.coursera.org/**
- **https://lumenlearning.com/**
- **https://oercommons.org/**
- **https://www.merlot.org/**

Learning Experience:
This Mathematical Economics course will be conducted through a combination of interactive lectures, and collaborative group studies. Each unit will start with foundational concepts, followed by hands-on exercises where students apply mathematical tools to economic problems, such as using matrices in input-output analysis or calculus in elasticity and utility functions. Technology will be integrated through software tools for graphing functions and solving optimization problems, enhancing understanding of complex concepts. Assessments will include problem sets, group projects, and presentations to encourage peer learning and critical thinking.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Microsoft Excel-Refresher to Advanced

Semester I					
SEC001	**Microsoft Excel-Refresher to Advanced**	L	T	P	C
Version 1.0		1	0	2	3
Category of Course	**Skill Enhancement Course (SEC)-I**				
Total Contact Hours	**45 Hrs**				
Pre-requisites/Co-requisites	**Basic Knowledge of MS office**				

Course Perspective

The **Microsoft Excel** course is designed to equip students with essential skills in spreadsheet management, data analysis, and visualization. Through this course, students will learn to navigate Excel's interface, create and manage worksheets, perform complex calculations using formulas and functions, and organize data effectively. The course also covers data visualization

techniques using charts and graphs, as well as advanced tools such as pivot tables, conditional formatting, and macros to automate tasks. By the end of the course, students will be able to apply Excel to solve real-world problems, streamline processes, and make informed data-driven decisions.

COURSE OUTCOMES (COs)

CO1	Demonstrating the basic mechanics and navigation of an Excel spreadsheet
CO2	Learning the use and utility of functions and formulas on excel spreadsheet
CO3	Learning formulas, creating charts and graphs that can easily explain or simplify complex information or data.
CO4	Analyzing data using Pivot Tables and Pivot Charts.
CO5	Manipulate data using data names and ranges, filters and sort, and validation lists

Syllabus

Brief Syllabus:
This course aims to deliver basic and advanced concepts of ms excel and its implementation. The students will become familiar with the concepts of functions, graphs, formatting tools and formulas.

UNIT WISE DETAILS

Unit Number: 1	**Title: Basic of MS Excel**	

Content Summary:
Introduction to MS Excel, Sheet, Cell, worksheet, menu bar, title bar, tabs.

Unit Number: 2	**Title: Formatting in MS Excel**	

Content Summary:
Alignment, conditional formatting, table, lookup.

Unit Number: 3	Title: Functions & Formulas	
Content Summary: Function: Sum, Count, Average, Max, Min, Upper, Lower, Power, logical functions, if-else function.		
Unit Number: 4	**Title: Graphs**	
Content Summary: Graph: 2D, 3D, Pivot Table.		

Text Books

1. Microsoft Office – Complete Reference – BPB Publication
2. Learn Microsoft Office – Russell A. Stultz – BPB Publication
4. Koers, D (2001). Microsoft Office XP Fast and Easy. PHI.

Reference Books/Materials

1. Courter, G Marquis (1999). Microsoft Office 2000: Professional Edition. BPB.
2. Nelson, S L and Kelly, J (2002). Office XP: The Complete Reference. Tata McGrawHill.

Learning Experience: This MS Excel course will be structured to maximize hands-on learning and real-world application. Each unit will begin with an interactive introduction to key concepts, followed by practical exercises where students will explore features like worksheets, formatting options, and essential functions. Collaborative group activities will allow students to solve problems together, applying functions such as SUM, AVERAGE, and IF-ELSE to create dynamic spreadsheets. Technology will enhance the experience through guided tutorials and online resources. Assessments will include individual projects where students will create spreadsheets and graphs, showcasing their skills in data analysis and presentation.

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Semester I					
VAC151	**Environmental Studies and Disaster Management**	L	T	P	C
Version 1.0		2	0	0	2
Category of Course	**VAC-I**				
Total Contact Hours	**30 Hrs**				
Pre-requisites/Co-requisites					

Course Perspective

The Environmental Studies and Disaster Management course provides a comprehensive understanding of the key concepts related to environmental sustainability and the management of natural and man-made disasters. The course explores the interrelationship between human activities and the environment, covering topics like biodiversity, pollution, climate change, and resource conservation. It also introduces disaster management principles, emphasizing the identification, assessment, and mitigation of risks associated with disasters such as floods, earthquakes, and industrial accidents. Through case studies and practical applications, students will gain the skills to design and implement sustainable practices and develop strategies for disaster preparedness, response, and recovery.

Course Outcomes

CO1: Demonstrate a clear understanding of key environmental concepts, including biodiversity, ecosystems, and the impact of human activities on the environment.

CO2: Apply disaster management strategies to assess risks, prepare for, and respond to natural and man-made disasters effectively.

CO3: Critically analyze the relationship between environmental degradation and disaster risks, identifying key factors that contribute to vulnerabilities in ecosystems and human settlements.

CO4: Evaluate environmental policies and disaster management frameworks to propose sustainable solutions for disaster resilience and environmental conservation.

Course Content

UNIT I **8 Lectures**

Environment and Natural Resources:
Multidisciplinary nature of environmental sciences; Scope and importance; Need for public awareness.
Land resources; land use change; Land degradation, soil erosion and desertification.

Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.
Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state).
Energy resources: Renewable and non- renewable energy sources, use of alternate energy sources, growing energy needs, case studies.
Carbon Footprints.

UNIT II **15 Lectures**

Environmental Pollution and Environmental Policies:
Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution Nuclear hazards and human health risks; Solid waste management: Control measures of urban and industrial waste; Pollution case studies.
Sustainability and sustainable development; Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture; Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; wildlife Protection Act; Forest Conservation Act; Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context. Fundamentals and Application of ESG (Environment Social Governance).

UNIT III **10 Lectures**

Introduction to Disasters:
Concept and definitions- Disaster, Hazard, vulnerability, resilience, risks.
Different Types of Disaster: Causes, effects and practical examples for all disasters. Natural Disaster: such as Flood, Cyclone, Earthquakes, Landslides etc. Man-made Disaster: such as Fire, Industrial Pollution, Nuclear Disaster, Biological Disasters, Accidents (Air, Sea, Rail & Road), Structural failures (Building and Bridge), War & Terrorism etc.

UNIT- IV **7 Lectures**

Disaster Preparedness Plan, Prediction, Early Warnings and Safety Measures of Disaster, Role of Government, International and NGO Bodies in Disaster Preparedness.
Reconstruction and Rehabilitation, Post Disaster effects and Remedial Measures
Disaster Management Act, 2005: Disaster management framework in India before and after Disaster Management Act, 2005,
Applications of AI and ML in Disaster Management and risk predictions.

Text Books

1. Content building programme (CBP) book on Disaster Management, Forum AS.
2. Kaushik and Kaushik, Environmental Studies, New Age International Publishers (P) Ltd. New Delhi.

Reference Books/Materials

1. A.K. De, Environmental Chemistry, New Age International Publishers (P) Ltd. New Delhi.
2. S.E. Manahan, Environmental Chemistry, CRC Press.

3. S.S Dara and D.D. Mishra, Environmental Chemistry and Pollution Control, S.Chand & Company Ltd, New Delhi.
4. R. Gadi, S. Rattan, S. Mohapatra, Environmental Studies Kataria Publishers, New Delhi.
1. Government of India, Department of Environment, Management of Hazardous Substances Control
2. Act and Structure and Functions of Authority Created Thereunder.
3. Indian Chemical Manufacturers' Association & Loss Prevention Society of India, Proceedings of the National Seminar on Safety in Road Transportation of Hazardous Materials: (1986).
4. Author Title Publication Dr. Mrinalini Pandey Disaster Management Wiley India Pvt. Ltd.
5. Tushar Bhattacharya Disaster Science and Management McGraw Hill Education (India) Pvt. Ltd.
6. Jagbir Singh Disaster Management: Future Challenges and Opportunities K W Publishers Pvt. Ltd.
7. J. P. Singhal Disaster Management Laxmi Publications.
8. Shailesh Shukla, Shamna Hussain Biodiversity, Environment and Disaster Management Unique Publications
9. C. K. Rajan, Navale Pandharinath Earth and Atmospheric Disaster Management: Nature and Manmade B S Publication
10. Indian law Institute (Upendra Baxi and Thomas Paul (ed.), Mass Disasters and Multinational Liability: The Bhopal Case (1986)
11. Indian Law Institute, Upendra Baxi (ed.), Environment Protection Act: An Agenda for Implementation (1987)
12. Asian Regional Exchange for Prof. Baxi., Nothing to Lose But our Lives: Empowerment to Oppose
13. Industrial Hazards in a Transnational world (1989)
14. Gurudip Singh, Environmental Law: International and National Perspectives (1995), Lawman (India) Pvt. Ltd.
15. Leela Krishnan, P, The Environmental Law in India, Chapters VIII, IX and X (1999), Butterworths, New Delhi.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester II

HUES102	Micro Economics-II	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	Major-IV				
Total Contact Hours	60 Hrs				
Pre-requisites/Co-requisites	Micro Economics-I				

Course Perspective:

Microeconomics-II builds on foundational microeconomic principles by delving deeper into the analysis of market structures, distribution theories, and welfare economics. The course explores pricing and output determination under perfect competition, monopoly, monopolistic competition, and oligopoly, focusing on the behaviour of firms and strategic decision-making. By the end of the course, students will have a comprehensive understanding of how markets operate, distribute resources, and impact societal welfare, preparing them for advanced studies in economic theory and policy analysis.

Course Outcomes (COs)

On completion of this course, the students will be able to

CO1: Understand the various aspects of consumer behaviour and Economic Welfare.

CO2: Apply game theory in decision making.

CO3: Analyze the performance of firms under different market structures and their equilibrium.

CO4: Examine forms of market imperfections and market failures observed in real life situations.

Course Content:

Unit 1: Market Structure and Pricing: 15 Hrs

Price and Output Under Perfect Competition- Price Determination in the Market Period, Short-Run Equilibrium of the Firm: Total Approach Short-Run Equilibrium of the Firm: Marginal Approach, Long-Run Equilibrium of the Firm.

Price and Output Under Pure Monopoly- Concepts, Types, The MR Curve and Elasticity, Short-Run Equilibrium: Total Approach, Marginal Approach, Long-Run Equilibrium Under Pure Monopoly, Price discrimination under monopoly.

Price and Output Under Monopolistic Competition -Meaning, Features, Short-Run and Long-Run Equilibrium, Selling Costs, Excess Capacity, Non-Price competition, Product differentiation.

Unit 2: Oligopoly and game theory: 15 Hrs

Meaning, Features, Collusive v/s non-collusive oligopoly, The Cournot Model, The Kinked Demand Curve Model,

Collusive Model: The Price Leadership Model-Low-cost firm, dominant firm, barometric price leadership, Cartels: Market sharing, Joint profit maximization.
Game Theory: Definitions and Objectives, Types of games, Types of Strategy, The Prisoners' Dilemma, Nash Equilibrium.

Unit 3: Theories of Distribution **15 Hrs**

Marginal productivity theory of distribution and Theory of wage determination under competitive market, with monopolistic power in product market, monopsonist power in factor market, bilateral monopoly in factor market, monopoly in factor market. Product exhaustion problem. theory of rent: Classical & Modern approach, Quasi -rent, overview of theory of interest and profit.

Unit-3: Welfare Economics & Market Failure **15 Hrs**

Introduction to concept of Welfare, Pareto Optimality, Utility frontier, Partial and General equilibrium Conditions. Social welfare functions, A.K. Sen Views on Welfare
Concepts of Market Failure: Externalities; public goods, Markets with Asymmetric information: Adverse Selection and Moral Hazards,

Textbooks:

1. N. Gregory Mankiw, (2022) Principles of Microeconomics ; 8th edition, Cengage Learning
2. Salvatore Dominick (2018) Microeconomics: Theory and Applications; 5th Edition, Oxford University Press

Reference Books

1. Bernheim, B., Whinston, M. (2009). Microeconomics. Tata McGraw-Hill.
2 Karl E. Case and Ray C. Fair, Principles of Economics, Pearson Education, Inc., 8th edition, 2007.
3 Joseph E. Stiglitz and Carl E. Walsh, Economics, W.W. Norton & Company, Inc.,New York, International Student Edition, 4th edition, 2007.
4 C. Snyder and W. Nicholson, Fundamentals of Microeconomics, CengageLearning (India), 2010.
5 B. Douglas Bernheim and Michael D. Whinston, Microeconomics, Tata McGrawHill (India), 2009.

Open Educational Resources (OER):

- **https://asccc-oeri.org/open-educational-resources-and-economics/**
- **https://ocw.mit.edu/**
- **https://www.coursera.org/**
- **https://lumenlearning.com/**

- **https://oercommons.org/**
- **https://www.merlot.org/**

Learning Experience: The Microeconomics course will be conducted through a blend of lectures, interactive discussions, and experiential learning activities, ensuring a participatory learning environment. Instruction will incorporate real-world case studies, hands-on exercises, and group work, allowing students to apply theoretical concepts to practical economic scenarios. Technology will be utilized through simulation tools, online quizzes, and virtual economic models to enhance understanding. Assignments and assessments will include problem-solving tasks, presentations, and peer reviews to promote collaboration and critical thinking. The course instructor will provide regular feedback and be available for additional support, encouraging students to seek help as needed and engage actively in group activities to deepen their learning experience.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester II					
HUES104	**Macro Economics-II**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-V**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Macro Economics-I**				

Course Perspectives :

This course offers a comprehensive overview of macroeconomic concepts and models, focusing on monetary and fiscal policies, inflation, unemployment, business cycles, and exchange rates. It starts with an examination of monetary and fiscal policy processes and their impact through the IS-LM model. The course then covers the causes, impacts, and measurement of inflation and unemployment, along with their theoretical foundations. Students will explore various business cycle models and analyse historical economic crises, such as the USA stagflation and the 2008 financial crisis. The course concludes with an analysis of

exchange rate determination and the balance of payments, featuring a case study on the trends of the Indian exchange rate in terms of the Dollar. Through lectures, discussions, and case studies, students will gain a solid understanding of macroeconomic principles and their real-world applications.

Course Outcomes:

After Completion of this course, Students will be able to:

CO1: Develop the understanding of the determination of key macroeconomic variables, macroeconomic models and theories.

CO2: Applying the principle of Macroeconomics in explaining the behaviour of Macroeconomic variables at national as well as global level.

CO3: Analysing the role of the Government in an economy and examine how it uses its fiscal and monetary policy to influence macroeconomic variables.

CO4: Evaluating the effectiveness of various macroeconomic variable, theories and policy and their short-term and long-term impacts on the economy.

Course Content:

Unit I: Monetary-Fiscal Policy and IS-LM Model (15 Hours)

Overview of Monetary & Fiscal Policy: The Monetary Policymaking Process, Meaning and Types of Monetary policy: Expansionary, contractionary; Transmission Mechanism of Monetary Policy; Fiscal Policy: Meaning, Types; instruments of Fiscal Policy: Taxation, Public Expenditure, Public Debt, Deficit Financing

Aggregate Demand & IS-LM Model: Building the IS-LM Model, The Goods Market and IS Curve; The Money Market and LM curve; How Fiscal and Monetary Policy Shifts IS-LM curve; Applying the IS-LM Model- Explaining Fluctuation with the IS-LM curve; IS-LM as a theory of Aggregate Demand; The Relative Effectiveness of Monetary and Fiscal Policy-Policy Effectiveness and the Slope of the IS-LM.

Unit II: Inflation and Unemployment (15 Hours)

Meaning and Types of inflation, Causes and Impact of Inflation, Interest rate and inflation, Theories of Inflation: Demand side and supply side view, Measurement of Inflation: Consumer Price Index, Wholesale Price Index: Calculation and Basket

How unemployment measured, Types of Unemployment, Deriving the Phillips Curve from the Aggregate Supply Curve; The Short-Run Trade-off Between Inflation and Unemployment; Expected Inflation, Natural Rate of Unemployment, Adaptive Expectation and inflation: Long run Phillips curve; Stagflation: Origin, Meaning, Causes, Okun Law.

Unit III: Business Cycle Theories (15 Hours)

Business Cycle: Meaning and Phases, Keynesian view of business cycle. Business Cycle Models: Samuelson Multiplier-Accelerator Model, Kaldor-Hicks Business Cycle Model, Real Business Cycle Model.

Case Study: Case of Stagflation (USA), 2008 Financial Crises

Unit IV: Exchange Rates and Monetary System (15 Hours)

Balance of Payments Accounts: Current Account, Capital Account, Why BOP always balanced; Exchange Rates and the Market for Foreign Exchange: Demand and Supply in the Foreign Exchange Market, Exchange Rate Determination: Flexible Exchange Rates, Exchange Rate Determination: Fixed Exchange Rates; Advantages of Alternative Exchange Rate Regimes,

Case: Trends of Exchange rate of India in terms of Dollar

Suggested Textbooks:

1. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 7th edition, 2010
2. Richard T. Froyen, Macroeconomics, Pearson Education Asia, 10th edition

Reference Books:

1. Edward Shapiro, Maroeconomics Analysis, Thomson Learning, 5th edition
2. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition
3. Olivier Blanchard, Macroeconomics, Pearson Education, Inc., 5th edition.
4. Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition.
5. Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc.,7th edition.
6. Errol D_Souza, Macroeconomics, Pearson Education.
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, International Economics, Pearson Education Asia, 9th edition.

Open Educational Resources (OER):

- **https://asccc-oeri.org/open-educational-resources-and-economics/**
- **https://ocw.mit.edu/**
- **https://www.coursera.org/**
- **https://lumenlearning.com/**
- **https://oercommons.org/**
- **https://www.merlot.org/**

Learning Experience: The Macroeconomics course will utilize a combination of teaching methods, including lectures, case studies, group discussions, and hands-on data analysis, to create an engaging and participatory learning environment. Students will explore real-world macroeconomic issues through case studies and collaborative group projects, applying

theoretical models like IS-LM and AD-AS to assess economic policies. Technology will play a key role, with interactive simulations and economic modelling tools to visualize concepts. Assessments will include problem-solving assignments, quizzes, presentations, and a final project that encourages practical application of macroeconomic principles. Regular feedback will be provided, and students are encouraged to seek additional support from the instructor and collaborate through peer reviews to strengthen their understanding.

Semester II					
HUES10	**Mathematical Methods for Economics-II**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Mathematical Methods for Economics-I**				

Course Description

This course focuses on the mathematical methods and models that are required to understand current economics and to investigate economic models. A rigorous mathematical framework to understand and solve key economic problems. By integrating mathematical methods with economic theory, it equips students with the tools necessary to analyze complex economic relationships, optimize decisions, and interpret economic behaviour in various contexts. The course emphasizes the application of mathematical techniques to model real-world economic phenomena, enabling students to engage in quantitative reasoning and develop a deeper understanding of the dynamic nature of economics. By mastering these mathematical tools, students will enhance their analytical skills, preparing them for advanced economic studies and decision-making in policy and business environments.

Course Outcomes

CO1: Understand the fundamental concepts of integration, differential equations, difference equations, and linear programming

CO2: Applying different mathematical concepts to solve economic problems and scenarios

CO3: Analysing various economic models using different mathematical techniques

CO4: Evaluate the relevance and effectiveness of linear programming in solving economic problems

Course Content

Unit-1 Integration and Economic Application 15 Hrs

Concept of integration, different rules and methods of integration, application to consumer's surplus and producer's surplus.

Unit 2: Differential Equation and Economic Application 15 Hrs

Differential Equation: Introduction; Solution: Variable separable case, Homogeneous case, Standard linear differential equation, Bernoulli's form, Exact equation; Solution of linear differential equation with constant coefficients; Simple economic applications

Unit 3: Difference Equation and Economic Application 15 Hrs

Difference Equation – basic concepts, solution of first and second order linear difference equation with constant term and coefficient.

Economic Application: Cobweb Model, Lagged income determination model, Harrod growth model, Samuelson multiplier-accelerator model

Unit 4: Linear Programming and Economic Application 15 Hrs

Linear Programming – Relevance and basic concepts, problem formulation, Economic interpretation of duality, graphical method of linear programming.

Textbooks:

- Chiang, Alpha C : Fundamental Methods of Mathematical Economics (3rd Ed.)
- Weber, Jean E : Mathematical Analysis: Business and Economic Applications (4^{th} Ed.)
- Yamane, Taro: Mathematics for Economists

Reference Books:

- Allen, R G D (1983) : Mathematical Analysis for Economists Macmillan & Co. ltd., 1965
- Kooros, A (1965) : Elements of Mathematical Economics
- Monga, G S (2000) : Mathematics and Statistics for Economists Vikas Publishing House, N Delhi
- Arora, P N & Arora S (2000) : CA Foundation Course in Mathematics.
- Bose, D C (1996) : An Introduction to Mathematical Economics. Himalaya Publishing House, Bombay
- Dorfman, R et.el. (1968) : Linear Programming and Economic Analysis McGraw Hill, New York
- Baumol, W J (1978) : Linear Programming and Economic Analysis McGraw Hill, New York

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- **https://ocw.mit.edu/**
- **https://www.coursera.org/**
- **https://lumenlearning.com/**
- **https://oercommons.org/**
- **https://www.merlot.org/**

Learning Experience:
The Mathematical Economics course will foster a dynamic learning experience through a blend of lectures, interactive workshops, and collaborative problem-solving sessions. Students will engage with mathematical concepts and techniques applied to economic theories, using software tools for simulations and modeling. Instruction will incorporate real-world economic problems, enabling students to apply mathematical methods to analyze data and optimize solutions.

Semester II					
SEC002	**Digital Marketing**	L	T	P	C
Version 1.0		1	0	2	3
Category of Course	**Skill Enhancement Course (SEC)-II**				
Total Contact Hours	**75 Hrs**				
Pre-requisites/Co-requisites					

Course Perspectives:

This course has been designed to impart knowledge of online marketing and working on various tools. Through this program, we aim to provide tools which have a high demand in the current business environment. The course curriculum of the University needs to be supplemented by a short duration course to impart knowledge and skills required to understand digital marketing concepts. This program is the need of the hour. Once there was a time when advertisements were limited to television, radio, newspapers and magazines. However, as the world is moving towards online platforms, businesses are expanding their reach and trying to connect with the customers through digital marketing platforms.

Course Outcomes:

CO1: Understanding the fundamental concepts and features of digital marketing, differentiating between traditional and digital marketing approaches, and identifying the various digital marketing channels.

CO2: Applying and implementing a content marketing strategy and email marketing

campaign, applying best practices and tailoring content to engage target audiences effectively.

CO3: Analyse the effectiveness of social media and display advertising strategies, assessing their benefits and challenges while identifying key metrics for success across different platforms.

CO4: Design and execute a comprehensive search engine marketing plan, integrating on-page and off-page optimization techniques, and effectively managing PPC campaigns

Syllabus:

Unit 1: Marketing in the Digital World

Digital marketing: Concept, Features, Difference between traditional and digital marketing, moving from traditional to digital Marketing; Digital Marketing Channels: Intent Based- SEO, Search Advertising; Brand Based-Display Advertising; Community Based-Social Media Marketing; Others-Affiliate, Email, Content, Mobile. Customer Value Journey: 5As Framework; The Ozone O3 Concept Key; Traits of online consumer

Unit 2: Content and Email Marketing

Content Marketing: Step-by-step Content Marketing Developing a content marketing strategy Email Marketing: Types of Emails in email marketing, Email Marketing best practices

Unit 3: Social Media Marketing and Display Marketing

Social Media Marketing: Building Successful Social Media strategy; Social Media Marketing Channels; Facebook, LinkedIn, YouTube (Concepts and strategies) Display Advertising: Working of Display Advertising; Benefits and challenges; Overview of Display ad Process.; Define- Customer, Publisher, Objectives; Format- Budget, Media, Ad Formats, Ad Copy.

Unit 4 Search Engine Marketing

Introduction of SEM: Working of Search Engine; SERP Positioning; online search behaviour, DMIs 5P Customer Search Insights Model. Search Engine Optimization: Overview of SEO Process; Goal Setting-Types.

On-Page Optimization: Keyword Research, SEO Process -Site Structure, Content, Technical Mechanics, Headings, Image & Alt text, Social Sharing, Sitemaps, Technical Aspects-Compatibility, Structured Data Markup.

Off Page Optimisation: Link Formats, Link Building, Content Marketing, Social Sharing; Black and White Hat Techniques Search Advertising: Overview of PPC Process Benefits of Paid Search; Basis of Ranking; Goal Setting-Objectives; Account Setting-Creation of Google Ads, Campaign architecture, Campaign setup, Targeting, Bid Strategy, Delivery, Ad Scheduling, Ad Rotation, Keyword Selection; Ad Copy composition, Ad Extension.

Essential/recommended readings

- J Dodson, I. (2016). The art of digital marketing: the definitive guide to creating strategic, targeted, and measurable online campaigns. John Wiley & Sons.

- Kartajaya, H., Kotler, P., & Setiawan, I. (2016). Marketing 4.0: moving from traditional to digital. John Wiley & Sons.

- Ryan, Damien: Understanding Digital Marketing - Marketing Strategies for Engaging the Digital Generation. Kogan Page Limited.

Reference Books

- Moutusy Maity: Internet Marketing: A practical approach in the Indian Context: Oxford Publishing

- Seema Gupta: Digital Marketing: Mcgraw Hill

- Ultimate guide to digital Marketing by Digital Marketer

Online Educational Resources:

- MS Office Tutorial
- Udemy
- Coursera
- Edx

Learning Experience:

The Microsoft Excel course will provide an interactive and hands-on learning experience through a combination of guided instruction, practical exercises, and collaborative projects. Students will explore Excel's features and functions through real-world scenarios, applying skills in data management, formula creation, and data visualization. Instruction will include step-by-step tutorials, video demonstrations, and group activities that encourage peer learning and support. Assessments will involve individual assignments and group projects that require students to analyze and present data effectively.

Semester II					
VAC168	**Service Learning for Social and Rural Development**	L	T	P	C
Version 1.0					2
Category of Course	**VAC-II**				
Total Contact Hours	**75 Hrs**				
Pre-requisites/Co-requisites	**Sociology/Economics**				

Course Perspectives

A community outreach program is a strategic initiative that organizations, institutions, or individuals undertake to engage with and serve a particular community. The primary goal of such programs is to build positive relationships, address community needs, and create a positive impact on the well-being of the individuals within that community. New generation of students are increasingly unaware of local rural and peri-urban realities surrounding their HEIs, as rapid urbanisation has been occurring in India. A large percentage of Indian population continues to live and work in rural and peri-urban areas of the country. While various schemes and programmes of community service have been undertaken by HEIs, there is no singular provision of a well-designed compulsory community engagement course that provides opportunities for immersion in rural realities. Such a course will enable students to learn about challenges faced by vulnerable households and develop understanding of local wisdom and life-style in a respectful manner.

Objectives:

- To develop an appreciation of rural culture, life-style and wisdom amongst students
- To learn about the status of various agricultural and development programmes
- To understand causes for distress and poverty faced by vulnerable households and explore solutions for the same
- To apply classroom knowledge of courses to field realities and thereby improve quality of learning

Learning Outcomes

After completing this course, student will be able to

• Gain an understanding of rural life, Indian culture & ethos and social realities

• Develop a sense of empathy and bonds of mutuality with local community

• Appreciate significant contributions of local communities to Indian society and economy

• Learn to value the local knowledge and wisdom of the community

• Identify opportunities for contributing to community's socioeconomic Improvements

Credits:

2 credit, 75 hours, at least 50% in field, compulsory for all students

Contents:

Divided into four Modules, field immersion is part of each Unit Course Structure: 2 Credits Course **(1 Credit for Classroom and Tutorials and 1 Credit for Field Engagement)**

Course Name- Service Learning for Social & Rural Development

Course Syllabus

S.No	Module Title	Module Content	Assignment	Teaching-Learning Methodology
1	Understanding Rural Society/NGO	Rural lifestyle, rural society, caste and gender relations, rural values with respect to community, nature and resources, elaboration of "soul of India lies in villages' (Gandhi), rural infrastructure	Prepare a map (physical, visual or digital) of the village/NGO you visited and write an essay about inter-family relations/ lives of people living in that village/NGOs	-Classroom discussions -Field visit** -Assignment Map
2	Understanding rural and local economy & livelihood/ Livelihood of Bottom of pyramid living in various places such as NGOs, Slums etc.	Agriculture, farming, landownership, water management, animal husbandry, non-farm livelihoods and artisans, rural entrepreneurs, rural markets, migrant labour, problems faced by bottom of the pyramid.	Describe your analysis of bottom of pyramid, its challenges and possible pathways to address them.	- Field visit** - Group discussions in class -Assignment
3	Rural and local Institutions, NGOs	Traditional rural & community organisations, Self-help Groups, Panchayati raj institutions (Gram Sabha, Gram Panchayat, Standing Committees),	What is the role of Local institutions/NGOs/SHGs in the development of the people living in the bottom of the pyramid? Present a case study (written or audio-visual)	-Classroom -Field visit** -Group presentation of assignment

		Nagarpalikas & municipalities, local civil society, local administration, Various NGOs and its role		
4	Rural and National Development Programmes	1. Sarva Shiksha Abhiyan- Educating Underprivileged Children. 2. MGNREGA- Role of MGNREGA in the employment generation. 3. Skill India- Awareness of Digital Literacy among people 4.Swachh Bharat- Implementation 5. Personal Health & Hygiene Awareness Program. 6. Financial Literacy Awareness Program 7. Any other	Describe the benefits received and challenges faced in the delivery of one of these programmes in the local c o m m u n i t y ; give suggestions about improving implementation of the programme for the poor.	- Each student selects one program for -field visit** - Written assignment/Report Presentation

Recommended field-based practical activities:

- Interaction with SHG women members, and study of their functions and challenges; planning for their skill building and livelihood activities
- Visit MGNREGS project sites, interact with beneficiaries and interview functionaries at the work site

- Field visit to Swachh Bharat project sites, conduct analysis and initiate problem solving measures
- Conduct Mission Antyodaya surveys to support under Gram Panchayat Development Plan (GPDP) Visit Rural Schools / mid-day meal centres, study academic and infrastructural resources and gaps.
- Visit local Anganwadi Centre and observe the services being provided
- Visit local NGOs, civil society organisations and interact with their staff and beneficiaries,
- Organize awareness programmes, health camps, Disability camps and cleanliness camps.
- Raise understanding of people's impacts of climate change/sustainability etc.

Teaching-Learning Methodology:

1. Classroom Discussion- 7-8 Hrs.
2. Field Visits- 15 Hrs.
3. Assignment/Presentation/Field Report writing- 7-8 Hrs.

Evaluation Criteria:

S.No	Categories	Marks
1	Attendance	10
2	Field Visits & Assignment	20
3	Report Writing	20
4	Presentation & Viva	50

Learning Experiences

1. **Field Visits and Immersion**
    - Students will visit rural and socially marginalized communities, old age homes, or NGOs to engage with real-world challenges faced by these groups.
    - Experience hands-on participation in local development projects, gaining insights into their daily operations, challenges, and impact.
2. **Participatory Learning**
    - Students will work in groups to collaboratively design and implement community development initiatives, such as health camps, educational outreach, or sanitation drives.
    - Reflection sessions after each project to discuss personal experiences, challenges faced, and lessons learned.
3. **Community Interaction**
    - Direct interaction with local community members to understand their needs, social dynamics, and aspirations.

- Participating in storytelling, cultural exchange activities, and focus group discussions with rural populations to develop empathy and social awareness.

4. **Service-based Learning Projects**
   - Students will be required to take up mini-projects focused on addressing specific issues like sanitation, literacy, or health in rural settings.
   - Opportunity to work on projects aligned with SDGs (e.g., SDG 1 - No Poverty, SDG 3 - Good Health, SDG 4 - Quality Education).
5. **Reflection and Journaling**
   - Students will maintain journals to reflect on their daily observations, interactions, and their impact on the community.
   - Final reflection papers where students critically analyze their learning journey and its influence on their perspective on social development.
6. **Case Studies and Problem-Solving**
   - Exposure to real-life case studies on successful social interventions and rural development projects.
   - Group discussions and problem-solving exercises to apply theoretical concepts to these cases.

Semester II					
CS001	**Club/Societies**	L	T	P	C
Version 1.0		-	-	-	1
Category of Course	**Club/societies**				
Total Contact Hours	**NA**				
Pre-requisites/Co-requisites					

Guidelines

Participation in Co/ Extracurricular activities is part of outside classroom learning.

Students must earn 2 credits from co/ extracurricular activities. One credit from participation in co curricular activities like Club/Society activities and another credit from Community Service (1 credit each) through participation in NSS/ Redcross activities or NGOs that contribute to their personal development, leadership skills, and community engagement.

- Under the category of Club/Society, 1 credit can be earned by registration in one of the Club/Societies of university and active participation in the events organized by the club/society OR

- 15 hours of active engagement in any of the recreational/sports activities

Semester III					
HUES201	**Economics of Growth & Development-I**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-VII**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Macro Economics**				

Course Perspective:

This course delves into the intricate dynamics of economic growth and development, offering a comprehensive examination of both traditional and contemporary measures. Students will explore Amartya Sen's capability approach alongside various indices such as the Human Development Index (HDI), Multidimensional Poverty Index, and other innovative metrics that assess inequality and well-being. The curriculum includes a detailed study of classical economic development theories, providing insights into historical and modern growth models. The course further investigates the profound impact of population growth on quality of life and economic progress, emphasizing the central roles of education and health as pivotal components of human capital. Through comparative case studies, students will critically analyse development trajectories and policies, enabling them to understand diverse strategies and outcomes in different national contexts. This holistic approach equips students with the analytical tools necessary to evaluate and influence economic development policies effectively.

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Course Outcomes:

After Completion of this course, Students would be able to:

CO1: Understanding the differences between traditional and modern measures of economic development, including various development indices.

CO2: Applying the development theories to assess real-world economic situations and development strategies.

CO3: Analysing the relationship between population growth and economic development in historical and contemporary contexts.

CO4: Evaluating the impact of human capital and technological progress on economic development through case studies and cost-benefit analysis.

Course Content:

Unit 1: Introduction to Economic Growth & Development 15 Hours

Concept of Economic Growth & Development: Meaning, Difference; Traditional Economic Measures – The New Economic View of Development – Amartya Sen's Capability approach – The Traditional Human Development Index – The New Human Development Index – Other Measures of Development: Inequality Adjusted HDI, Multidimensional Poverty Index, Happiness Index, Global Hunger Index– Development and Happiness – Three Core Values of Development – The Central Role of Women – The Three Objectives of Development;

Case Study: Comparative Development of two countries

Unit 2: Classical Theories of Economic Development 15 Hours

Classical theories of economic development; Rostow's Stages of Growth; The Harrod-Domar Growth Model; Solow Growth Model; Robinson and Schumpeter contribution; Dual Model of Development: Nurkse Vicious circle of poverty, Lewis Model of Development, Fie-Ranis Model

Unit 3: Population Growth and Economic Development 15 Hours

The Basic Issue: Population Growth and Quality of Life; The Historical Changes in World Population, Malthusian theory of population growth; optimum theory of population; Demographic Transition theory; World Population Growth throughout History; Structure of the World's Population

Case Study: Population, Poverty, and Development: China and India

Unit 4: Human Capital, Technical Progress and Economic Development 15 Hours

The Central Roles of Education and Health; Human Capital formation Approach of development; The Gender Gap: Discrimination in Education and Health; Education Health, Productivity and Development.

Case Study: Pathways Out of Poverty: Progresa/Oportunidades in Mexico

Choice of Techniques and appropriate Technology: Capital intensive versus Labor intensive techniques, Elementary Idea of Cost-Benefit Analysis, Technical Progress.

Suggested Textbook:

1. Todaro, Michael P. and Stephen C Smith., ―Economic Development, Pearson Education, (Singapore) Pvt. Ltd., Indian Branch, Delhi.
2. Thirlwall, A. P., ―Growth and Development, Seventh edition, Palgrave Macmillan, New York.

Reference Books

1.Banerjee, A., Benabou, R., Mookerjee, D. (eds.) (2006). Understanding poverty. Oxford University Press.

2. Bardhan, P. (2010). Awakening giants, feet of clay: Assessing the economic rise of China and India. Oxford University Press.

3. Basu, K. (2007). The Oxford companion to economics in India. Oxford University Press.

4. Dasgupta, P. (2007). Economics: A very short introduction. Oxford University Press.

5. Deaton, A. (2013). The great escape: Health, wealth and the origins of inequality. Princeton University Press.

6. Hirschman, A. (1992). Rival views of market society and other essays. Ch. 3: ―Linkages in Economic Development‖. Harvard University Press.

7. Human Development Report. Relevant years.

8. Olson, M. (1996). Big bills left on the sidewalk: Why some nations are rich, and others poor. Journal of Economic Perspectives, 10, 3-24.

9. Ray, Debraj (2004), ―Development Economics‖, Seventh impression, Oxford University Press, New Delhi.

10. Meier, Gerald M. and James E. Rauch., ―Leading Issues in Economic Development‖, Oxford University Press, New York.

Online Educational Resources:

- Development Economics by University of Michigan
- https://www.khanacademy.org/economics-finance-domain
- https://www.khanacademy.org/economics-finance-domain
- https://data.worldbank.org/
- https://www.researchgate.net/
- https://www.jstor.org/
- UNDP Publications
- IMF Data Centre

Learning Experience:

The Development Economics course will employ a variety of teaching and learning methods to create an engaging and immersive experience. Lectures will introduce key concepts and theories, complemented by interactive discussions and case studies that explore real-world development challenges. Students will participate in group projects, where they will analyze specific economic issues in developing countries, allowing for collaborative learning and diverse perspectives. Learning will be further enriched through the use of multimedia resources, simulations, and data analysis from the field. Evaluation will include individual assignments, group presentations, and reflective essays that assess students' understanding and application of development economics principles.

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Semester III					
HUES203	**Statistical Methods for Economics**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-VIII**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Basic Mathematics/Algebra**				

Course Perspective

Statistical Methods for Economics is designed to provide students with the analytical skills necessary to handle real-world economic data effectively. By applying statistical techniques, students gain the ability to assess economic relationships, identify trends, and make evidence-based decisions. This course bridges theoretical knowledge and practical application, ensuring that students can use statistics to analyze economic issues, evaluate policies, and conduct independent research. The course is vital for anyone pursuing a career in economics, finance, or policy analysis, as it lays the groundwork for empirical economic research and data-driven decision-making.

Course Outcomes

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

CO1: Understand the nature of statistics and fundamental statistical concepts.
CO2: Learn how to collect, organize, and present the data.
CO3: Apply a range of statistical methods commonly used in economics, including correlation & regression analysis.
CO4: Analyse economic data using appropriate statistical techniques and interpret the results and draw meaningful conclusions.

Course Content

Unit 1 **15 Hrs**

Introduction – Meaning, Scope , Limitations of Statistics. Distrust of Statistics. Primary and secondary data.: Methods of collecting primary data. Organisation of data: Classification,

tabulation and frequency Distribution. Diagrammatic and graphic representation. General rules for constructing diagrams, types of diagrams. Graphic representation of data: Technique of construction of graphs. General rules for graphing. Graphs of frequency distributions. Graphs of time series or histograms.

Unit -II **15 Hrs**

Measures of Central Tendency & Measures of Dispersion

Measure of Central Tendency - Requisites of a good average. Various Measures of Central Tendency : Arithmetic Mean , Median , Mode , Geometric Mean , Harmonic Mean .

Measures of Dispersion

Meaning of dispersion , absolute and relative measures of dispersion .Measures of dispersion- Range, Quartile Deviation or Semi-interquartile range, Mean deviation. Standard deviation. Lorenz curve. Skewness, moments and kurtosis -overview.

Unit III **15 Hrs**

Correlation and Regression

Correlation- Meaning and types of corelation , Coefficient of correlation, Karl Pearson and Rank correlation; Partial and Multiple Correlation analysis.

Regression analysis – Estimation of a regression line in a bivariate distribution, Least squares method; Interpretation of Correlation and regression coefficients; Coefficient of determination.

Unit IV: **15 Hrs**

Time Series & Index Number

Index numbers: Problems and methods of construction of various types of indices, Laspeyres, Pasche's and Fisher's ideal index numbers, Time reversal, factor reversal and circular tests; chain-based indices, costs of living index numbers and consumer price index numbers.

Time series: components of time series and their decomposition, Methods of measuring trend, cyclical, seasonal and irregular variation.

Recommended Textbook

Gupta, S. C. & Indra Gupta, "Business Statistics, Himalaya Publishing House, Latest Editions.

Reference Books

- Devore, J. (2012). Probability and statistics for engineers, 8th ed. Cengage Learning.
- Larsen, R., Marx, M. (2011). An introduction to mathematical statistics and it's applications. Prentice Hall.
- Miller, I., Miller, M. (2017). J. Freund's mathematical statistics with applications, 8th ed. Pearson.

- Business statisics By S.N. Arora S. Chand Publication
- Business Statistics for Contemporary Decision Making, by Ken Black, John Wiley & Sons (Asia) Pte. Ltd., Singapore.
- Statistics for Management- by Richard Levin & David S. Rubin, Pearson Education.
- Statistics for management – by Gerald Keller, Cengage Learning.
- Complete Business Statistics Amir D Aczel & Jayavel Sounderpandyan.
- Introductory Statistics by Weiss. Seventh edition, Pearson education.
- Business Statistics – by J. K Sharma, Pearson education.
- Statistics for Management - by T N Srivastava and Shailaja Rego, The McGraw-Hill companies.

Open Educational Resources:

- **Coursera: Statistics for Economists**
- **edX: Introduction to Statistics for Econometrics**
- **Khan Academy: Statistics and Probability**
- **OpenCourseWare: Statistical Methods for Economics (MIT)**
- **NPTEL: Statistics and Econometrics**
- **YouTube: Econometrics Academy**
- **Wiley: Introduction to Econometrics**
- **ResearchGate: Econometrics and Statistics Research Papers**

Learning Experience: The Statistical Methods for Economics course will utilize a blend of teaching and learning methods to ensure a comprehensive understanding of statistical concepts applied to economic data. Lectures will introduce key statistical theories and techniques, while interactive workshops will provide hands-on experience with data analysis using software tools like Excel and R. Students will engage in group projects that require them to collect, analyze, and interpret economic data, fostering collaboration and critical thinking. Evaluation will include practical assignments, quizzes, and a final project where students present their findings and insights.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester III					
HUES251	**Statistical Methods for Economics-Practical**	L	T	P	C
Version 1.0		0	0	1	1
Category of Course	**Major-Practical**				
Total Contact Hours	**30 Hrs**				
Pre-requisites/Co-requisites	**Basic Knowledge of MS Office/Excel**				

Course Objectives

The main objective of the course is to get a clear understanding of the practical portion in economics that includes hands on experience in excel, correlation and regression.

Course outcome

An important learning outcome of the course will be the ability to create charts, graphical representation of data and statistical analysis.

Syllabus

UNIT I: Data Visualization with Excel

Creating Charts, Graphical representation of data, Representation of Economic relationships: Demand curve, Supply curve, Cost curves, Revenue curves, Consumption function, Savings function and Production function.

UNIT II: Basics of Excel:

Data Classification, sorting & Filtering: Functions in Excel, Sorting and filtering of data, Creating Sub- totals, Using a data form, Creating Pivot tables, Using and creating MS-Excel templates, Linking workbooks.

UNIT III: Data Analysis:

Preparation of frequency distribution, Pivot table, calculation of Mean, Standard deviation, Coefficient of variation, Correlation coefficient, Regression coefficients, Trend line using method of least squares and Moving averages.

UNIT IV: Conditional Formatting:

Highlight Cell Rules, Top-Bottom rules, Data Bars, Color Scales, Icon Sets, Clear rules, Manage rules

Reference Books

1. MS Office

2. Access 2007 Inside Out-John L. Viescas, Jeff Conrad (PHI)

3. Microsoft Office Access 2007 –Introductory –Linda O'Leary (TMH)

4. Microsoft Office Access 2007QuickSteps-John Cronan (TMH)

5. Data Analysis with Access 2007 –Larry Rockoff-Course Technology PTR

Semester III					
AEC006	**Verbal Ability**	L	T	P	C
Version 1.0		3	0	0	3
Category of Course	**Ability Enhancement Course-I**				
Total Contact Hours	**45 Hrs**				
Pre-requisites/Co-requisites	**Basic English**				

Course Perspective:

The course aims to improve language proficiency in three key areas: grammar, vocabulary and identification of grammatical errors in writing. Language proficiency enables students to comprehend lectures, understand course materials and enhances students' ability to express themselves clearly and effectively. In many professions, strong language skills are a prerequisite. Whether in business, medicine, law, or science, being able to communicate fluently and accurately is essential for collaboration, negotiation, and advancement. A strong command of verbal abilities can significantly impact job interviews. It allows candidates to answer questions confidently, demonstrate their qualifications effectively and leave a positive impression on potential employers..

COURSE OUTCOME (COs)

On completion of the course learner should be able to: -

CO1. Understanding the grammar rules and word meaning (Vocabulary).

CO2. Applying grammar rules and vocabulary in different context & purpose
CO3. Analyzing situations/ context of communication and selecting appropriate grammar and words.
CO4. Developing sentences and paragraphs to describe and narrate a situation

COURSE Content:

Unit Number: 1 Vocabulary Development and Application 10 hrs

Content Summary: Understanding the concept of root words, Prefix and suffix, Ways to enhance Vocabulary, Crosswords and word quizzes, Confusing words, One word substitution, Odd one out, Synonyms and Antonyms, Commonly misspelt words, Idioms and Phrases

Unit Number:2 Fundamentals of Grammar and Sentence Structure 8 hrs

Content Summary: Introduction to Parts of Speech, Tenses and its 'rules, Sentences (Simple, Compound and Complex), Subject Verb Agreement, Pronoun Antecedent agreement, Phrases and Clauses

Unit Number: 3 Mastering Sentence Accuracy and Completion Skills 12hrs

Content Summary: Spot the error (grammatical errors in a sentence), Sentence Correction (Improvement of sentences based on Grammar rules), Sentence Completion, Cloze Tests

Unit Number: 4 Enhancing Sentence Structure and Reading Comprehension Skills 6 hrs
Logical Arrangement of Sentences, Comprehending passages, Contextual questions, Anagrams, Analogies

Suggested Textbooks
R1. Norman Lewis – Word Power Made Easy
R2. Wren & Martin – High School English Grammar & Composition
R3. R.S. Agarwal & Vikas Agarwal – Quick Learning Objective General English
R4. S.P. Bakshi - Objective General English
R 5. Praxis Groups -Campus Recruitment Complete Reference

Additional Readings:
https://www.indiabix.com/online-test/aptitude-test/
https://www.geeksforgeeks.org/aptitude-questions-and-answers/
https://www.hitbullseye.com/

Learning Experience: This course will focus on developing effective verbal and written communication techniques essential for professional and personal interactions. The course will employ a mix of interactive lectures, role-playing exercises, and group discussions to enhance

speaking, listening, and presentation skills. Students will participate in activities such as peer reviews, case studies, and workshops that emphasize real-world communication scenarios, allowing for practical application of concepts. Evaluation will include individual presentations, written assignments, and participation in discussions, ensuring that students receive constructive feedback throughout the course.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester III					
VAC179	**Public Policy Analysis**	L	T	P	C
Version 1.0		2			2
Category of Course	**VAC-III**				
Total Contact Hours	**30 Hrs**				
Pre-requisites/Co-requisites	**Principles of Economics**				

This course seeks to provide students with both a conceptual framework and practical experience in analysing public policies . The course covers a variety of topics related both to the substance and methods of policy analysis . The course is designed to help students develop the skills required to define and critically analyse policy problems, articulate relevant decision-making criteria for policy analysis, and evaluate alternative policy options. The goals of this course are to provide students with an understanding of the role that analysis plays in the policymaking process, to make students critical consumers of policy analysis, and to equip students with the basic skills necessary to write and present a professional policy analysis paper. Aim of the course is to help students in developing as a junior policy analysts The interdisciplinary curriculum equips students to create social impact at local, national and global levels and also prepare for Civil Service examination in India. Students would develop quantitative, qualitative and analytical skills, and receive substantive exposure to the real-world policy making processes.

Course Outcomes

After completion the course, students will be able to:

1. Understand public policy on both a theoretical and practical level.

2. Explain how the policymaking process works and apply them to real world issues by providing solutions to real world problems.
3. Identify and define public problems as well as identify and evaluate policy solutions.
4. Describe the relationship between policy analysis, politics and the policy process in democracy.

Unit 1 (7 lectures)

Understanding Public Policy Analysis, Definitions and Frameworks

Introduction to Public Policy, Attributes, Definitions and Relevance of Public Policy, Policy Inputs, Outputs and Outcomes, Typologies, Policy Cycle, Constraints in Policy Making

Unit 2 (10 lectures)

Problem Emergence

Identification of issue, Framing of Problem, Problem of definition and assembling of evidence, Writing a Problem statement, Policy problems as market and governmental failure, Distributional and Other Goals**.** Determination of goals and objectives. Constructing Alternatives and Selecting Criteria. Selection of Policy choice and confronting trade-offs.

Unit 3 (7 lectures)

Actors in Public Policy and Practical Applications of Policy Analysis

Legislature and Executive; Interest Groups; Judiciary; Bureaucracy; Practical Applications: Green Revolution; Who Changed Delhi's Air? How the State Changed.

Unit 4 (6 Lecture)

Implementation and Policy Evaluation

Implementation: Approaches and Models - Top-Down Rational System Approaches, Bottom-Up Approaches: Challenges and Gaps; Policy Impact, Evaluation and Change, Criteria for Evaluation. Cost Benefit Analysis, Management by Objectives (MBO), Operations Research, Programme Evaluation and Review Technique (PERT) & Critical path Method (CPM).

Reference Books

1. Anderson, J.E. (2014). Public Policy Making. Cengage Learning.
2. Ayyar, R. V. V. (2009). Public Policymaking in India. Pearson.
3. Bardach, Eugene (2011). A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving. CQ Press College.

4. Birkland, Thomas A. (2011). Policy Process: Theories, Concepts, and Models of Policy Making. Routledge.

Class Assignments & Evaluations

1. Internal [50%]
2. Final Project Portfolio (50%)

The final project consists of a portfolio containing the following items:

(1) a final project proposal,

(2) four drafts of the final project components,

(3) a final paper,

(4) a policy memo

(5) a presentation.

Guidelines for the students regarding Final Project

Pick a state or local issue in at national or state level within the policy area assigned to you for the Issues and Controversies. For example, if you are assigned to welfare and social security policy for the Issues and Controversies assignment, pick an issue related. to that policy area. The final policy paper must include key components of a policy analysis as described below:

• **Defining a Public Policy Problem:** Policy analysts have learned that it is extremely challenging to define a problem in an agreeable format.

Discuss the following questions:

- What is a public problem that you aim to address through a policy proposal?
- Why is it a problem and from whose perspective?
- What is the history of the problem and past policy attempts to solve it?
- Identifying Evaluative Criteria: Based on readings and class discussion regarding evaluative criteria (not analytical criteria), you will identify a good set of criteria to make a judgment on potential policy alternatives. In this subsection, you may discuss what criteria you will use to compare policy alternatives and why. You may want to discuss the limitations of your selected criteria at the end of the paper.

• **Generating and Assessing Policy Alternatives:** It is inevitable that policy analysis has a Qualitative aspect, especially when we think about policy alternatives and selection. criteria. Your group may think about a couple of policy alternatives to address your local policy problem in addition to a ‘do nothing’ option. Evaluate the alternatives based on the policy criteria you

selected. Be critical and clear in explaining the trade-offs. Your final paper may include a Criteria and Alternative Matrix (CAM), if you chose to do so. You can add qualitative or quantitative evaluations of the alternatives.

Learning Experience:

The public policy analysis course will be conducted through a dynamic blend of lectures, interactive discussions, and hands-on activities that foster experiential learning. Students will engage in case studies to explore real-world applications of policy frameworks and attributes, while group work will enhance collaborative problem-solving skills as they identify, frame, and analyze policy issues. Practical projects will simulate decision-making processes, including constructing alternatives and evaluating trade-offs. Guest speakers from relevant fields will provide insights into the role of key actors in policymaking, and students will apply tools like cost-benefit analysis and PERT in assessing policy impacts. Continuous feedback will be provided through assignments, peer reviews, and instructor consultations, encouraging students to seek help and collaborate throughout the course. This comprehensive approach aims to equip students with the skills necessary to critically analyse and effectively engage with public policy challenges.

Semester III					
SEC003	**Entrepreneurship**	L	T	P	C
Version 1.0		1	0	2	3
Category of Course	**Skill Enhancement Course-III**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites					

Course Perspectives

A fundamental outcome of entrepreneurship is the creation of new value, usually through the creation of new products and services which may lead to the creation of a new business entity. The objective of this course is to demonstrate and understand that exploiting a new opportunity is a process that can be planned, resourced, and managed. To start a successful business, an entrepreneur must exercise motivation as well as enterprising and managerial skills. He or she requires access to resources to grow the business; not just investment but social resources as well. Overall success is not just related to the nature of market opportunities but to the entrepreneurial and managerial motivations and skills of the entrepreneur

Course Outcomes

On completion of this course, the students will be able to

CO1. Develop idea generation, creative and innovative skills

C02. Aware of different opportunities and successful growth stories

CO3. Learn how to start an enterprise and design business plans those are suitable for funding by considering all dimensions of business.

CO4. Understand entrepreneurial process by way of studying different case studies and find exceptions to the process model of entrepreneurship.

Course Content

Course Syllabus:

UNIT-I

Entrepreneurship – Concept, knowledge and skills requirement, characteristics of successful Entrepreneurs, role of entrepreneurship in economic development, entrepreneurship process, factors impacting emergence of entrepreneurship, managerial vs. entrepreneurial approach and emergence of entrepreneurship

UNIT-II

Creating Entrepreneurial Venture – Environmental scanning, competitor and industry analysis; feasibility study – market feasibility, technical/operational feasibility, financial feasibility; drawing business plan; preparing project report; presenting business plan to investors

UNIT-III

Sources of Finance – Debt or equity financing, commercial banks, venture capital; financial Institutions supporting entrepreneurs; legal issues – intellectual property rights patents, trademarks, copy rights, trade secrets, licensing, franchising .

UNIT-IV

Role of Central and State Governments in promoting entrepreneurship – Start-up India, Standup India, PM Yuva Yojana, NITI Aayog, Various incentives, subsidies, fiscal and fax concessions; agencies in entrepreneurship development – District Industries Centres (DICs), Small Industries Service Institute (SISI), Entrepreneurship Development Institutes of India (EDII); Women Entrepreneurs – role, problems, prospects.

Reference Books:

1.Tendon,C: Environment and Entrepreneur; Cliugh Publications, Allahabad.

2. Siner A David: Entrepreneural Megabuks; John Wiley and Sons, New York.

3. Srivastava S. B: A Practical Guide to Industrial Entrepreneurs; Sultan Chand and Sons, New Delhi.

Open Educational Resources:

- Coursera: Entrepreneurship: Launching an Innovative Business
- edX: Entrepreneurship in Emerging Economies
- Khan Academy: Entrepreneurship
- YouTube: Stanford eCorner – Lectures and talks on entrepreneurship.
- MIT OpenCourseWare: Entrepreneurial Finance
- Harvard Business School Online: Entrepreneurship Essentials
- SBA Learning Center: Free Courses on Starting a Business

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Learning Experience:

The entrepreneurship course will be conducted in an experiential and participatory manner, blending theoretical knowledge with hands-on learning to ensure students actively engage with the material. Instruction methods will include interactive lectures, case studies, group work, and real-world applications. Hands-on learning will be emphasized through activities like business plan development workshops, role-playing exercises for sourcing finance, and legal issue simulations where students navigate intellectual property rights. Assignments will be both individual and group-based, encouraging collaboration and peer feedback. Group discussions, debates, and presentations will enhance understanding, while peer reviews of business plans will build critical evaluation skills. Outside the classroom, students will be encouraged to

engage with local entrepreneurs, conduct market research, and explore government schemes supporting entrepreneurship.

Semester III					
SIES001	**Summer Internship**	L	T	P	C
Version 1.0					2
Category of Course	**Summer Internship-I**				
Total Contact Hours	**75 Hrs**				
Pre-requisites/Co-requisites	**Knowledge of MS Office, Some soft Skills**				

Course Perspective

Internships in Economics offer students invaluable opportunities to apply their academic knowledge to real-world scenarios, gain practical experience, and develop crucial skills for their future careers. These internships typically range from placements in government agencies, financial institutions, research organizations, consulting firms, to various industries where economic analysis plays a pivotal role.

Objectives:

1. One of the primary objectives of an internship for economics students is to provide them with the opportunity to apply theoretical concepts learned in the classroom to real-world scenarios.
2. Internships aim to develop a diverse set of skills essential for success in the field of economics.
3. Students learn about workplace dynamics, professional etiquette, teamwork, time management, and project management, all of which are crucial for their future careers.
4. Internships significantly enhance a student's resume, making them more competitive in the job market upon graduation.
5. They gain confidence in their abilities, learn to adapt to new challenges, and develop a deeper understanding of their strengths, weaknesses, and career aspirations.

Types of Economic Internships:

Government Agencies: Interning at government agencies such as the Banks, Ministries, RBI etc. offers students insight into economic policymaking, data analysis, and research.

Financial Institutions: Interning at banks, investment firms, or insurance companies provides students with exposure to financial markets, economic forecasting, risk analysis, and investment strategies.

Research Organizations: Organizations like think tanks, economic research institutes, and non-profits often offer internships focused on economic research, policy analysis, and advocacy work.

Consulting Firms: Economic consulting firms hire interns to assist with economic analysis, market research, financial modeling, and strategic planning for clients across various industries.

Corporate Internships: Some corporations hire economics interns to work in areas such as pricing analysis, market research, demand forecasting, and business strategy, digital marketing, data analysis etc.

Guidelines for students:

1. All the students need to go for internship for minimum of 4 weeks.

2. Students can take mini projects, assignments, case studies by discussing it with concerned authority from industry and can work on it during internship.

3. All students should compulsorily follow the rules and regulations as laid by industry.

4. Every student should take prior permissions from concerned industrial authority if they want to use any drawings, photographs or any other document from industry.

5. Student should follow all ethical practices and SOP of industry.

6. Students have to take necessary health and safety precautions as laid by the industry.

7. Student should contact his /her academic guide from university on weekly basis to communicate the progress.

8. Each student has to prepare internship report in consultation with the academic guide.

Internship Report

After completion of Internship, the student should prepare a comprehensive report to indicate what he has observed and learnt in the training period. The student may contact Industrial Supervisor/ Faculty Mentor/TPO for assigning special topics and problems and should prepare the final report on the assigned topics. The training report should be signed by the Internship Supervisor and Faculty Mentor.

The Internship report will be evaluated on the basis of following criteria:

i. Originality.
ii. Adequacy and purposeful write-up.
iii. Organization, format, drawings, sketches, style, language etc.
iv. Variety and relevance of learning experience.
v. Practical applications, relationships with basic theory and concepts taught in the course.

Assessment:

- Internship Performance Feedback & Certificate (30%)
- Internship Report (50%)
- Internship Presentation (20%)

Note: The specific requirements and expectations of the internship course may vary depending on the institution's policies, the availability of internship opportunities, and the preferences of the faculty. Students are encouraged to consult with their academic advisors and internship coordinators for personalised guidance and support throughout the internship process.

Semester III					
CS002	**Community Service**	L	T	P	C
Version 1.0		-	-	-	1
Category of Course	**Club/societies**				
Total Contact Hours	**NA**				
Pre-requisites/Co-requisites					

Guidelines

Under the category of Community Service, 1 credit can be earned by

• 15 hours active engagement in community service through NGO/NSS/Redcross or any other society approved/ empanelled by the university

At the end of the semester, students are required to submit a log of hours, a report, and a certificate of participation/ completion summarizing their activities followed by a presentation.

Semester IV					
HUES202	**Economics of Growth & Development-II**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-IX**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Development Economics/Indian Economy Basics**				

Course Perspectives:

This course delves into the intricate dynamics of economic growth and development, offering a comprehensive examination of both traditional and contemporary measures. Students will explore Amartya Sen's capability approach alongside various indices such as the Human Development Index (HDI), Multidimensional Poverty Index, and other innovative metrics that assess inequality and well-being. The curriculum includes a detailed study of classical economic development theories, providing insights into historical and modern growth models. The course further investigates the profound impact of population growth on quality of life and economic progress, emphasizing the central roles of education and health as pivotal components of human capital. Through comparative case studies, students will critically analyse development trajectories and policies, enabling them to understand diverse strategies and outcomes in different national contexts. This holistic approach equips students with the analytical tools necessary to evaluate and influence economic development policies effectively.

Course Objectives:

This course helps the students:

- Analyse contemporary development theories and their application in various contexts.
- Assess the measurement and implications of poverty and inequality in economic development.
- Explore the interconnections between the environment and sustainable development.
- Evaluate different development planning approaches and the role of markets.
- Apply case study analysis to understand development dynamics in diverse regions.

Course Outcomes:

After Completion of this course, Students would be able to:

CO1: Understanding the contemporary theories of economic development and their foundational concepts.

CO2: Applying the development models to address issues of poverty and inequality in specific case studies.

CO3: Analysing the relationship between environmental sustainability and economic growth.

CO4: Evaluating the effectiveness of development policies and planning strategies in various economies.

Course Content:

Unit 1: Contemporaries Development Theories 15 Hours

Myrdal 's-Backwash Effects and circular causation, Balanced and Unbalanced Growth, Theory of Big Push; Michael Kremer's O-Ring Theory of Economic Development; Economic Development as Self-Discovery; The Hausmann-Rodrik-Velasco Growth Diagnostics Framework; Endogenous Growth Models

Case Study: Understanding a Development Miracle: China

Unit 2: Poverty, Inequality and Development 15 Hours

Inequality: Meaning, Types; Measuring Inequality: Lorenz curve, Ginni Coefficient, The Ahluwalia-Chenery Welfare Index (ACWI); Kuznets' Inverted U-Shaped Hypothesis; Growth and Inequality. Measuring Absolute Poverty, Relative Poverty; Multidimensional Poverty Index (MPI); Growth and Poverty; Economic characteristics of High Poverty Groups: Rural Poverty, Women and Poverty; Policy Options on Income Inequality and Poverty: Some Basic Considerations

Case Study: Institutions, Inequality, and Incomes: Ghana and Côte d'Ivoire

Unit 3: The Environment and Development 15 Hours

Environment and Development: The Basic Issues- Economics and the Environment, Environment Relationships to Population, Poverty, and Economic Growth, Sustainable Development Environment and Rural and Urban Development; Global Warming and Climate Change: Scope, Mitigation, and Adaptation; Economic Models of Environmental Issues: Privately Owned and Common Resources, Public Goods and Bads: Regional Environmental Degradation and the Free-Rider Problem; Urban Development and the Environment

Case Study: A World of Contrasts on One Island: Haiti and the Dominican Republic

Unit 4: Development Policymaking and the Roles of Market 15 Hours

Development Planning: Concepts and Rationale- Economic Planning and types of planning, Nature of Development Planning, planning in mixed-developing economies, The Rationale for Development Planning; The Development Planning Process: Some Basic Models; Government Failure and Preferences for Markets Over Planning; Decentralisation of Planning; Planning in Market Economy.

Case Study: The Role of Development NGOs: BRAC and the Grameen Bank

Suggested Textbook:

1. Todaro, Michael P. and Stephen C Smith., ―Economic Development, Pearson Education, (Singapore) Pvt. Ltd., Indian Branch, Delhi.
2. Thirlwall, A. P., ―Growth and Development, Seventh edition, Palgrave Macmillan, New York.

Reference Books

1.Banerjee, A., Benabou, R., Mookerjee, D. (eds.) (2006). Understanding poverty. Oxford University Press.

2. Bardhan, P. (2010). Awakening giants, feet of clay: Assessing the economic rise of China and India. Oxford University Press.

3. Basu, K. (2007). The Oxford companion to economics in India. Oxford University Press.

4. Dasgupta, P. (2007). Economics: A very short introduction. Oxford University Press.

5. Deaton, A. (2013). The great escape: Health, wealth and the origins of inequality. Princeton University Press.

6. Hirschman, A. (1992). Rival views of market society and other essays. Ch. 3: ―Linkages in Economic Development‖. Harvard University Press.

7. Human Development Report. Relevant years.

8. Olson, M. (1996). Big bills left on the sidewalk: Why some nations are rich, and others poor. Journal of Economic Perspectives, 10, 3-24.

9. Ray, Debraj (2004), ―Development Economics‖, Seventh impression, Oxford University Press, New Delhi.

10. Meier, Gerald M. and James E. Rauch., ―Leading Issues in Economic Development‖, Oxford University Press, New York.

Open Educational Resources

- Development Economics by University of Michigan
- https://www.khanacademy.org/economics-finance-domain
- https://www.khanacademy.org/economics-finance-domain
- https://data.worldbank.org/
- https://www.researchgate.net/
- https://www.jstor.org/
- UNDP Publications
- IMF Data Centre

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Learning Experience:

The Development Economics course will employ a variety of teaching and learning methods to create an engaging and immersive experience. Lectures will introduce key concepts and theories, complemented by interactive discussions and case studies that explore real-world development challenges. Students will participate in group projects, where they will analyze specific economic issues in developing countries, allowing for collaborative learning and diverse perspectives. Learning will be further enriched through the use of multimedia resources, simulations, and guest speakers from the field. Evaluation will include individual assignments, group presentations, and reflective essays that assess students' understanding and application of development economics principles. Continuous feedback will be provided, and students are encouraged to seek support from the instructor while engaging in peer reviews to enhance their learning experience.

Semester IV					
HUES204	**Basic Econometrics**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-X**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Development Economics/Indian Economy Basics**				

Course Perspective

This course is designed to expose students to the basic concepts of Econometric theory. The focus of the course will be on thinking like an economist and demonstrating how to apply Econometric concepts to real-world problems. This course introduces students to key techniques for analysing economic data, estimating relationships between variables, and making predictions. It combines statistical methods with economic theory, focusing on practical applications of econometric models to real-world issues. Students will learn to construct and estimate regression models, address challenges like multicollinearity and autocorrelation, and critically interpret results. Essential for understanding empirical research, this course equips students with data analysis skills applicable in economics, finance, and

policy analysis, using hands-on exercises to develop their ability to make informed decisions and analyze trends.

Course Outcomes

At the end of the course, students should be able to:

CO1: Understanding of basics of econometrics and its assumptions and impact of violations of classical assumptions.

CO2: Applying econometrics tool to identify problems and analyses data set.

CO3: Able to read and understand project reports and journal articles that make use of the concepts and methods that are introduced in the course.

CO4: Interpret and critically evaluate outcomes of regression analyses and identify problems faced during regression analysis.

Course Contents

UNIT-I

Basics of Econometrics **15 Hrs**

Introduction: Definition, Scope of Econometrics. Statistics and Econometrics. Methodology of econometrics; Types of Econometrics, Nature and sources of data for econometric analysis; Specification of an econometric model.

Statistical inference: testing hypothesis **15 Hrs**

Testing Hypothesis, Testing Hypothesis about The Population Mean And Proportion ,Testing Hypothesis for Differences Between Two Means Or Proportions , Chi Square Test of Goodness of Fit and Independence, Analysis of Variance , Non Parametric Testing

UNIT- II

Probability and probability distribution **15 Hrs**

Probability of Single Event , Probability of Multiple Events , Discrete Probability Distributions: The Binomial Distribution , The Poison Distribution , Continuous Probability Distributions: The Normal Distribution

UNIT- III **15 Hrs**

Simple regression analysis

The nature of regression analysis , The two variable linear model , The ordinary least squares method , Test of significance of parameter estimates .Test of goodness of fit and correlation , Properties of Ordinary Least-Squares Estimators. Multiple Regression Analysis, Tests of Significance of Parameter Estimates , The Coefficient of Multiple Determinations , Test of The Overall Significance Of The Regression

Unit IV **15 Hrs**

Econometric Problems

Econometric Problems: Nature, consequences, detection and remedial measures of the problems of multicollinearity, heteroscedasticity and autocorrelation.

Model Selection & Test Procedures

Test Procedures and Model Selection: Tests of specification and mis-specification, measurement errors, encompassing models, and criteria for model selection.

Recommended Textbook

- Gujarati, D. (2002). Basic Econometrics (4th ed.). McGraw Hill.

Addition Reading List

- Stock, J.H. & Watson, M. W. (2011). Introduction to Econometrics (3rd ed.). Delhi: Pearson Prentice Pvt. Ltd.
- Maddala, G. S. (2007). Introduction to Econometrics (3rd ed.). India: Wiley.
- Wooldridge, J. M. (2000). Introductory Econometrics. Southwestern College Publishing.
- Joshua D Angrist and Jorn-Steffen Pischke "Mostly Harmless Econometrics: An Empiricist's Companion" Princeton University

Open Educational Resources:

- MIT OpenCourseWare: Econometrics
- Econometrics Academy: Video Lectures and Resources
- OpenStax: Introductory Econometrics
- University of California, Berkeley: Econometrics Online Course
- YouTube: Econometrics Lectures
- NPTEL: Econometrics Course
- Statistical Software and Econometrics Resources

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Learning Experience:

The **Econometrics** course will offer an engaging learning experience through a combination of lectures, hands-on data analysis, and real-world case studies. Students will utilize statistical software to apply econometric techniques to economic data, enhancing their practical skills. Group projects will encourage collaboration and critical thinking as students interpret results and draw conclusions

Semester IV					
AEC007	**Communication & Personality Development**	L	T	P	C
Version 1.0		3	0	0	3
Category of Course	**Ability Enhancement Course (AEC)-II**				
Total Contact Hours	**45 Hrs**				
Pre-requisites/Co-requisites	**Basic English Language**				

Course Perspectives:

The course enhances public speaking and presentation skills, helps students confidently convey ideas, information & build self-reliance and competence needed for career advancement. Personality assessments like the Johari Window and Myers & Briggs Type Indicator (MBTI) provide frameworks to enhance self-understanding, helps people increase their self-awareness, understand and appreciate differences in others and apply personality insights to improve their personal and professional effectiveness. Interpersonal skills included in the course deal with important topics like communication, teamwork and leadership, vital for professional success.

Course Outcomes (COs)

On completion of the course learner should be able to: -

CO1: Improve public speaking and presentation abilities to confidently convey ideas and information.

CO2: Understand the framework of Communication to augment oratory skills and written English
CO3: Cultivate essential soft skills required at the different workplaces.

Course Content:

Unit 1: Developing self and others 8 hours

Content Summary: Self Awareness, Personality Concepts (Personality Assessments -Johari Window, Myers & Brigg), Self-Management, Self Esteem, Self-Efficacy, Interpersonal skills, mindset, grit and working in teams.

Unit 2: Enhancing Reading and Writing Skills 6 hours

Content Summary: Speed reading and its importance in competitive examinations, techniques for speed reading, note-taking, and critical analysis. Paragraph Writing, Essay and Summary writing, Business Letter, Email writing

Unit 3: Effective Communication and Public Speaking 7 hours

Content Summary: Communication Framework, barriers & overcoming these barriers, Group Discussions, Extempore & Public Speaking drills, to manage stage fright and anxiety. Structuring and organizing a presentation (Oral & PPT), Etiquettes, Grooming, Body Language and Conversation starters, TMAY.

Unit 4: Career Guide and readiness 15 hours

Cover Letter, ATS friendly resume, Elevator Pitch, Video Resume (Visume), Networking, Group Discussion, Mock Interviews. Capstone Project

Text Book and References

R1 Talking to Strangers – Malcom Gladwell

R2 Fierce Conversation - Scot Susan

R3 Public Speaking - William S. Pfeiffer, Pearson

R4 Soft Skills for Everyone – Jeff Butterfield

R5 Business Communication – Rajendra Pal, J S Korlahalli

R6 The power of Positive Attitude -Roger Fritz

R7 Believe in Yourself – Dr. Joseph Murphy

J. Additional Readings

- **Websites & MOOCs**

www.16personalities.com

www.tonyrobbins.com

- **Specific Research Papers**

GALLUP PRESS RESEARCH

FRANKLIN COVEY LEADERSHIP CENTRE

- **Videos**

The 7 Habits of Highly Effective People, Dr. Stephen R. Covey

I Am Not Your Guru, Tony Robbins

- **Podcast**

The Tim Ferriss Show

- **Magazines**

SUCCESS Magazine

- **Journals**

The IUP Journal of Soft Skills

Learning Experience:

This course will focus on enhancing interpersonal and communication abilities essential for professional success. Through interactive workshops, role-playing exercises, and group activities, students will develop skills in teamwork, conflict resolution, and emotional intelligence. The course will include real-life scenarios and case studies to practice adaptability and critical thinking in dynamic environments.

Open Educational Resources:

- Coursera: Soft Skills for Professionals
- edX: Communication and Soft Skills
- Khan Academy: Personal Finance and Soft Skills
- LinkedIn Learning: Soft Skills for Professionals
- MindTools: Soft Skills Articles and Resources
- YouTube: TEDx Talks on Soft Skills
- SkillsYouNeed: Soft Skills Guides

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Semester V					
HUES301	**Public Economics**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-XII**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Basic Knowledge of Indian Economy/Economics**				

Course Perspectives:

Public Economics covers the fundamental concepts and theories of public finance. Public Economics explores the role of government in the economy, focusing on how it influences allocation of resources, income distribution, and overall welfare through policies such as taxation, public spending, and regulation. This course examines theoretical frameworks and empirical methods to analyze the efficiency and equity implications of government interventions. Through this course, students learn to evaluate the rationale for government intervention, assess policy effectiveness, and understand the trade-offs involved in public decision-making. This paper also emphasis on a thorough understanding of fiscal institutions with a careful analysis of the issues which underlines budgetary policies in general and India in particular. Through case studies and discussions, the course equips students with tools to critically analyze and shape public economic policies.

Course Outcomes (COs):

After completion of the course, the students will be able to:

CO1- Understanding the principles and theories underpinning public finance.

CO2- Applying theoretical frameworks to analyze real-world economic scenarios and policy decisions related to public finance.

CO3- Analyzing the impact of taxation, public expenditure, and public debt on economic stability, growth, and resource allocation.

CO4- Evaluating the role of government in correcting market failures and promoting maximum social advantage.

Course Content:

Unit-I (Total Hours: 15)

Introduction to Public Finance: Nature, Scope, Importance; Private and Public Finance: Similarities and Dissimilarities; Public and Private Goods: Features and Dissimilarities; Merit goods (concept); Theory of Maximum Social Advantage: Principle, Limitations; Concept of Market Failure, Role of Government in Correcting Market Failure.

UNIT-II (Total Hours: 15)

Public Revenue: Sources of Public Revenue; Taxes: Classification of Taxes, Principles of Taxation; Canons of Taxation; Ability to Pay and Benefit Approach; Incidence and Shifting of Tax Burden; Tax Reforms in India, Major Taxes in India, Concept of Goods and Service Tax (GST); Effects of Taxation on Production, Growth, Distribution and Allocation of Resources; Trade-off between Equity and Efficiency; Laffer Curve Analysis.

UNIT-III (Total Hours: 15)

Public Expenditure: Meaning and Objectives of Public Expenditure; Classification of Public Expenditure; Canons of Public Expenditure; Wagner's Law of Increasing State Activities; Wiseman-Peacock Hypothesis; Arrow's Impossibility Theorem; Effects of Public Expenditure on Stabilization, Production, Distribution, Growth.

UNIT-IV (Total Hours: 15)

Public Debt and Government Budget: Public Debt- Meaning, Role and Purposes of public debt, Sources of Public Borrowings, Methods of Debt Redemption, Public Debt vs Private Debt, Public Debt and Economic Growth, Government Budget- Concept, Features, Types of budget; Importance of Government Budget; Economic and Functional Classification of Budget; Balanced and Unbalanced budget; Balanced Budget Multiplier; Types of Budget Deficits; Programme and Performance budgeting and Zero-base budgeting; Budget as an instrument of economic policy.

Textbooks:

1. Bhatia H L (2021): Public Finance, S. Chand and Co., New Delhi
2. Musgrave R.A and Musgrave P.A (2017): Public Finance in Theory and Practice, Mcgraw- Hill Kogakusha, Tokyo

Reference Books:

1. Lekhi R.K (2020): Public Finance, Kalyani Publishers, New Delhi.
2. S.K. Singh (2019): Public Economics: Theory and Practice S. Chand and Co., New Delhi.
3. Journal- "Economic and Political Weekly" (EPW).
   Website Link- https://www.epw.in/journal/epw-archive
4. Journal- "Review of Development and Change".
   Website Link- https://journals.sagepub.com/home/RDC

5. Journal – "Journal of Public Economics", Monthly Journal, Publisher- Elsevier. Website Link- https://www.sciencedirect.com/journal/journal-of-public-economics
6. Reports and Publications by the Ministry of Finance, Government of India.
7. Reports, Bulletins, and Working Papers from Reserve Bank of India (RBI).
8. Reports and Policy Briefs from NITI Aayog (National Institution For Transforming India)
9. Reports and Working Papers from International Monetary Fund, World Bank, Organization for Economic Co-Operation and Development, Regional Development Banks
10. Newspapers like the Economic Times, Business Standard, and magazines like Business Today and Outlook Money.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Learning Experience: This course will explore the role of government in the economy, focusing on taxation, public expenditure, and welfare policies specific to India. Through a combination of lectures, case studies, and group discussions, students will analyze the impact of fiscal policies on economic growth, income distribution, and social welfare. The course will emphasize the examination of current public policy issues, such as subsidy reforms, GST implementation, and social security programs. Evaluation will include assignments, presentations.

Semester V					
HUES302	**Indian Economy-I**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-XIII**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Basic Knowledge of Indian Economy/Economics**				

Course Description:

India, with its vast population, diverse regions, and rapidly changing economic landscape, offers unique insights into development economics, public policy, and global trade. Understanding the Indian economy helps students analyze critical issues like poverty,

inequality, unemployment, and income distribution, as well as the impacts of reforms, globalization, and technological advancements. It equips students with the ability to assess the effectiveness of policies in sectors such as agriculture, industry, and services, and examine their roles in driving economic growth.

For those pursuing careers in economics, finance, policymaking, or development, studying the Indian economy is essential to grasp the complexities of managing an emerging market economy, addressing structural issues, and contributing to sustainable and inclusive development. It also enables a deeper understanding of India's position in the global economy and its future potential.

Course Outcomes (CO)

CO1: Understanding economic concepts related to various sectors of the India economy(primary, secondary and tertiary) , National Income Estimates, poverty, inequality and unemployment and human development .

CO2: Applying the concepts learnt to present economic scenario.

CO3: Analysing the Government policies related to Agriculture ,industries, poverty, unemployment ,foreign trade etc.

CO 4: Evaluating the concepts through Project work and case studies.

Course Content:

Unit 1: Introduction to Indian Economy (15Hours)– Indian Economy on the eve of independence. Growth and Structural Change in Indian Economy. National Income in India – Estimates and Trends, Contribution of different sectors. Parallel economy, Economic Planning in India: Features, Objectives and Assessment of Indian Planning.

Unit 2: Demography and Development (15 Hours) –Key Features about India's population; Demographic Dividend; National Population policy. Human Resource Development – Indicators (HDI, GII) and importance of Human Resource Development.

Unit 3: Poverty and Unemployment in India (15 Hours): Concepts, incidence & extent of poverty in India,

Unemployment- Special reference to India Labour market (Trends and Patterns), Gender Dimensions, Formalisation of jobs.

Inequality – Dimensions and Trends of inequality in India, Programmes for eradication of poverty, unemployment, inequality in India.

Unit 4: Indian Agriculture (15 Hours):.

Features of Indian Agriculture; Land relations and land reforms; New Agricultural strategy. Impact of Green Revolution on Indian Agriculture. Technological aspects- Use of technology

in agriculture , Organisation of rural credit in India ; pricing of agricultural produce. Recent Trends in Agricultural Development -- Causes of Deceleration and Future Challenges.

Textbooks:

- (Datt and Sundaram's Indian Economy-latest edition)
- Uma Kapila: Indian Economy Since Independence

Reference Books:

- Economic Survey- Latest Edition
- Economic and Political Weekly
- Budget Document(Latest)
- Economic Survey
- Ministry of Statistics and Planning
- NITI Ayog

Learning Experience:

The **Indian Economy** course will provide a comprehensive overview of the structure, dynamics, and challenges of the Indian economic system. Through a mix of lectures, case studies, and interactive discussions, students will explore topics such as economic growth, poverty, employment, and the role of agriculture, industry, and services in the economy. Emphasis will be placed on understanding the impact of government policies, globalization, and economic reforms on India's development trajectory. Evaluation will consist of assignments, presentations, and group projects that analyze current economic issues and propose solutions.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester V					
AEC010	**Arithmetic and Reasoning Skills-III**	L	T	P	C
Version 1.0		3	0	0	0
Category of Course	**AEC-III**				
Total Contact Hours	**45 Hrs**				
Pre-requisites/Co-requisites					

Course Perspectives:

The course aims to improve basic arithmetic skills, speed, and accuracy in mental calculations, and logical reasoning. These abilities are essential for a strong math foundation, helping students succeed in academics and various practical fields.

Course Outcomes (COs)

On completion of the course learner should be able to: -

CO 1: Understanding arithmetic algorithms required for solving mathematical problems.
CO 2: Applying arithmetic algorithms to improve proficiency in calculations.
CO 3: Analyzing cases, scenarios, contexts and variables, and understanding their inter-connections in a given problem.
CO 4: Evaluating & deciding approaches and algorithms to solve mathematical & reasoning problems.

Course Content

Unit I: Mathematical Essentials

12 Hrs

Traditional Indian Calculation methods, Number types and divisibility principles, Practical uses of Percentage in calculating changes and discount, understanding Ratio and Proportion in everyday context.

Unit II: Fundamentals of Logical Reasoning

9 hrs

Blood Relations, Direction Sense, Coding Decoding

Unit III: Elementary Quantitative Skills 13 hrs

Simple and Compound Interest in everyday situations like loans, investment, Practical problems involving Averages, Real life examples and scenarios involving Partnership

Unit IV: Reasoning Skills 11hrs

Introduction to reasoning, logical reasoning, Analytical reasoning, deductive reasoning, Inductive reasoning, Abductive reasoning, Reasoning in Communication, reasoning in decision making, Reasoning in Research and analysis

Text Book and References:

R1. Guha Abhijit: Quantitative Aptitude for Competitive Examinations, Tata McGraw Hill Publication
R2. Quantitative Aptitude by R.S. Aggarwal
R3. Verbal & Non-Verbal Reasoning by R.S. Aggarwal

OER

https://www.indiabix.com/online-test/aptitude-test/
https://www.geeksforgeeks.org/aptitude-questions-and-answers/
https://www.hitbullseye.com/

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Learning Experience:

Students will explore emotional intelligence through group discussions and role-playing scenarios, enhancing their ability to empathize and resolve conflicts. Time management techniques will be practiced through real-life scheduling exercises and prioritization tasks. Digital literacy sessions will focus on safe online practices and creating professional digital profiles. Overall, the course aims to foster personal and professional growth through interactive learning experiences

Semester V					
SIES002	**Summer Internship**	L	T	P	C
Version 1.0					2
Category of Course	**Summer Internship-II**				
Total Contact Hours	**75 Hrs**				
Pre-requisites/Co-requisites	**Knowledge of MS Office, Some soft Skills**				

Description:

Internships in Economics offer students invaluable opportunities to apply their academic knowledge to real-world scenarios, gain practical experience, and develop crucial skills for their future careers. These internships typically range from placements in government agencies, financial institutions, research organizations, consulting firms, to various industries where economic analysis plays a pivotal role.

Objectives:

6. One of the primary objectives of an internship for economics students is to provide them with the opportunity to apply theoretical concepts learned in the classroom to real-world scenarios.
7. Internships aim to develop a diverse set of skills essential for success in the field of economics.
8. Students learn about workplace dynamics, professional etiquette, teamwork, time management, and project management, all of which are crucial for their future careers.
9. Internships significantly enhance a student's resume, making them more competitive in the job market upon graduation.
10. They gain confidence in their abilities, learn to adapt to new challenges, and develop a deeper understanding of their strengths, weaknesses, and career aspirations.

Types of Economic Internships:

Government Agencies: Interning at government agencies such as the Banks, Ministries, RBI etc. offers students insight into economic policymaking, data analysis, and research.

Financial Institutions: Interning at banks, investment firms, or insurance companies provides students with exposure to financial markets, economic forecasting, risk analysis, and investment strategies.

Research Organizations: Organizations like think tanks, economic research institutes, and non-profits often offer internships focused on economic research, policy analysis, and advocacy work.

Consulting Firms: Economic consulting firms hire interns to assist with economic analysis, market research, financial modeling, and strategic planning for clients across various industries.

Corporate Internships: Some corporations hire economics interns to work in areas such as pricing analysis, market research, demand forecasting, and business strategy, digital marketing, data analysis etc.

Guidelines for students:

1. All the students need to go for internship for minimum of 4 weeks.

2. Students can take mini projects, assignments, case studies by discussing it with concerned authority from industry and can work on it during internship.

3. All students should compulsorily follow the rules and regulations as laid by industry.

4. Every student should take prior permissions from concerned industrial authority if they want to use any drawings, photographs or any other document from industry.

5. Student should follow all ethical practices and SOP of industry.

6. Students have to take necessary health and safety precautions as laid by the industry.

7. Student should contact his /her academic guide from university on weekly basis to communicate the progress.

8. Each student has to prepare internship report in consultation with the academic guide.

Internship Report

After completion of Internship, the student should prepare a comprehensive report to indicate what he has observed and learnt in the training period. The student may contact Industrial Supervisor/ Faculty Mentor/TPO for assigning special topics and problems and should prepare the final report on the assigned topics. The training report should be signed by the Internship Supervisor and Faculty Mentor.

The Internship report will be evaluated on the basis of following criteria:

vi. Originality.
vii. Adequacy and purposeful write-up.
viii. Organization, format, drawings, sketches, style, language etc.
ix. Variety and relevance of learning experience.
x. Practical applications, relationships with basic theory and concepts taught in the course.

Assessment:

- Internship Performance Feedback & Certificate (30%)
- Internship Report (50%)
- Internship Presentation (20%)

Note: The specific requirements and expectations of the internship course may vary depending on the institution's policies, the availability of internship opportunities, and the preferences of the faculty. Students are encouraged to consult with their academic advisors and internship coordinators for personalised guidance and support throughout the internship process.

Semester VI					
HUES302	**Behavioural Economics**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-XV**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Micro Economics**				

Course Perspectives:

Behavioural Economics looks at developing models that are motivated by empirical evidence of individual behaviour rather than assumptions about rationality. How do individuals actually make decisions when confronted with uncertainty? Are people aware of what truly brings them happiness? How do they predict and interpret the world around them? These are key questions that behavioral economists strive to answer.

By merging the fields of psychology and economics, behavioral economics challenges the traditional economic assumption that individuals always make rational choices. Instead, it acknowledges that people are more social and impulsive, less proficient at processing information, and more prone to psychological biases than standard economic models suggest.

This highly interactive course provides students with a comprehensive introduction to the principles and methods of behavioral economics, focusing on individuals, firms, and institutions. Covering both macroeconomic and microeconomic perspectives, the course delves into crucial topics such as heuristics, biases, nudging strategies, and rational expectations.

Equipped with cutting-edge analytical tools derived from recent research, students will learn to apply these tools in various economic contexts within both the private and public sectors. These tools will enable students to integrate psychologically-driven assumptions into economic models and understand the implications of these assumptions for policy development and business strategy.

Course Outcomes:

Upon completing the course, students will be able to:

CO1: Gain a thorough understanding of the psychological factors influencing individual decision-making, including various biases.

CO2: Identify and assess real-world instances of behavioral economic phenomena.

CO3: Analyze the application of behavioral economics to public policy, particularly in areas such as healthcare, education, and environmental regulation.

CO4: Apply the principles of behavioral economics to enhance decision-making in both personal and professional contexts.

Course Content:

Unit 1: Introduction to Behavioural Economics 15 Hours

Introduction to Behavioral Economics: Traditional Economic Theory and Assumptions, Limits of Rationality, Bounded Rationality • Heuristics and bias: Representativeness, Biases resulting from representativeness, Confirmation bias, Anchoring, Availability, Affect, Overconfidence, Exponential growth bias, other biases.

Unit 2: Inter-temporal Choice 15 Hours

Introduction to Risk and Time Preferences • Making choices under risk: Prospect Theory. Choice with risk: Expected Utility, risk aversion, reference dependence and prospect theory, Insurance, Tax Evasion Time Preference: hyperbolic discounting, loss aversion and sequences, Time and risk, environmental economics and inter-generational discount factor.

Unit 3: Strategic Behaviour 15 Hours

Behavioural game theory (nature, equilibrium, mixed strategies, bargaining, iterated games, signalling, learning)- application Modelling of social preferences –nature and factors affecting social preferences distributional social preferences based on altruism, inequality aversion models- reciprocity models, evidence and policy implications. How do people make predictions about their opponents in strategic interactions? Models of limited social inference (level-k reasoning, cursedness).

Unit 4: Nudges, Policy and Happiness 15 Hours

Nudges, Policy and Happiness Nudges, Policy, and Happiness- the application. Money Illusion and Monetary Policy.How and when should governments intervene if people are "behavioural"? The theory of nudges, and happiness as an outcome.

Recommended Text Books

1. Wilkinson, N., & Klaes, M. (2012). An introduction to behavioural economics (2 p.) Palgrave Macmillan. New York.
2. Akerlof, G. A., & Shiller, R. J. (2009). Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Gfobal Capitalism Princeton University Press.

Reference Books

1 .Bernheim, B. D., DellaVigna, S., & Laibson, D. (2019). Handbook of Behavioral Economics-Foundations and Applications 2. Elsevier.

2.Diamond, P. A., & Vartiainen, H. (2007). Behavioral economics and its applications (pp. 1-336). Princeton, NJ: Princeton University Press.

3. Dhami, S. (2020). The Foundations of Behavioral Economic Analysis: Volume VII: Further Topics in Behavioral Economics (Vol. 7). Oxford University Press, USA.
4. Ianole, R. (Ed.). (2016). Applied Behavioral Economics Research and Trends. IGI Global.

Specific Reading

1. Cartwright, E. (2014): "Behavioral Economics", Routledge. Chapter 1
2. Tversky, A. and Kahneman, D. (1974) "Judgment Under Uncertainty: Heuristics and Biases", Science, 185(4): 1124– 1131.
3. Matthew Rabin, Joel L. Schrag (1999) "First Impressions Matter: A Model of Confirmatory Bias", The Quarterly Journal of Economics, 114(1),37–82
4. Cartwright, E. (2014): "Behavioral Economics", Routledge. Chapter 3 and 4
5. Kahneman, D. and Tversky, A. (1979) "Prospect Theory: An Analysis of Decision Under Risk", Econometrica, 47(2): 263–291.
6. Ericson, Keith Marzilli, and David Laibson. 2019. "Intertemporal Choice." Handbook of Behavioral Economics - Foundations and Applications 2. Elsevier. https://doi.org/10.1016/ bs.hesbe.2018.12.001.
7. Cartwright, E. (2014): "Behavioral Economics", Routledge. Chapter 11: Policy and behavior
8. Chetty, Raj. 2015. "Behavioral Economics and Public Policy: A Pragmatic Perspective." American Economic Review. https://doi.org/10.1257/ aer.p20151108.
9. Thaler, Richard H. and Cass R. Sunstein. 2008. "Nudge: Improving decisions about health, wealth, and happiness." Yale University Press, New Haven, CT.
10. Cartwright, E. (2014): "Behavioral Economics", Routledge. Chapter 10
11. Kahneman and Krueger (2006) "Developments in the Measurement of Subjective Wellbeing", Journal of Economic Perspectives, 20(1): 3– 24
12. Niederle, Muriel. 2016. "8. Gender." Edited by John H. Kagel and Alvin E. Roth. The Handbook of Experimental Economics, Volume Two. Princeton University Press. https://doi.org/10.1515/ 9781400883172 -009.

Open Educational Resource:

- Coursera: Behavioral Economics in Action
- edX: Behavioral Economics and Finance
- Open Yale Courses: Introduction to Behavioral Economics
- MIT OpenCourseWare: Behavioral Economics
- The Behavioral Economics Guide
- YouTube: Behavioral Economics Lectures

- NPTEL: Behavioral Economics

Learning Experience:

The **Behavioral Economics** course will delve into the psychological factors that influence economic decision-making, examining how biases and heuristics affect consumer behavior and market outcomes. Through a combination of lectures, interactive discussions, and real-world case studies, students will explore concepts such as prospect theory, mental accounting, and the impact of framing on choices. The course will also include experiments and simulations to illustrate behavioral principles in action, enhancing practical understanding. Evaluation will comprise assignments, presentations, and group projects that require students to apply behavioral insights to economic problems.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester VI					
HUES304	**Indian Economy-II**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-XVI**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Indian Economy Basics**				

Course Description:

At the end of the course, a student should be able to understand the development paradigm adopted in India since independence and evaluate its impact on economic as well as social indicators of progress and wellbeing. The students will be able to learn the process involved in the development of Indian Economy.

Course Outcomes (COs)

CO1: Understanding economic concepts related to various sectors of the India economy(primary, secondary and tertiary) , National Income Estimates, poverty, inequality and unemployment and human development .

CO2: Applying the concepts learnt to present economic scenario.

CO3: Analysing the Government policies related to Agriculture ,industries, poverty, unemployment ,foreign trade etc.

CO 4: Evaluating the concepts through Project work and case studies.

Course Content:

Unit 1: India's Services sector(15 Hours) : Trends opportunities and challenges, Growth trends in India's services sector, FDI in services sector, liberalisation of services in India.

Unit 2: Indian Industries (15 Hours) : Industrial Policy , Growth and pattern of industrialisation, Privatisation and disinvestment , Micro and small scale industries, recent Labour reforms, Dualism and phenomenon of missing middle. SEZs.

Unit 3: Financial relations between centre and states(15 Hours) :– Centre State Fiscal relationship- cooperative and competitive federalism in India- Role of Finance Commission ,Latest Finance Commission, Tax reforms -Goods and Services Tax. Implementation of Fiscal responsibility and budget management Act. (FRBM Act)

Unit 4: Trade and Indian Economy (15 Hours) : Foreign Trade- Composition and direction of India's foreign trade , Balance of payment, FDI FII , India's Trade Policy, Reforms in Trade policy, FEMA, New Export Import Policy.

Textbooks:

- Datt and Sundaram's Indian Economy-latest edition
- Uma Kapila: Indian Economy Since Independence

Reference Books and OER:

- Economic Survey- Latest Edition
- Economic and Political Weekly
- Budget Document (Past and Latest)

Learning Experience:

This course will provide a comprehensive overview of the structure, dynamics, and challenges of the Indian economic system. Through a mix of lectures, case studies, and interactive discussions, students will explore topics such as economic growth, poverty, employment, and

the role of agriculture, industry, and services in the economy. Emphasis will be placed on understanding the impact of government policies, globalization, and economic reforms on India's development trajectory. Evaluation will consist of assignments, presentations, and group projects that analyze current economic issues and propose solutions. Continuous feedback from the instructor will support learning, while peer collaboration will encourage diverse perspectives and critical thinking about the complexities of the Indian economy.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester VI					
HUES306	**International Economics**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-XVII**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Micro Economics and Macro Economics**				

Course Perspective:

This course develops a systematic exposition of models that try to explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy. It concludes with an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years. Studying International Economics is essential for understanding the complexities of global trade and finance. It helps students analyze how countries interact economically, the benefits of trade, and the impacts of policies like tariffs and exchange rate adjustments. This knowledge is critical for evaluating the effects of globalization, trade agreements, and international monetary flows on national economies. With increasing interdependence among countries, understanding international economics is vital for careers in finance, trade, policymaking, and global development, enabling informed decision-making in a globally connected world.

Course Outcomes

On completion of this course, the students will be able to

CO1: Understanding the fundamental concepts of international trade.

CO2: Applying the trade theories like comparative advantage and the Heckscher-Ohlin model to assess the impact of trade policies on economic growth and distribution.

CO3: Critically analyze international trade restrictions, such as tariffs and quotas, and their effects on global markets and domestic economies.

CO4: Evaluate balance of payments issues and exchange rate mechanisms, using concepts like purchasing power parity and monetary approaches to recommend policy solutions.

Course Content:

Unit 1: Introduction to International Economics and Its Basic Concepts: 15 hrs
International Tarde: Inter-Regional trade and international trade, Basic concepts of international trade- Production Possibility Curve, Offer Curve and Community indifference Curve and its application, international trade as an engine of economic growth, Current international economic problems, and challenges.

Unit 2: International Trade Theories: 15 Hrs
Theories of absolute advantage, comparative advantage, and opportunity cost: Hecksher-Ohlin theory of trade, Factor price equalisation and income distribution main features, assumptions, and limitations. The Leontief‘s paradox; The Rybczynski theorem-concept and policy implications of immiserizing growth.

Unit 3: International Trade Policy: 15 Hrs
Trade restrictions: Introduction of tariffs, partial and general equilibrium analysis of tariff, optimum tariff, Non-tariff barriers and the new protectionism: Import Quota, Effects of import quota, Voluntary export restraints, Technical administrative and other regulations, International cartels, Dumping, Export subsidies, Custom unions and free trade areas.

Unit 4: Balance of Payment & Exchange Rate: 15 Hrs
Balance of Payments: Concepts and components of the balance of trade and balance of payments; Equilibrium and disequilibrium in the balance of payments: Various measures to correct the deficit in the balance of payments, Various approaches of BOP, Exchange Rate: Meaning, concept of equilibrium exchange rate, Arbitrage, Spot and Forward Rates, Currency Swaps, Futures, Options, Foreign exchange risk, Hedging and speculation. Exchange rate determination: Purchasing power parity theory, Monetary approach to the balance of payment and exchange rates.

Textbooks:

Salvatore, D. (1997), International Economics, PHI, New York.

Sharma, C. 13th Edition, International Economics, Wiley, India.

REFERENCE BOOKS:

- Mannur, H.G International Economics.
- Salvatore, D. International Economics, PHI, New York.
- Sodorston, International Economics, The Macmillan Press Ltd. London.
- Pilbeam, Keith International Finance, Palgrave.
- Mithani, M. D International Economics.
- Bhagwati. J (1981), International Trade, Cambridge University Press, London.

Open Educational Resources:

- Coursera: International Business Essentials
- MIT OpenCourseWare: International Economics
- The World Bank: International Economics Resources
- YouTube: International Economics Lectures
- NPTEL: International Trade
- World Bank & IMF
- WTO Data Centre

Learning Experience:

The **International Economics** course will examine the principles and practices of trade and finance between countries, focusing on the dynamics of globalization and its impact on economies. Through a combination of lectures, case studies, and interactive discussions, students will explore topics such as comparative advantage, trade policies, exchange rates, and balance of payments. The course will also include practical exercises involving data analysis and the use of economic models to evaluate international trade issues.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester VII					
HUES401	**Research Methodology**	L	T	P	C

Version 1.0		3	1	0	4
Category of Course	**Major-XIX**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Micro Economics and Macro Economics**				

Course Perspectives:

The main objective of this course is to introduce the basic concepts in research methodology in social science. This course addresses the issues inherent in selecting a research problem and discuss the techniques and tools to be employed in completing a research project. This will also enable the students to prepare report writing and framing Research proposals. Studying Research Methodology is crucial for understanding the systematic process of conducting research, enabling students to generate reliable and valid knowledge. It equips learners with essential tools for designing research, collecting data, and analyzing results, ensuring that conclusions are grounded in scientific rigor. Research methodology helps in selecting the appropriate techniques and methods for specific research questions, improving the quality of decision-making and problem-solving. Whether in academia, business, or policymaking, it is vital for developing critical thinking and ensuring that findings are credible and applicable to real-world challenges. This knowledge is fundamental for producing meaningful and impactful research across various fields.

Course Outcomes :

On completion of this course, the students will be able to:

CO1: Understand and comprehend the basics in research and identify the basic components of a research framework i.e., problem definition, research design, data collection, ethical issues in research, report writing, and presentation.
CO2: Apply foundational methods and techniques of academic research in Economics and prepare and present an academic research paper
CO3: Analyze how to formulate research problem and frame it for the purpose of research.
CO4: Sensitize them to the issue of plagiarism and academic fraud.

Unit I: Research Methodology: An Introduction **15 Hrs**

Objectives and motivation of research - Types of research - Research approaches - Significance of research - Research methods verses methodology - Research and scientific method - Importance of research methodology - Research process - Approaches of investigation of solutions for research problem, data collection, analysis, interpretation, necessary

instrumentations- Criteria of good research. Defining the research problem: Definition of research problem - Problem formulation - Necessity of defining the problem - Technique involved in defining a problem. An Illustration

UNIT II: LITERATURE SURVEY AND DATA COLLECTION 15 Hrs

Importance of literature survey - Sources of information - Assessment of quality of journals and articles - Information through internet. Effective literature studies approaches, analysis, plagiarism, and research ethics. Data - Preparing, Exploring, examining and displaying.

UNIT III: RESEARCH DESIGN AND ANALYSIS 15 Hrs

Meaning of research design - Need of research design - Different research designs Sampling, Design ,Census and Sample Survey Implications of a Sample Design 55 Steps¸ in¸ Sampling¸ Design ,Criteria of Selecting a Sampling Procedure 57 Characteristics of a Good Sample Design 58 Different Types of Sample Designs

Unit IV – Interpretation and Report Writing 15 Hrs

Meaning of Interpretation ,Why Interpretation? Technique of Interpretation: Precaution in Interpretation .Significance of Report Writing Different Steps in Writing Report Layout of the Research Report ,Types of Reports ,Oral Presentation, Writing a Research Report Precautions for Writing Research Reports. Structure of a Research paper; Literature Review; Citation methods;

Recommended Textbook

- Uwe Flick" Introducing Research Methodology" Sage Publications (Latest Edition)

Suggested Book

- C R Kothari, G. Garg " Research Methodology: Methods & Techniques" New Age International(Latest Edition)
- Basotia G.R. Sharma K.K.- Research Methodology. ADDITIONAL READING LIST
- Acoff. Russel L.(1961) The Design of Social Research, Chicago, Uni. of Chicago,
- Ghosh B.N. (1982) Scientific Methods & Social Research New Delhi, Sterling Publishers Pvt. Ltd
- Wilkinson and Bhandarkar – Methodology and Techniques of Social Research.

Open Educational Resources:

- Coursera: Research Methods
- edX: Quantitative Research Methods

- OpenLearn: Understanding Research Methods

Learning Experience:

The **Research Methodology** course will provide students with a comprehensive understanding of the principles and techniques involved in conducting research in various fields, particularly in economics and social sciences. The course will employ a mix of lectures, workshops, and hands-on projects to teach students about different research designs, data collection methods, and analytical techniques. Through case studies and group discussions, students will critically evaluate existing research and learn to formulate research questions and hypotheses. Assessment will include research proposals, presentations, and practical assignments that require students to apply methodologies to real-world problems.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester VII					
HUES403	**Digital Tools for Data Analysis in Research**	L	T	P	C
Version 1.0		2	0	2	4
Category of Course	**Major-XX**				
Total Contact Hours	**90 Hrs**				
Pre-requisites/Co-requisites	**Research Methodology**				

Course Perspective

This course provides an in-depth understanding of various digital tools and techniques essential for data analysis in research. It covers the fundamentals of data management, statistical analysis, data visualization, and advanced analytical methods. The course is designed to equip students with the skills necessary to analyze large datasets and derive meaningful insights using contemporary digital tools. By the end of the course, students will be proficient in utilizing these tools to conduct research and present their findings effectively.

Course Outcomes:

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

CO1: Demonstrate competence in using digital tools for data management and analysis.

CO2: Apply advanced data analysis techniques to solve research problems.

CO3: Conduct statistical analysis and interpret the results accurately.

CO4: Create visually compelling and informative data visualizations.

Course Content

Unit I: Introduction to Digital Tools and Data Management 15 Hrs

- **Overview of Digital Tools in Research**
    - Importance and Applications
    - Types of Digital Tools (Spreadsheets, Statistical Software, Data Visualization Tools)
- **Data Management Techniques**
    - Data Collection and Organization
    - Data Cleaning and Preparation
    - Data Storage and Security

Unit II: Introduction to Spreadsheet Software (e.g., Microsoft Excel, Google Sheets) 15Hrs

- Basic Functions and Formulas
- Data Sorting, Filtering, and Validation
- Pivot Tables and Data Summarization

Unit III: Statistical Analysis Using SPSS 30 Hrs

Introduction to Statistical Software

- Overview and Interface of SPSS
- Data Import and Export

Descriptive Statistics

- Measures of Central Tendency
- Measures of Dispersion

Inferential Statistics

- Hypothesis Testing
- Correlation and Regression Analysis
- ANOVA and Chi-Square Tests: Statistical Analysis Using SPSS

Unit IV: Data Visualization and Presentation through Power BI 30 Hrs

- Importance of Effective Data Visualization
- Types of Data Visualizations (Charts, Graphs, Maps)

- Creating Basic Visualizations and presentation through Power BI

Software/ Open Educational Resources

- **Coursera**
- **Udemy**
- **Edx**
- **SPSS**
- **MS Excel**
- **Swayam**

Learning Experience:

The **Digital Tools for Data Analysis in Research** course will equip students with essential skills to effectively utilize various digital tools and software for data analysis in their research projects. The course will feature a blend of lectures, hands-on workshops, and practical exercises, allowing students to engage directly with tools like Excel, SPSS, Power BI, and data visualization software. Students will learn to collect, clean, analyze, and interpret data, focusing on statistical techniques and data visualization methods to enhance their research presentations. Assessment will include practical assignments, group projects, and a final data analysis project where students demonstrate their proficiency in using digital tools.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester VIII					
HUES402	**Research Ethics & Report Writing**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-XXII**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Research Methodology**				

Course Perspectives: This course will focus on basics of philosophy of science and ethics, research integrity, publication ethics. Studying Research Ethics & Report Writing is crucial for maintaining integrity and transparency in the research process. Ethics ensure that researchers

conduct their work responsibly, respecting the rights and dignity of participants, avoiding plagiarism, and ensuring honest reporting of results. Understanding ethical guidelines helps prevent misconduct and promotes trust in research findings. Report writing, on the other hand, is essential for clearly communicating research outcomes, ensuring that complex information is presented in an organized, accessible manner. It enables researchers to effectively share their findings with the academic community, policymakers, and the public, making it a critical skill for impactful research dissemination.

Course Outcomes

CO1- Understanding of the foundational aspects of philosophy, including its definition, nature, scope, and key branches.

CO2- Apply the principles of intellectual honesty and research integrity in the context of scientific inquiry.

CO3- Identifying and addressing conflicts of interest and recognizing various forms of publication misconduct, such as unethical behaviour leading to and resulting from publication issues.

CO4- Develop skills in employing software tools, including those developed by SPPU to identify predatory publications, and effectively use journal finder and suggestion tools (e.g., JANE, Elsevier Journal Finder, Springer Journal Suggest) to select appropriate venues for their research.

Course Content

Unit 1: Philosophy and Ethics **15 Hrs**

Introduction to philosophy, definition, nature and scope, concept, branches, Ethics, definition, moral philosophy, nature of moral judgements and reactions

Unit 2: Scientific conduct **15 Hrs**

Ethics concerning science and research Intellectual honesty and research integrity Scientific misconduct, falsification, fabrication and plagiarism Redundant publications, duplicate and overlapping publications and salami slicing, Selective reporting and misrepresentation of data

Unit 3: Publication Ethics **15 Hrs**

Publication ethics: definition, introduction and importance, best practices / standards setting initiatives and guidelines: COPE, WAME, etc. Conflicts of interest, Publication misconduct: definition, concept, problems that lead to unethical behaviour and vice versa, types, Violation of publication ethics, authorship and contributorship, Identification of publication misconduct, complaints and appeals, Predatory publishers and journals

Unit 4: Open Access Publishing **15 Hrs**

Open access publications and initiatives, SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies, Software tool to identify predatory publications developed by SPPU, Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggested, etc. Publication Misconduct,

Suggested Textbook:

- Mark Israel, lian Hay: Research Ethics for Social Scientists, latest edition, SAGE Publications Ltd

Reference Books:

- Macrina FL (2014): Scientific Integrity: An Introductory Text with Cases. 3rd edition, American Society for Microbiology Press, Washington, D.C
- Nicols-Casebolt, A. (2012): Research Integrity and Responsible Conduct of Research. Oxford University Press, New York.
- Oliver, Paul. The Student's Guide to Research Ethics. 2003. Open University Press
- Israel, M and Hay, I (2006): Research Ethics for Social Scientists: Between Ethical Conduct and Regulatory Compliance. Thousand Oaks, CA; Sage Publications.
- Comstock G (2013): Research Ethics: A Philosophical Guide to the Responsible Conduct of Research. Cambridge University Press, Cambridge, UK.

Open Educational Resources:

- The National Institutes of Health: Research Ethics Training
- Coursera: Research Ethics
- OpenCourseWare: Ethics in Research
- UGC
- Swayam

Learning Experience:

The Research Ethics and Report Writing course will provide students with a thorough understanding of ethical principles in research, alongside the essential skills needed for effective report writing. The course will incorporate lectures, case studies, and group discussions to explore topics such as informed consent, confidentiality, and the responsible use of data. Students will engage in hands-on workshops to practice writing research proposals and reports, focusing on structure, clarity, and adherence to ethical guidelines. Evaluation will include written assignments, peer reviews, and a final report that requires students to apply ethical considerations and effective writing techniques to their research findings

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**

Weightage (%)	30	20	50

Semester VIII					
HUES404	**Environmental Economics**	L	T	P	C
Version 1.0		3	1	0	4
Category of Course	**Major-XXIII**				
Total Contact Hours	**60 Hrs**				
Pre-requisites/Co-requisites	**Micro & Macro Economics**				

Course Perspectives: We are currently facing numerous challenges and debates regarding the intersections of economy, development, and the environment. This course focuses on comprehending the intricate relationships between the economy, economic activities, and environmental systems. It will explore fundamental theories related to environmental and collective goods, the connections between the environment, economic growth, and development, as well as welfare economics in the context of environmental valuation. Additionally, the course will cover environmental regulatory policies, with an emphasis on the economics of pollution, in extensive detail.

Course Outcomes: Upon completing the Environmental Economics course, students will be able to:

CO1: Understand the interrelationships between economic activities and environmental systems, understanding the impact of economic growth on the environment.

CO2: Apply fundamental theories of environmental and collective goods to evaluate environmental issues and policies.

CO3: Utilize various methods of environmental valuation to assess the economic value of natural resources and ecosystem services.

CO4: Critically evaluate environmental regulations and policies, understanding their economic implications and effectiveness in addressing pollution and other environmental challenges.

Course Content:

Unit 1: 15 Hours

The Economy and the Environment: Neo Classical perspective, Ecological perspective, Major Problems and Key Concerns of Environmental Economics; Externalities: Public Goods, Market Failure, Property rights and Coase Theorem; Pigouvian Fee; Poverty, Environment and Economic Growth Linkages-Environmental Kuznets Curve.

Unit 2: 15 Hours

Sustainable Development: Concepts, Theories and Principles of Sustainable Development, Environmental Sustainability; Environmental Performance Index; Benefit-cost Analysis. Economic incentives for Environmental Protection: Market Based Instruments, Command and Control, Marketable permits, Alternative approaches.

Unit 3: 15 Hours

Consumer Demand of Environmental Goods and Welfare Effects of Price Change; Values, Environmental Values and Non-market Valuations: Revealed Preference Methods Stated Preference approaches, Surrogate Market approaches, Conventional market approach, Household production function approach.

Unit 4: **15 Hours**

Climate Change & Ecosystem services: Ecosystem function, Kyoto Protocol and other International Agreements; Environment Policy of India: Objectives and Implementation.

Recommended Text Books

1. Hanley, Nick, Jason F Shogren& Ben White, (2008). Environmental Economics, Macmillan.

2. Hussan, Ahmed M (2004). Principles of Environmental Economics, Routledge Publication.

Reference Books

1. Brady, John (2006). Environmental Management in organizations, Earthscan Pub.

2. Bromely, Daniel E The Handbook of Environmental Economics

3. Connor, Robin and Stephen, Dovers (2004). Edward Institutional Change for Sustainable Development, Edward Elgar Publishing.

4. Folmer, Henk, Hlandis Gabel and Hans Opschoor (1997). Principles of Environmental and Resource Economics, Edward Elgar Pub

5. Hart, Staurt L (1997). Strategies for Sustainable World, Harvard Business Review.

6. Hussan, Ahmed M (2004). Principles of Environmental Economics, Routledge Publication.

7. James, David. Application of Economic Techniques in Impact Assessment.

8. Kerr John, M, Marothia, Dinesh K, Singh, Katar, Ramaswamy, C and Bentaly, William R (1997). Natural Resource Economics, Oxford & IBH Publication.

9. . Pearce, David, Giles Atkinson and Susana Mourato (2006). Cost –Benefit Analysis and Environment, Earthscan Pub.

10. Roger, Perman (1995). Natural Resources and Environmental Economics, Longman Publication.

11. Richard, Welford The Context of Corporate Environment Management.

12. Therivel, Riki (2004). Strategic Environmental Assessment in Action, Earthscan Publication.

Open Educational Resources:

- Coursera: The Economics of Climate Change
- edX: Environmental Economics
- Open Yale Courses: Environmental Economics
- MIT OpenCourseWare: Environmental Economics and Policy
- The World Bank: Environmental Economics Resources
- YouTube: Environmental Economics Lectures
- NPTEL: Environmental Economics

Learning Experience:

The **Environmental Economics** course will explore the relationship between economic activities and the environment, focusing on how economic principles can be applied to address environmental challenges. Through a combination of lectures, case studies, and group discussions, students will examine topics such as externalities, public goods, and the economic impact of environmental policies. Hands-on projects will allow students to analyze real-world environmental issues using tools like cost-benefit analysis and environmental valuation methods. Assessment will include individual assignments, group presentations, and policy analysis projects that encourage students to develop solutions for sustainable resource management.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Semester VIII					
HUES406	**Dissertation**	L	T	P	C
Version 1.0					12
Category of Course	**Dissertation**				
Total Contact Hours	**NA**				

Pre-requisites/Co-requisites	Research Methodology

Description: Students choosing a 4-Year Bachelor's degree (Honours with Research) are required to take up research projects under the guidance of a faculty member. The students are expected to complete the Research Project in the eighth semester. The research outcomes of their project work may be published in peer-reviewed journals or may be presented in conferences /seminars

The following guidelines may be followed during the preparation of the thesis.

- One should go through the guidelines of dissertation preparation before beginning.
- The thesis should be prepared using standard text processing software such as MS Word, Latex.
- The dissertation should be free from typographical errors.
- It must be written in the English Language.
- One should ensure uniformity in fonts, text, spacing, margins, figures, tables, etc.
- Please ensure that you remove all personal information from your thesis, e.g., email address, mailing or home address, etc. You must remove or black/white out all signatures in your dissertation

Components of Dissertation

- Conceptualization - formulation of the research question(s); aims and objectives, development of theoretical framework to conceptualize the problems or issues
- Review of literature - articulation of the state of the questions and identification of appropriate theoretical perspectives from a detailed review of the literature
- Explanation of research methods - discussion of possible research procedures and a rationale for the methods chosen data collection - clear description of the research process undertaken to implement the research design, description, analysis and evaluation of findings
- Reporting of results – linked to research objectives, and referring to key methodological issues outlined earlier
- Analysis/discussion - effective presentation, discussion and synthesis of results
- Conclusion - recommendations for future research
- Presentation, layout - physical format of your work, clarity of writing style, effective use of images, tables, figures, charts diagrams etc., coherent use of argument, and critical analysis of evidence, in support of one's investigation

ANNEXURE I

Discipline Specific Electives

Pool of Discipline Specific Courses (DSE)							
S.No	**Category of Course**	**Course Code**	**Course Title**	**L**	**T**	**P**	**C**
1	DSE	HUES001	Demography	3	1	0	4
2	DSE	HUES002	Political Economy	3	1	0	4
3	DSE	HUES003	Economics of Education	3	1	0	4
4	DSE	HUES004	Health Economics	3	1	0	4
5	DSE	HUES005	Economic History of India (1857-1947)	3	1	0	4
6	DSE	HUES006	Gender Economics	3	1	0	4
7	DSE	HUES007	Industrial Economics	3	1	0	4
8	DSE	HUES008	International Finance	3	1	0	4
9	DSE	HUES009	Economics of Public Sector	3	1	0	4
10	DSE	HUES010	Society, culture and social change	3	1	0	4
11	DSE	HUES011	Rural Economy	3	1	0	4
12	DSE	HUES012	Urban Economy	3	1	0	4
13	DSE	HUES013	Contemporary Economic Issues	3	1	0	4
14	DSE	HUES014	Applied Econometrics	3	1	0	4
15	DSE	HUES015	Labour Economics	3	1	0	4
16	DSE	HUES016	Monetary Economics	3	1	0	4

Demography

Course Code	Course Title	L	T	P	S	C
HUES001	Demography	3	1	0		4
Category of Course						
Pre-requisites/Exposure	Micro Economics -I					

(L – Lecture T – Tutorial P – Practical S – Studio C – Credits)

Course Perspectives: This course provides a comprehensive overview of demography, the statistical study of populations. Students will explore key concepts such as population size, distribution, and structure, along with demographic processes including birth, death, migration, and aging. The course will examine how these factors influence societal trends, economic development, and public policy. Through data analysis and case studies, students will gain practical skills in interpreting demographic data and understanding its implications for various fields, including economics, sociology, and public health. By the end of the course, students will be equipped to critically analyze demographic changes and their impacts on communities and global issues.

COURSE OUTCOMES (COs)

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

CO1.Understand the basic tenets of demography as well as key demographic issues .

CO2. Analyse the inter-relationship between demography and the process of economic development

CO3. Analyse theories of population and their application on real world

CO4. Comprehend the basic components of population (fertility, mortality, migration)and population policy and their impact of socio economic development .

SYLLABUS

Unit I: 15 Lectures

Demography – Concept and Scope, Theories of Population – Malthusian & Optimum Theory of Population & Theory of Demographic Transition, Relationship between Population and Economic Development - views of Julian Simon, Simon Kuznets Tragedy of commons, Sources of Population data - Population Censuses, Vital Registration, Sample Registration System and Large-scale Demographic Surveys.

Unit II: **15 Lectures**

Concepts and Measures of Population Growth:
Demographic Measurements: Fertility – Basic concepts, indicators of fertility 3.2 Mortality – Basic concepts, indicators of mortality 3.3 Trends and Fertility Differentials in India (rural-urban, education, religion). Population Projection: Lifetable; logistic curve. Nuptiality and its measurement.

Unit III: **15 Lectures**

Concept and types of migration; Internal Migration in India – Trends, Causes and Consequences Theories of migration related to internal migration. Ageing societies: Benefits and Costs. International aspects of Population: Unequal distribution of population and world resources.

Unit IV: **15 Lectures**

Population Growth Trends, Projections and Challenges in India. Current Population Scenario and Demographic Profile of India and States. Demographic Dividend in India Analytical study of National Policies: National Health Policy, National Population Policy, National Nutrition Policy, National Health Mission. Population and the Environment.

Recommended Text Book

M. Spiegelman: Introduction to Demography, Harvard University Press. Latest Edition

Reference Books

1. Bhende A.A. and Tara Kanitkar (2019)- 'Principles of Population Studies'- Himalaya Publishing House, Bombay
2. Richard K. Thomas "Demography: An Introduction to Population Studies , Springer; 2024th edition .
3. George W Barclay, Techniques of Population Analysis , Willey Publications.
4. Ashok Mitra: India's Population: Problem of quality and Control

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Course Code	Course Title	L	T	P	S	C
HUES002	Political Economy	3	1	0		4
Total Lecture Hrs	60 Hrs					
Pre-requisites/Exposure						

Course Perspectives

This course explores the systemic structures and institutions of capitalist economies and their evolution in a political economic framework. Students will be exposed to alternative schools of thought and are expected to read some classic texts and commentaries as well as more contemporary essays on the subject.

Course Outcomes

CO1: Understanding the historical development of capitalism through the transition from feudalism and analyzing its evolution in different periods, including alternative perspectives.

CO2: Applying concepts of accumulation, crisis, and monopoly capitalism to evaluate the evolving role of the state in economic systems and its interaction with capitalist dynamics.

CO3: Analyzing the social dimensions of globalization and uneven development, focusing on growth, inequality, and their social and geographical impacts.

CO4: Evaluating the intersections of political economy with gender and environmental issues, assessing the implications for sustainability, inequality, and global economic processes.

Course Content

Unit 1: **Historical Perspective of Capitalism**

Analysing Social Change in Historical Perspective The method of historical materialism; the transition from feudalism to capitalism; capitalism as a historical process – alternative perspectives; Capitalist development in the pre-Second World War period, the ‘Golden Age’ and later

Unit 2: **Capitalism & State**

Capitalism as an Evolving Economic System Basic features; accumulation and crisis; monopoly capitalism— alternative perspectives; role of State in Capitalism; The state and the economy – contestation and mutual interdependence; the state as an arena of conflict;

Unit 3: **Social Dimension of Political Economy**

The Social Dimension: Globalization and Uneven Development – Growth, inequality and crisis in an uneven geographical spread and its social ramifications

Unit 4: **Political Economy & Environment**

Broader Perspectives (Gender and Environment): Dimensions of Gender in work, accumulation and globalization; Political economic issues in environment, sustainability and inequality.

Recommended Text Books

1.Lange, O. (1963). *Political economy*, *Vol. 1.* Chapters 1 and 2. Macmillan.

Reference Books

1. Patnaik, P. (2006). Lenin's theory of imperialism today. In K. S. Jomo (ed.): *The long twentieth century: The great divergence: Hegemony, uneven development and global inequality*. Oxford University Press.
2. Schumpeter, J. (1976). *Capitalism, socialism and democracy.* Chapters 6, 7 and 8. George Allen and Unwin.
3. Shaikh, A. (2000). Economic crises. In T. Bottomore, et al. (eds.): *The dictionary of Marxist thought*. Maya Blackwell.
4. Shaikh, A. (2000). Falling rate of profit. In T. Bottomore et al. (eds.): *The dictionary of Marxist thought*. Maya Blackwell.
5. Sweezy, P. (1942). *The theory of capitalist development*. Monthly Review Press.
6. Vakulabharanam, V. (2009). The recent crisis in global capitalism: Towards a Marxian understanding. *Economic and Political Weekly,* 44, 144-150.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Economics of Education

Course Code	Course Title	L	T	P	S	Credit
HUES003	**Economics of Education**	3	1			4

Pre-requisites/Exposure	
Total Lecture Hrs	60

Course Outcomes: After completing the course, students will be:

CO1: Understanding the economics of education by exploring the determinants of demand for education, investment in human capital, and the rates of return to education, both private and social.

CO2: Applying theories of discrimination and the roles of private and social sectors to assess educational inequality, including gender and caste discrimination in India.

CO3: Analyzing the educational reforms and regulations in India, including key policies like Education Policy 1986 and NEP 2020, and the roles of organizations such as NCERT, UGC, AICTE, MOE, and NCTE.

CO4: Evaluating the progress towards SDG 4 (Quality Education) by reviewing and analyzing its targets and exploring strategies to ensure inclusive, equitable, and quality education for all.

Syllabus

Unit 1: **Economics of Education** **15 Hrs**

Demand for Education and its determinants, Investment in human capital, Rate of return to education, Private and Social quality of Education

Unit 2: **Educational Inequality** **15 Hrs**

Role of private and social sector in Education; quality of education; signalling of human capital; theories of discrimination; gender and caste discrimination in India.

Unit 3: **Educational Reforms & Regulation** **15 Hrs**

Education sector in India: an overview, Educational Reform in India (Education Policy 1986, NEP 2020), Role of NCERT, UGC, AICTE, MOE, NCTE etc.

Unit 4: **Education & SDG** **15 Hrs**

SDG 4 Quality Education: ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; Review and analysis of various targets of SDG 4.

Recommended Text Books

- "Economics of Education" by George S. Psacharopoulos and Harry Anthony Patrinos
- **"The Economics of Education: A Comprehensive Overview" by Steve Bradley, Colin Green, and John Mangan**

Reference Book

- "Handbook of the Economics of Education" edited by Eric A. Hanushek, Stephen Machin, and Ludger Woessmann

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

HEALTH ECONOMICS

Course Code	Course Name	L	T	P	C
HUES004	Health Economics	3	1	0	4
Pre-requisite	Microeconomic Principles				
Total Lecture Hrs	60				

Course Perspective:
This course provides a comprehensive overview of health economics, focusing on the principles and applications of economic analysis within the healthcare sector. Students will explore the fundamental concepts of demand and supply in healthcare, assess various healthcare financing mechanisms and insurance models, and examine the role of public health policies in shaping health outcomes and addressing disparities. Through a combination of theoretical knowledge and practical analysis, students will develop the skills to evaluate the healthcare systems, understand market dynamics and health policies.

Course Outcomes (COs):

- **CO1: Understanding** the basic concepts of health economics, including the economic nature of health.
- **CO2: Applying** economic theories such as the Grossman Model to analyze demand and supply dynamics in healthcare.
- **CO3: Analyzing** the financial aspects of healthcare, including health insurance, the impact of uncertainty and risk, and market failures caused by asymmetric information, moral hazard, and adverse selection, using different frameworks.
- **CO4: Evaluating** public health policies and systems and examining past and current reforms and challenges.

Course Content:

Unit-I (Total Hours: 15)

Introduction to Health Economics: Overview of Health Economics; Health as an Economic Good; Economics of Health vs Economics of Healthcare; Income and Health Linkages; Concept of Wellbeing – PQLI and HDI; Occupational Health Hazards- Fertility, Morbidity, Mortality and Life Expectancy; Nutrition and Health: Malnutrition and Under-nutrition.

Unit-II (Total Hours: 15)

Demand and Supply in Healthcare: Utility, indifference curves and demand curves for health care; Measuring price sensitivity with elasticities; The Grossman Model and Health Disparities; Supply Induced Demand; Hospitals as Health Providers; Production and Cost of Healthcare; Production function of health; Profit maximization models in health care.

Unit-III (Total Hours: 15)

Financing and Insurance in Health Care: Financing Health care; Uncertainty and Risk -Health Insurance; Patient Payments; Reimbursements; Asymmetric information and Market failure in Healthcare, Application of the principle of lemons, Principal agent relationship, Moral Hazard and Adverse Selection in Health Insurance. Arrow's Perspective on Healthcare.

UNIT-IV (Total Hours: 15)

Public Health and Policies: Financing of health care and resource constraints; Healthcare provisioning and responsiveness; Socio-economic disparities in Health- global perspective; Indian Health System: organization and governance; Indian Health Status: Reforms, Status, and Future challenges; National health policy under Five-year plans.

TEXTBOOKS

1. Bhattacharya, J., Hyde, T., & Tu, P. (2014). Health Economics. Palgrave Macmillan.
2. Dewar, M. Diane. (2021). Essentials of Health Economics. Jones & Bartlett Learning.
3. Morris, S., Devlin, N., Parkin, D., & Spencer, A. (2012). Economic Analysis in Health Care (2nd ed.). Wiley.
4. Zweifel, P., Breyer, F., & Kifmann, M. (2009). Health Economics (2nd ed.). Springer.

REFERENCE BOOKS

1. World Health Organisation (2013). The economics of the social determinants of health and health inequalities: A resource book. World Health Organisation.
2. Wonderling, David, Reinhold Gruen and Nick Black (2007): Introduction to Health Economics, Berkshire, Open University Press.
3. Sherman, Folland, Allen C Goodman and Miron Stano (2012): The Economics of Health and Health Care, Pearson Prentice Hall.
4. Henderson, J. W (2010): Health Economics & Policy, Thomson Southwestern (3rd ed.)

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Economic History of India

HUES005	Economic History of India	L	T	P	C
Version 1.0		3	1	0	4
Pre-requisites/Exposure					
Total Lecture Hrs	60				

Course Perspective: This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the mechanisms that linked economic development in India to the compulsions of colonial rule. The course develops critical analytical skills and exposes students to understanding the intricacies of India's economic, political and social developments both in the past and present times. It increases their employability by enhancing their ability to deal with a variety of textual and statistical sources, and to draw upon them to construct a coherent argument. These skills would be useful in a variety of careers in academics, research, journalism and the government

Course Outcomes:.

- **CO1: Understanding** the importance of studying economic history including the impacts of colonial land settlements and the growth of the British Empire.
- **CO2: Analyzing** the transformation of the traditional village economy under British rule, and the issues of rural indebtedness, wages, and price movements.
- **CO3: Evaluating** the industrial landscape of mid-nineteenth century India, exploring the de-industrialization thesis, and assessing the rise of modern industries
- **CO4: Examining** the role of foreign capital and trade in Colonial India

UNIT – I 15 Hrs

Why study economic history, the problems in interpreting India 's past, the state of the Indian Economy on the eve of independence, the Indian Economy in the mid-nineteenth century, the growth of the empire, and systems of land settlements in Colonial India.

UNIT - II 15 Hrs

Transformation of the traditional village – economy during the British rule, Commercialization of agriculture – its causes and consequences, Emergence of agricultural labour as a category, movement of agricultural wages and prices during the period – problems of rural indebtedness.

UNIT – III 15 Hrs

The state of industrial development in mid-nineteenth century India, the de-industrialization thesis –its statement and validity, emergence of modern capitalist industrial enterprise in India – Textile (Jute and Cotton), Iron & Steel, Cement, Coal, Tea.

UNIT – IV 15 Hrs

Foreign capital in Colonial India – its extent and impact; foreign-trade-growth and composition; 'guided under-development' of India under British rule; evolution of provincial finance, the nature and problem of public debt; Economic drain from India -form, extent, and consequences.

Recommended Text Books

1. Balachandran, G. (2016). Colonial India and the world economy, C. 1850- 1940. In L. Chaudhary, B. Gupta, T. Roy, A. Swami (eds.): A new economic history of colonial India. Routledge.

2. Bogart, D., Chaudhary, L. (2016). Railways in colonial India: an economic achievement? In L. Chaudhary, B. Gupta, T. Roy, A. Swami (eds.): A new economic history of colonial India. Routledge. 3. Chaudhary, L., Gupta, B., Roy, T., Swami, A. (2016). Agriculture in colonial India. In L. Chaudhary, B. Gupta, T. Roy, A. Swami (eds.): A new economic history of colonial India. Routledge.

4. Chaudhuri K. (1982). Foreign trade and balance of payments (1757-1947). In D. Kumar, T. Raychaudhari (eds.): Cambridge economic history of India 1757-c.1970 2. Orient Longman.

5. Guha, S. (1991). Mortality decline in early 20th century India. Indian Economic and Social History Review, 28(4), 371-87.

6. Jain, L. (2011). Indigenous credit instruments and systems. In M. Kudaisya (ed.): The Oxford India anthology of business history. Oxford University Press.

7. Klein, I. (1984). When rains fail: Famine relief and mortality in British India. Indian Economic and Social History Review, 21, 185-214.

8. Krishnamurty, J. (1982). Occupational structure. In D. Kumar, T. Raychaudhari (eds.): Cambridge economic history of India 1757-c.1970 2. Orient Longman.

9. Morris, M. (1965). Emergence of an industrial labour force in India. Oxford University Press.

10. Parthasarathi, P. (2009). Historical issues of deindustrialization in nineteenth century south India. In T. Roy, G. Riello (eds.): How India clothed the world: The world of south Asian textiles, 1500-1850. Brill Academic.

11. Parthasarathy, P. (2011). Why Europe grew rich and Asia did not: Global economic divergence, 1600-1850. Chapters 2, 8. Cambridge University Press.

12. Ray, R. (1994). Introduction. In R. Ray (ed.): Entrepreneurship and industry in India 1800-1947. Oxford University Press.

13. Roy, T. (2018). A business history of India: Enterprise and the emergence of capitalism from 1700. Chapters 4, 5, 6. Cambridge University Press.

14. Roy, T. (2011). The Economic History of India 1857-1947, 3rd ed. Chapters 3, 5, 6, 11. Orient Longman. 15. Washbrook, D. (2012). The Indian economy and the British empire. In D. Peers, N. Gooptu (eds.): India and the British Empire. Oxford University Press.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

GENDER ECONOMICS

HUES006	**Gender Economics**	**L**	**T**	**P**	**C**
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Perspective:

This course provides a comprehensive examination of the role of gender in economic development and the broader economy. It explores key concepts and approaches in gender economics, including feminist critiques of mainstream economic theories, the impact of globalization on gender relations, and the gendered nature of labor markets. Students will engage with critical debates on gender inequality, analyze demographic and economic data through a gendered lens, and examine the implications of gender policies on national and global scales. The course also delves into the intersection of household economics and gender, focusing on the distribution of resources and decision-making within households.

Course Outcomes:

CO1: Explain key concepts and approaches in gender economics, including gender and human development.

CO2: Apply feminist critiques to mainstream economic theories and assess their implications for gender relations.

CO3: Analyze gender inequalities in labor markets, including factors affecting participation, wages, and occupational segregation.

CO4: Evaluate the effectiveness of gender policies and strategies in reducing inequalities at national and global levels.

Course Content

Unit I: Concepts and Approaches in Gender Economics 15 Hrs

Introduction to Gender and Development: Concept of gender and human development, gender inequality, and the transition from Women in Development to Gender and Development.

Gender Statistics: Importance of gender-disaggregated data and indicators of economic inequalities.

Capability Approaches: Focus on economic empowerment and perspectives on men, masculinities, and third gender in economic development.

Demographic Changes: Gender interpretation of demographic shifts in birth rates, child sex preferences, secondary sex ratio, and gender differences in mortality.

Unit II: Feminist Critiques and Globalization 15 Hrs

Feminist Economics: Critique of mainstream economics, alternatives, and feminist perspectives on economic methods.

Globalization and Gender: Neoliberal policies, international trade, feminization of the workforce, and gender wage inequality.

Macroeconomic Impacts: Gender effects on macroeconomic theory, concepts of feminization of poverty, and women's contribution to GDP.

Unit III: Gender and the Labor Market 15 Hrs

Women's Work: Productive vs. reproductive work, formal vs. informal work, and international debates on estimating women's work.

Labor Market Inequality: Gender inequality in labor market participation, careers, wages, skills training, and factors in wage disparities.

Globalization Impacts: Effects on women's occupations, economic changes, and the international division of labor.

Unit IV: Gender in Household Economics and Policy 15 Hrs

Household Economics: Theoretical concepts, gender critiques of neo-Marxist and neo-classical approaches, gender contracts, and negotiation models.

Gender Policies: National, regional, and global policies; strategies for reducing gender inequalities, gender mainstreaming, gender budgeting, micro-credit, welfare, and social security measures, GII.

Textbooks:

- **"Gender and Development: The Economic Basis of Women's Power"** by Lourdes Benería and Gita Sen, Zed Books, 2019.
- **"The Economics of Gender"** by Joyce P. Jacobsen, Wiley, 2020 (4th Edition).
- **"Gender, Development, and Globalization: Economics as if All People Mattered"** by Lourdes Benería, Günseli Berik, and Maria Floro, Routledge, 2015 (2nd Edition).

Reference Books:

- **"Gender Inequality and Economic Development: Insights from the Capabilities Approach"** by Sakiko Fukuda-Parr, Oxford University Press, 2022.
- **"Global Women's Work: Perspectives on Gender and Work in the Global Economy"** edited by Beth English, Mary E. Frederickson, and Olga Sanmiguel-Valderrama, Routledge, 2020.
- **"The Gendered Economy: Work, Wages, and Welfare"** by Ann Mari May, Routledge, 2021.
- **"Feminist Economics and Public Policy: Reflections on the Work and Impact of Ailsa McKay"** edited by Jim Campbell and Morag Gillespie, Routledge, 2019.
- **"Handbook of Research on Gender and Economic Life"** edited by Deborah M. Figart and Tonia L. Warnecke, Edward Elgar Publishing, 2020.
- **"Gender, Asset Accumulation, and Just Cities: Pathways to Transformation"** by Caroline O.N. Moser, Routledge, 2022.
- **"The Routledge Handbook of Feminist Economics"** edited by Günseli Berik and Ebru Kongar, Routledge, 2021.
- **"Gender and the Environment: New Approaches to the Economic Analysis of Environmental Issues and Policies"** edited by Lourdes Benería and Mayra Buvinic, Routledge, 2020.
- **"Gender, Work, and Economy: Unpacking the Global Care Chain"** by Aislinn Kelton and Jason Smith, Routledge, 2023.
- **"Economic Growth and Gender Inequality in the Global South"** edited by Stephanie Seguino and Caren Grown, Palgrave Macmillan, 2021.

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Industrial Economics

HUES007	Industrial Economics	L	T	P	C
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Perspective:

This course provides an in-depth understanding of industrial economics, exploring the organization and behavior of firms, determinants of industrial location, patterns of industrialization, labor relations, and financial aspects of industrial projects. It emphasizes the Indian context, including recent trends, policies, and economic strategies.

Course Outcomes:

CO1: Understand the organizational structure and objectives of firms, including their size, growth, and efficiency metrics.

CO2: Analyze the determinants and theories of industrial location and their application to regional development.

CO3: Evaluate the alternative patterns of industrialization and the role of labor relations and reforms in industrial growth.

CO3: Apply project appraisal techniques and identify various sources and types of industrial finance from institutional entities.

Course Content

UNIT-I: INTRODUCTION TO INDUSTIRAL ECONOMICS 15 Hrs

Concept and Organization of a firm - Ownership control and objectives of a firm, Passive and active behavior of firm, Size, Growth, Profitability, Productivity, Efficiency and Capacity Utilization - Concept and measurement. Industrial policy, Classification of industries in India, Role of Public and private sectors; Recent trends in Indian industrial growth.

UNIT-II: LOCATION AND REGIONAL DEVELOPMENT OF INDUSTRY 15 Hrs

Determinants of Industrial Location - Technical, economic, infrastructural and other factors. Theories of industrial location - Weber, August Losch, Sargant Florence, Development of

Backward Regions - Government Policy and approach for the development of backward regions.

UNIT-III: INDUSTRIAL STRUCTURE AND LABOUR 15 Hrs

Alternative Patterns of Industrialization - Hoffman's hypothesis of capitalistic economies – Simon Kuznet's interpretation - Industrialization and planned economies - Cheney's Patterns of industrial changes . Structure of industrial labour, Industrial relations, Exit policy, Social Security Measures and Labour Reforms in Indian Context.

UNIT-IV: PROJECT APPRAISAL AND INDUSTRIAL FINANCE 15 Hrs

Project Appraisal Techniques – CBA, NPV and IRR, Sources of Industrial Finance - Owned, external and components of funds; Nature, Volume and Types of institutional finance – IDBI, IFCI, SFCs, SIDC, Commercial Banks, etc.

Textbooks:

1. Bharthwal RR.(2010), 'Industrial Economics: An Introductory Textbook', New Age International Publisher.

2. Tirole Jean (2007), 'Theory of Industrial Organization' Prentice Hall Learning Private Limited (PHI).

Reference Books:

1. Ahluwalia, I.J: Industrial Growth in India (Oxford University Press, New Delhi, 1985)

2. Desai B: Industrial Economy in India (3rd Edition) (Himalaya Publishing House, Mumbai, 1999)

3. Divine P.J & R.M Jones et. Al: An Introduction to Industrial Economics (George Allen and Unwin Ltd, London, 1976)

Web References

- http://heecontent.upsdc.gov.in/
- https://epgp.inflibnet.ac.in/
- https://swayam.gov.in/
- https://udrc.lkouniv.ac.in/Department/DepartmentDetail/StudyMaterial?dept=5
- https://www.coursera.org/in

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

International Finance

HUES008	International Finance	L	T	P	C
Version 1.0		3	1	0	4
Pre-requisites/Exposure					
Total Lecture Hrs	60				

Course Perspective:

This course provides an in-depth understanding of international finance, focusing on the global financial environment, international financial markets, and the roles of key financial institutions. It covers the evolution of international financial systems, various financial instruments, and the strategic decisions of multinational corporations in global markets. Emphasis is placed on understanding the complexities of managing finances across borders, the dynamics of financial markets, and the impacts of international investment decisions.

- FDI and FII, and the theories underpinning these decisions.

Course Outcomes:

CO1: Understand the nature, scope, and evolution of the international financial environment and differentiate between international and domestic financial management.

CO2: Apply knowledge of international financial markets to analyze the roles and functions of different markets, such as Eurocurrency, bond, equity, and money markets.

CO3:Analyze the roles and operations of key international financial institutions and the structure of international banking, including various types of banking offices.

CO4: Evaluate various international financial instruments and their relevance in global finance and compare foreign investment options such as FDI and FII.

Course Content

Unit I: Introduction to International Finance

International Financial Environment: Overview, Nature and Scope of International Finance Evolution of international financial system–gold standard, Breton woods standard, floating exchange rate; International Finance Management VS Domestic Financial Management.

Unit II: International Financial Markets

Eurocurrency market, international bond market, international equity market, international money market.

Unit III: International Financial Institutions

IMF, Bank for International Settlements; international banking-euro bank, types of banking offices-correspondent bank, representative office, foreign branch, subsidiary bank, offshore bank.

Unit IV :-International Financial Instruments

Introduction to International Financial Instruments Types of International Financial -Euro CP, Eurobonds, foreign bonds, global bonds, euro equity, ADR, GDRs. Foreign investment decision-Foreign direct investment (FDI)–motives, FDI theories-theory of comparative advantage, OLI paradigm of FDI in India. FII's Definition, role of FII's, Different Between FDI & FII.

Text Books:

1. Maurice D. Levi; "International Finance" 5ed. Routledge, Taylor & Francis Group
2. Eun Cheol S. and Resnick, Bruce G. "International Finance Management", 7th ed, McGraw Hill

Reference Books:

1. Eun C.S., Resnick B.G., "International Financial Management", 2010, Tata McGraw Hill Education Pvt. Ltd., 4th Ed. Special Indian Edition

2. Shailaja G, "International Finance", 2010, 2nd Ed. Orient Black'swan.

3. Hendrik Van den Berg, "International Finance and Open Economy Macro Economics", 2009, 1st Ed. Cambridge.

4. Sharan V., "International Financial Management", 2009, 5th Ed. PHI, EEE.

5. Madura J., "International Financial Management", 2010, 4th Ed. Cengage Learning.

6. Apte P.G., "International Finance", 2008, 2nd Ed. McGraw Hill.

7. Madhu Vij, "International Financial Management", 2010, 3rd Ed. Excel Books.

8. Vyuptakesh Sharan, International Financial Management, 4th Ed, 2006, PHI Learning Pvt. Ltd.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Economics of Public Sector

HUES009	Economics of Public Sector	L	T	P	C
Version 1.0		3	1	0	4
Pre-requisites/Exposure					
Total Lecture Hrs	60				

Course Perspective: The main aim of the course is to develop analytical tools and their application to key policy issues relating to the spending, taxation and financial activities of the government. After studying the course students should know main theoretical concepts and models, be able to analyse the influence of taxation and public spending on the economy, discuss different questions, connected with public sector economics, and solve problems.

Course Outcomes

After studying the course students will: -

CO1: Understand the meaning and function of public sector .

CO2: Apply main theoretical concepts and models.

CO3: Analyse the social cost benefit analysis.

CO4: Discuss different questions, connected with public sector economics, and solve . problems.

Course Content

Unit 1 15 Hrs

Introduction to Public Sector , Functions of the Public sector. The minimal state. Market failure. Redistribution. Voting :Public mechanisms for allocating resources: problems of eliciting preferences and reconciling differing views. Voting. Majority voting: the median voter theory and the voting paradox. Arrow’s Impossibility Theorem.

Unit 2 15 Hrs

Rent-seeking :Special interest groups. Rent-seeking behaviour. Controlling rent-seeking. Theory of bureaucracy. “Principal - agent” problem. Government failure. Theories of the public sector .The size of public expenditures. Wagner’s law, Baumol’s law, a political model, budget-setting, etc. Public provision versus public procurement.

Unit 3 15 Hrs

The problem of collective choice. Arrow's impossibility theorem. Consequences and alternatives. Majority rule and public goods provision. The median voter theorem. Unidimensional and multidimensional issues. Logrolling. Preference revelation mechanisms for public goods. Direct democracy and representative democracy. The "cast of characters" in the public sector. The role of political representatives. Organization and Incentives in the public sector: from the models of bureaucracy of Niskanen and Migué-Bélanger to the modern theories about the structure and behaviour of agencies. Pressure groups.

Unit 4 15 Hrs

Efficiency of public expenditures. Cost-benefit analysis. Private cost-benefit analysis. NPV and IRR methods. Social cost-benefit analysis. Measuring non-monetized costs and benefits. Shadow prices and market prices. The evaluation of risk. Managing the Public Sector's Assets and Liabilities. Privatisation: efficiency and equity arguments about state intervention.

Text Books

1. Hindriks, J. and G.D. Myles Intermediate Public Economics, (2nd ed.), Cambridge: MIT Press, 2013

2. J.Stiglitz, Economics of the Public Sector, (3rd ed.), Norton, 1999

Reference Books

1. Atkinson, A. and J.Stiglitz, Lectures in Public Economics, McGraw-Hill, 1980.

2. Barr, N. The Economics of the Welfare State, 4th ed. – Oxford: Oxford University Press, 2004.

3. Connolly, S. and A. Munro, Economics of the Public Sector. Prentice Hall Europe, 1999

4. Hillman A. L. Public Finance and Public Policy: Responsibilities and Limitations of Government. Cambridge: Cambridge University Press, 2003

5. Mueller, D.C. Public Choice III. Cambridge: Cambridge University Press, 2003

6. Rosen H., Gayer T., Guell R. Public Finance, Mcgraw-Hill, 2005.

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Society Culture and Social Change

HUES010	Society Culture and Social Change	L	T	P	C
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60 Hrs**				

Course Perspectives

India is a changing society in a rapidly changing world. The nature and pace of change is both welcomed and resisted by different social groups. The benefits and disadvantages of social change are not evenly distributed because society is characterized by significant social differences and inequalities of class, gender, ethnicity and power. Changes and inequality affect all the institutions in which we live - education, health-care, the family, work, religion and government. This course introduces understanding of social change and inequality. It questions the specific social, cultural and historical conditions that shape social institutions and values to identify how things might be otherwise and how we might contribute to changing things for the better. After completion of this course students shall have sociological understanding of social change and inequality and develop knowledge and understanding about social and cultural concepts and their application in personal, social and cultural identity and interactions within societies and cultures.

Course Outcomes

On completion of this course, the students will be able to:

- **CO1:** Understanding the nature, definition, and types of various societies, culture, socialization, and social control mechanisms.
- **CO2:** Applying the theoretical concepts of socialization and social control to analyze real-world societal examples and their influence on behaviour.
- **CO3:** Examining the effects of industrialization, secularization, modernization, and globalization on social structures and cultural norms.
- **CO4:** Evaluating the impact of social stratification (caste, class, power, gender) on social inequality and mobility, and its effects on individuals and communities.

Course Content

UNIT I **10 lecture hours**

Society: Tribal, Rural , Urban Industrial and Post Industrial : Its Nature, Definition & Types.

UNIT II **20 lecture hours**

Culture: Its Nature, Definition & Types: Material and Non-Material Culture; Socialization: Its Importance, Processes and Stages; Social Control: Its Types and Means.

UNIT III **20 lecture hours**

Process of Social Change: Industrialization, Secularization, Modernization & Globalization: Its Nature & Impact on Society.

UNIT IV **10 lecture hours**

Concepts & Basis of Social Stratification: Caste, Class, Power & Gender

REFERENCE BOOKS:

- Ahuja, Ram (1997): **Society in India: Concept, Theories and Recent Trends,** Jaipur: Rawat Publication.
- Beteille, Andre (1992): **Backward Classes in Contemporary India**, New Delhi: OUP.
- Dube, S.C.(1991): **Indian Society**, New Delhi : National Book Trust.
- Ghurye, G.S. (1968): **Social Tension**, Bombay: Popular Prakashan.
- Karve, Iravati (1961): **Hindu Society: An Interpretation,** Pune: Daccan College.
- Mandelbaum, D.G. (1970): **Society in India**, Bombay: Popular Prakashan.
- Sharma K.L.(ed.) (1994): **Caste and Class,** Jaipur, Rawat Publication.
- Srinivas, M.N.(1980): **India's : Social Structure,** New Delhi : Hindustan Publication.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Rural Economy

HUES011	**Rural Economy**	**L**	**T**	**P**	**C**
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Co-requisites	**--**				
Total Lecture Hrs	**60 Hrs**				

Course Perspective:

This course explores the key aspects of the rural economy in India, emphasizing the roles of agriculture, industry, and public utilities. It examines the features of rural economic structure, the challenges of rural poverty and unemployment, and the importance of rural finance and development initiatives. The course also addresses issues related to agricultural productivity, rural industries, and public services like irrigation, transport, and electrification.

Course Outcomes:

- CO1: Understand the features of the rural economy and the role of agriculture and animal husbandry in rural development.
- CO2: Apply knowledge of agricultural practices and marketing strategies to identify measures that can improve productivity and support rural industries.
- CO3: Analyze agricultural productivity and marketing, and evaluate the challenges and opportunities in agro-based and small-scale industries.
- CO4: Examine the role of public utilities and finance in rural areas and understand the challenges of rural economy and the measures to address it.

Course Content

UNIT I 15 Hours

Rural Economy in India-Features of Rural Economy; Role and Importance of Animal Husbandry in Rural Economy; Place of Agriculture in Rural Economy.

UNIT II 15 Hours

Agriculture and Industry in Rural Economy: Farm Size, Land Utilization and Cropping Pattern, Agricultural Productivity Causes of Low Productivity in Agricultural, measures taken to improve the productivity. Agricultural Marketing- Importance, Merits, demerits and Measures to improve it.

Need, Importance and problems of (a) Agro-based Industries (b) Small-scale and Cottage Industries

UNIT III 15 Hours

Rural Poverty and Unemployment - Causes, Extent, various Rural Development Programmers for reducing the rural Poverty and Unemployment

UNIT IV 15 Hours

Public Utilities and Finance in Rural Economy -Irrigation Facilities B) Transport and communication C) Rural Electrification**;** Public Distribution Systems (PDS) ; Need and Sources of rural Finance, Problem of Rural Indebtedness and its relief measures.

Textbooks:

- Handbook of Rural India: A book by Surinder S. Jodhka
- Rural Economy of India, N. Linga Murthy, K. V. Narayana, Mittal Publication

REFERENCE BOOKS:

- "Agricultural Economics and Rural Development"- Tyagi. B.P. Jai Prakashan Nath & Co Garh-Nauchandi Chauraha Grarh Road, Meerut-250002.
- Agricultural Problems of India- Mamoria C.B. & Tripathi.B.B. Century Printers, S.N. Marg Allahabad.
- The Indian Rural Problem- M.B. Nanavati and J.J. Anjaria (Vora and Co.Bombay)
- Indian Economy- Dutt R. and K.P.M. Sundharam (2007/Latest ed.) 25, S.Chand and company, New Delhi
- Indian Economy- Misra S.K. and V.K. Puri, Himalaya Publishing Co., Bombay (Latest ed.)

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Urban Economy

HUES012	**Urban Economy**	**L**	**T**	**P**	**C**
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Perspective:

This course provides an in-depth understanding of urban economics, focusing on the dynamics of urban growth, land use planning, resource management, and governance in urban areas. It explores the economic, social, and environmental challenges of urbanization, including issues related to transportation, waste management, and urban poverty. The course also examines urban development strategies, land use policies, and the roles of local government bodies in managing urban spaces.

Course Outcomes:

CO1: Understand the economic functions, models, and planning strategies of urban areas.

CO2: Apply land use planning principles to analyze urban land use changes and space planning.

CO3: Analyze resource management challenges in urbanization, including transportation and waste management.

CO4: Evaluate urban governance, slum development policies, and measures for urban poverty and crime reduction.

UNIT I **15 Hours**

Introduction to Urban Economics - Scope and Dimensions -The Nature and Function of Cities; Models of Urban Development and Planning- The Urban Economy and Development Strategy - The Economics of Urban Growth - Models of Urban Growth - The Frontiers of Urban Growth -The Economics of Intra-urban Location Decisions- Residential and industrial locations-Semi urban areas- special townships.

UNIT II **15 Hours**

Land Use Planning- General Urban Land-Use Models- The Determinants of Specific Land Uses; Changes in Land Uses- Land Use Policy- Land Reservation- Public Amenities - Town Planning-Small Cities Concept- Size of Livable Areas - Space Planning - Floor Space Index Concept

UNIT III **15 Hours**

Resource problems in urbanization - transportation, waste management and water - traffic Congestion - Traffic management and Policies- Public transport Surveillances- Route Mapping Signal system - The Urban Environment - Environmental Pollution- Types of pollution and Management- Types of wastes: degradable and non-degradable - Garbage, Plastic, Biomedical Waste Managements – Sustainable development Policies.

UNIT IV **15 Hours**

Urban local Government- Types local bodies and Governance- Cantonment Boards- Special Areas Improvement Trust: Functions, Problems and limitations- Slums Areas: Locations and Problems - slum development policy- Urban Poverty: Problems, Measures, and Policies- the Nature of Urban Poverty -The Causes of Poverty- Urban Crime and management.

Textbooks

- Changing Paradigms of Urbanisation: India and Beyond, OM Prakash Mathur, Academic Foundation,

REFERENCE BOOKS:

- Hartwick, John M. (2015) Urban Economics, Routledge; 1st edition.
- O'Sullivan, Arthur (2012) Urban economics, 8th Ed., McGraw-Hill/Irwin
- Button, K. J. (1976) Urban Economics Theory and Policy, Palgrave Macmillan UK.
- Rakesh A Mohan (1978) Urban Economic and Planning Models Assessing the Potential for Cities in Developing Countries, OCP- 25, World Bank.
- Duranton, G. (2007). Urban Evolutions: The Fast, the Slow, and the Still. American Economic Review, 97 (1), 197-221. http://dx.doi.org/10.1257/aer.97.1.197.

● Henderson, J. V. (1974) The Sizes and Types of Cities, The American Economic Review, Vol. 64, No. 4 (Sep., 1974), pp. 640-656, URL: https://www.jstor.org/stable/1813316 Accessed: 05-10-2018 12:02 UTC.
● Black, Duncan and Henderson, Vernon (1999), A Theory of Urban Growth, Journal of Political Economy, 1999, vol. 107, no. 2, The University of Chicago.

Evaluation Scheme

Components	Continuous Assessment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Contemporary Economic Issues

HUES013	Contemporary Economic Issues	L	T	P	C
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Perspective:

This course examines the key aspects of fiscal policy, budgetary processes, and economic performance in India. It explores government spending, tax structures, budgeting techniques, and financial relations between the center and states. The course also includes an analysis of the Union Budget, Economic Survey, and comparative performance of the Indian economy against global economies.

Course Outcomes:

- CO1: Understand the fundamentals of fiscal policy, budgeting, and financial relations in India.
- CO2: Analyze the Union Budget, focusing on expenditure trends, deficits, and effective spending strategies.
- CO3: Review and assess the key findings of the Economic Survey of India.

- CO4: Compare the performance of the Indian economy with other global economies in terms of growth and development.

Course Content

Syllabus

Unit I: **Concepts**
Fiscal policy, areas of government spending in India, Capital and revenue expenditure, plan and non-plan expenditures, Deficits (fiscal, primary, revenue), impact of fiscal deficits on the economy, Capital receipts, revenue receipts, tax and non-tax revenue, direct and indirect taxes, need for rationalization of tax structure, Goods and Services Tax (GST), Actual, revised and budget estimates, Zero-base budgeting, Gender budgeting, Fiscal devolution and centre-state financial relations

Unit II: **Union Budget**
Need for the budget, understanding the process of budget making in India, Analysis of fiscal and revenue deficits, Analysis of expenditure pattern and expected growth in expenditure, thrust areas of budget, sectors that have received higher/lower shares of expenditure, the reasons and consequences thereof, steps proposed to ensure effective spending.

Unit III: **Economic Survey**
Analysis and Review Past and Current Economic Survey of India

Unit IV: **Comparative Analysis**
Performance of Indian Economy as compare to global Economy in terms of growth, development and structural changes (Compare with China, USA, Other developing nations)

Reference Books

1. Union Budget & Goods and Services Tax
a. The Key to Budget Documents, available at:
https://www.indiabudget.gov.in/doc/Key_to_Budget_Document_2023.pdf
b. Budget at a Glance, available at:
https://www.indiabudget.gov.in/doc/Budget_at_Glance/budget_at_a_glance.pdf
c. Let's Talk About Budget. Centre for Budget and Governance Accountability. Chapters 4 to 6. Union Budget of India, Making of Union Budget, What does Union Budget papers look like? This text can be downloaded from PRIMER-1-FIN.pdf (cbgaindia.org). De-emphasize pages: Pg 29 (Chapter 4 Plan and Non-plan Expenditure) and 37(Preparation of Union Budget Section) 2
d. Goods and Service Tax (GST): Concept and Status (as on 01st July, 2019); CBIC, Department of Revenue, Ministry of Finance. Pg. 3-15, 36 (section 10)-44, 48-50 https://gstcouncil.gov.in/sites/default/files/GST-Concept-and-Status01072019.pdf
e. Das S (2017): "Some Concerns Regarding the Goods and Services Tax," Economic and Political Weekly, Vol. 52, No. 9 (March 4, 2017) available at:

http://www.epw.in/journal/2017/9/webexclusives/some-concerns-regarding-goods-and-servicestax.html f. Dipak Dasgupta and Supriyo De (2012), "Fiscal Deficit", in Basu and Maertens. https://dea.gov.in/sites/default/files/FPI_trends_Trajectory.pdf g. D K Srivastava, Muralikrishna Bharadwaj, Tarrung Kapur, Ragini Trehan (2021) "Taxing Petroleum Products - Sharing Revenue Space between Centre and States" Economic and Political Weekly, Vol. 56, Issue No. 9, 27 Feb, 2021 2. Fiscal Federalism

a. Y V Reddy (2015), "Continuity, Change and The Way Forward: Fourteenth Finance Commission", EPW Vol. 50, Issue No. 21, 23 May 2015. (Pg.27-31, Subpoint 1-9)

b. Chakraborty, Lekha (2019) "Indian Fiscal Federalism at the Crossroads: Some Reflections", NIPFP working paper no 260 available at: https://www.nipfp.org.in/media/medialibrary/2019/05/WP_260_2019.pdf

c. The Fifteenth Finance Commission (FFC) Report for the Year 2021-26 Chapter 1 titled "Introduction" available at: https://fincomindia.nic.in/ShowContent.aspx?uid1=3&uid2=0&uid3=0&uid4 =0

3. Economic Survey- 2022-23

a. State of the economy (Economic Survey 2022-23-Chapter 1) https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap01.pdf

b. Fiscal Development (Economic Survey 2022-23- Chapter 3) www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap03.pdf

c. Monetary Management and Financial Intermediation (Economic Survey 2022-23- Chapter 04) https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap04.pdf

d. Prices and Inflation (Economic Survey 2022-23- Chapter 5) https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap05.pdf

e. External Sector (Economic Survey 2022-23-Chapter 11) www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap11.pdf

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Applied Econometrics

HUES014	**Applied Econometrics**	**L**	**T**	**P**	**C**
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure	**Basic Econometrics**				
Total Lecture Hrs	**60**				

Course Perspective:

This course provides a comprehensive understanding of empirical econometric research, focusing on regression analysis, advanced econometric models, and practical applications using econometric software. It covers the stages of econometric research, estimation and diagnostic testing, and introduces models for limited dependent variables and panel data. The course emphasizes hands-on experience with econometric software and real-world data sets.

Course Outcomes:

CO1: Understand the stages and methods involved in empirical econometric research, including regression estimation and diagnostic testing.

CO2: Apply advanced regression techniques, including dynamic models and panel data methods, to econometric analysis.

CO3: Analyze and interpret models for limited dependent variables, such as binary and truncated data.

CO4: Utilize econometric software to estimate models and apply techniques learned to publicly

Course Content

Unit 1 **12 sessions**

Introduction

Basic mathematical tools, Probability distribution, Point and interval estimation. Large sample properties of estimators, Hypothesis testing and confidence intervals, Matrices.

Unit 2

Linear Regression Analysis : Simple linear regression and ordinary least squares (OLS) estimation Multiple linear regression. The properties, expected value and the variance of the OLS estimator Issues in Multiple Regression Analysis , Inference and hypothesis testing, Large sample properties of the OLS estimator, Other functional form, Goodness of fit, Qualitative data (Binary variables)

Unit 3

Regression Diagnostics a. Detection of and remedial measures for Multicollinearity, Autocorrelation and Heteroscedasticity Heteroskedasticity- Heteroskedasticity-robust inference, Testing for heteroskedasticity, Weighted least squares estimation. Randomized Control Trials: Difference-in-Differences

Unit 4

Limited dependent variables: logit and probit models for binary responses, tobit models for truncated data. Functional form misspecification, Proxy variables, Measurement errors. Specification and Data Issues (Wooldridge: Chapter 9)

Text Books

1. Wooldridge, J. (2014). Introduction to econometrics: A modern approach, 5th ed. Cengage Learning.
2. Gujarati, D. (2014). Econometrics by example, 2nd ed. Palgrave Macmillan. 33

Reference Books

1. Gujarati, D. (2014). Econometrics by example, 2nd ed. Palgrave Macmillan. 33

3. Wooldridge, J. (2014). Introduction to econometrics: A modern approach, 5th ed. Cengage Learning.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Labour Economics

HUES015	Labour Economics	**L**	**T**	**P**	**C**
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Perspective:

This course provides a comprehensive introduction to the fundamental concepts and theories of labour economics, focusing on the study of labour as a crucial factor of production. Furthermore, the course explores the concept of wages and income distribution, examining theories of wage determination (including classical, neoclassical, and bargaining theories) and factors influencing wage differentials (such as education, skills, discrimination, and unions). A significant portion of the course is dedicated to understanding labour productivity—its measurement, determinants, and implications for economic growth and living standards.

Discussions will cover the role of human capital investment, technological progress, and management practices in enhancing productivity levels. Additionally, the course addresses issues related to labour welfare, including the analysis of working conditions, health and safety regulations, income inequality, and social protection policies. Students will critically evaluate the effectiveness of various welfare measures and their impact on both workers and employers.

Course Outcomes (COs):

After successfully completing the course, the student will be able to:

CO1- Understand the basic concepts of Labour Economics.

CO2- Analyze the functioning of labour market, including the determinants of labour supply and demand, factors influencing wage determination, and the implications of labour market efficiency on economic growth and development.

CO3- Evaluate the causes and consequences of unemployment, including different types of unemployment and their impact on economy.

CO4- Evaluate the role of government policies in influencing wage levels, improving labour market outcomes, and promoting equitable distribution of income.

Course Content:

Unit-I (Total Hours: 15)

Introduction to Labour Economics: Definition, Nature and Scope of Labour Economics; Importance of Labour Economics; Significance and characteristics of labour; Types of Labour; Labour as factor of production; Organized and Unorganized Labour Sector; Classical theory of labour; Neoclassical perspective on labour; Determinants of labour demand and supply; Factors affecting demand and supply of Labour.

Unit-II (Total Hours: 15)

Labour Market: Definition and characteristics of Labour Market; Determining factors of Labour Force participation; Difference between Labour Market and Commodity Market; Labour markets and Pareto efficiency; Nature of Labour market in developing countries like India; Causes of labour market failure; Labour problems in India, Labour policy of Government of India; Characteristics of Labour Market in Developing Economics.

UNIT-III (Total Hours: 15)

Employment, Unemployment and Wage: Concept of Employment and Full Employment - Need for Full Employment; Theories of Employment - Classical, Neo-Classical and Modern Approaches to Employment; Unemployment- Causes and Consequences; Technology and Employment; Concept and Definitions of Wage; Theories of Wages- Classical, Marginal Productivity and Collective Bargaining Theory of Wage; Wage Different ials; Wage Policy- Objectives and Importance; Wage determination and its relationship with labour market equilibrium.

UNIT-IV (Total Hours: 15)

Labour Productivity and Labour Welfare: Concept of Labour Productivity; Measurement and Importance of Labour Productivity; Determinants of Labour Productivity; Causes for Low Labour Productivity; Measures to Increased Labour Productivity; Technology and Labour Productivity; Need for State Intervention in Labour Matters; Methods of State Intervention in Labour Matters; Objectives and Importance of Labour Policy.

Textbooks:

1. G.J. Borjas, "Labour Economics", 5th, 6th, 7th, 8th edition, McGraw-Hill.
2. Suman Kalyan Chakraborty (2018), "Labour Economics", Himalaya Publishing House Pvt. Ltd, Mumbai.
3. Jones, Thornton (2018), 2nd Edition, "Fundamentals of Labour Economics", Cengage Learning Inc., London.

Reference Books:

1. R.C. Sharma (2016), "Industrial relations and Labor legislations", PHI Learning Private Limited.
2. Dr. V.C. Sinha (2015), "Labor Economics and Industrial relations", SBPD Publications.
3. Panda. B.K (2015), "Economics of Labour and Industry", Gvph Publishers and Exporter, New Delhi.
4. M.V. Joshi (2014), "Labor Economics and Labor Problems", Atlantic Publishers and Distributors Private Limited, New Delhi.
5. Peter Sloane (2013), "Modern Labour Economics", Taylor & Francis Group, Adarsh publisher (seller), Bhopal.
6. S.D. Singh (2012), "Labour Economics", Centrum Press, New Delhi.

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Monetary Economics

HUES016	Monetary Economics	L	T	P	C
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Perspectives:

This course explores the dynamics of money demand and supply, the nature and causes of inflation, and the role of monetary policy and financial institutions in the economy. It covers classical and modern theories of money, monetarism, new classical economics, and the tools and strategies of monetary policy, with a focus on the Indian context. The course also examines the functions, growth, and regulatory environment of financial institutions in India.

Course Outcomes:

CO1: Understanding the concept of money and banking , inflation**,** monetary policy frameworks and instruments used by central banks to achieve their objectives.

CO2: Applying and correlating the above concepts of monetary economics to current economic scenario.

CO3: Analysing the mechanisms through which monetary policy actions influence key macroeconomic variables.

CO4: Evaluating the working of Indian Monetary system (RBI, NABARD, SEBI, RRBs etc) in India

Unit 1: Demand and supply of money: (15 hours)

Functions of money and kinds of money; Components of supply of money, Money multiplier.Theories of demand for money – classical and Keynes; Quantity Theory of Money, Transactions approach to the quantity theory, Cambridge Cash Balance approach to the quantity theory ,Friedman's "restatement" of the QTM. Tobin's portfolio selection and Baumol's transaction demand for money.

Unit 2: Inflation ,Monetarism and New classical Economics: (15 hours)

Demand Pull Inflation, Cost Push Inflation, Keynesian theory of inflation - Phillips Curve . Monetarism: Basic elements of monetarism , Friedman-Phelp critique of Phillips Curve. New classical Economics and Rational Expectations.

Unit 3: Monetary Policy and Central Bank (15 hours):

Goals, targets and instruments of monetary policy **(**open market operation, CRR, Statutory Liquidity Ratio, Moral Suasion, Selective Credit Control)**.**Process of credit creation , Monetary Policy of RBI, Monetary Policy Committee, Recent Developments on Financial Inclusion -Jan Dhan Yojana.

Unit 4: Financial Institutions: Functions and growth of financial institutions in India (15 hours):

Commercial banks, co-operatives, regional rural banks (RRBs), Non-bank financial intermediaries (NBFIs): Insurance institutions: Life and general insurance, mutual benefit funds. Role of Regulatory authorities – SEBI and IRDA

Textbooks:

- JagdishHanda, (2009): Monetary Economics, 2nd Edition, Routledge, London
- Gupta, Suraj B. (2016): Monetary Economics: Institutions, Theory and Policy, S.Chand and Company Private Limited, New Delhi.

Online Reference

www.rbi.org.in

Niti Ayog

IMF

World Bank

Evaluation Scheme

Components	**Continuous Assessment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	30	20	50

Annexure II

Syllabi (Minor Courses)

1. DATA SCIENCE							
S.No/Sem	**Category of Course**	**Course Name**	**Course Code**	**L**	**T**	**P**	**C**
I	GE	UDT101	Data Analytics Using SQL	2	0	2	4
II	GE	UDT102	Data Analytics Using R	2	0	2	4
III	GE	UDT103	Python For Data Science	2	0	2	4
IV	GE	UDT104	Data Preprocessing and Visualization Using Python	2	0	2	4
V	GE	UDT105	Time Series Analysis & Forecasting Using Python	2	0	2	4
VI	GE	UDT106	Fundamental Of Machine Learning	2	0	2	4
VII	GE	UDT107	Data Driven Applications	2	0	2	4
VIII	GE	UDT108	Project And Case Study	2	0	2	4

Semester-I

UDT101	**Data Analytics using SQL**	**L**	**T**	**P**	**C**
Version 1.0		**2**	**0**	**2**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Perspective

The course objective of "Data Science Using SQL" typically revolves around teaching students or participants the essential skills and knowledge needed to effectively utilize SQL (Structured Query Language) for data analysis and exploration within the context of data science. The course aims to provide a strong foundation in SQL and its application in various data-related tasks, with a focus on supporting data-driven decision-making processes.

Course Outcomes:

Upon successful completion of the course students should be able to:

1. Write complex SQL queries to retrieve, filter, and aggregate data from relational databases.
2. Apply SQL commands to clean and pre-process data, including handling missing values, duplicates, and data transformations.
3. Utilize SQL queries to explore datasets, identify patterns, and summarize key statistics to gain initial insights into the data.
4. Visualize query results using tools or libraries to create meaningful charts, graphs, and plots that enhance data understanding.
5. Apply SQL skills to real-world data science problems in domains such as business, finance, marketing, and healthcare.

Course Contents:

Unit 1 Contact Hours: 16

- Introduction to Data Science
- Introduction To SQL Server
- Understanding Data & Information
- Database
- DBMS
- RDBMS
- DB Design
- Types of Databases
- SQL Server versions
- Creating DB
- Sub Languages of TSQL
- DDL
- DML
- TCL
- DCL
- DQL
- Creating Tables
- Insert,Delete,Update Data into Tables
- Normalization
- Constraints
- Unique
- Not Null
- Primary key
- Check
- Default
- Foreign Key

Unit 2 Contact Hours: 22

- Working With Single Table Queries
- Writing Queries using SELECT Statement
- Understanding Query Flow

- Operators in SQL Server
- Clauses in SQL Server
- Filtering Data Using WHERE Clause
- Sorting Data using ORDER BY Clause
- Avoid Duplicates using DISTINCT Clause
- Using Top Clause
- DML Commands
- Copying Data From one Table to Another
- Insert command
- Update Command
- Delete Command
- DDL Commands
- Create command
- Alter Command
- Drop Command
- Truncate Command
- Delete vs Truncate

Unit 3 Contact Hours: 10

- Built in Functions
- Scalar Functions
- String
- Date
- DateFromParts
- ISNULL
- Group Functions
- Aggregate Functions
- Cunt(*)
- MAX()
- MIN()
- AVG()
- SUM()

Unit 4 Contact Hours: 16

- Sub Queries
- Importance of Sub Query
- Types of Sub Queries
- Nested Queries
- JOINS
- Importance of Joins
- Types of Joins
- Inner Join or Equi Join

- Outer Join
- Left Outer Join
- Right Outer Join

List of Practical's

- Create a student table with the student id, name, and marks as attributes where the student id is the primary key.
- Insert the details of a new student in the above table
- Delete the details of a student in the above table
- Use the select command to get the details of the students with marks more than 80
- Find the min, max, sum, and average of the marks in a student marks table
- Find the total number of customers from each country in the table (customer ID, customer Name, country) using group by.
- Write a SQL query to order the (student ID, marks) table in descending order of the marks
- Write a SQL query to display the marks without decimal places, display the reminder after diving marks by 3 and display the square of marks
- Write a SQL query to display names into capital letters, small letters, display first 3 letters of name, display last 3 letters of name, display the position the letter A in name
- Remove extra spaces from left, right and both sides from the text - " SQL for Data Science "
- Display today's date in "Date/Month/Year" format
- Display day name, month name, day, day name, day of month, day of year for today's date.

Reference Books

SQL: QuickStart Guide – The Simplified Beginner's Guide To SQL

UDT102	**Data Analytics Using R**	**L**	**T**	**P**	**C**
Version 1.0		**2**	**0**	**2**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Perspectives:

Data Science is a fast-growing interdisciplinary field, focusing on the analysis of data to extract knowledge and insight. This course will introduce students to the collection. Preparation, analysis, modeling and visualization of data, covering both conceptual and practical issues. Examples and case studies from diverse fields will be presented, and hands-on use of statistical and data manipulation software will be included.

Course Outcomes:

Upon completion of the subject, students will be able to:

1. Command over R programming for Data Visualization
2. Understand the processes of data science - identifying the problem to be solved, data collection, preparation, modeling, evaluation and visualization.
3. Able to use basic R data structures in loading, cleaning the data and preprocessing the data.
4. Able to do the exploratory data analysis on real time datasets
5. Able to understand and implement Linear Regression
6. Able to understand and use - lists, vectors, matrices, dataframes, etc.

Course Content

UNIT I Introduction to Data Science and Data Visualization:

Introduction to Data Science- Introduction- Definition - Data Science in various fields - Examples - Impact of Data Science - Data Analytics Life Cycle - Data Science Toolkit - Data Scientist - Data Science Team

Understanding data: Introduction – Types of Data: Numeric – Categorical – Graphical – High Dimensional Data – Classification of digital Data: Structured, Semi-Structured and Un-Structured - Example Applications. Need for data visualization, applications of data visualization, Difference Between Data Visualization and Data Analytics, Role of Data Visualization in Artificial Intelligence, Machine Learning and Data Science. Comparison of various data visualization techniques.

UNIT II FUNDAMENTALS OF R

Introduction to R- Features of R - Environment - R Studio. Basics of R-Assignment - Modes - Operators - special numbers - Logical values - Basic Functions - R help functions - R Data Structures - Control Structures. Vectors: Definition- Declaration - Generating - Indexing - Naming - Adding & Removing elements - Operations on Vectors - Recycling - Special Operators - Vectorized if- then else-Vector Equality – Functions for vectors - Missing values - NULL values - Filtering & Subsetting.

UNIT III:

Matrices - Creating Matrices - Adding or Removing rows/columns - Reshaping - Operations - Special functions on Matrices. Lists - Creating List – General List Operations - Special Functions - Recursive Lists. Data Frames - Creating Data Frames - Naming - Accessing -
Adding - Removing - Applying Special functions to Data Frames - Merging Data Frames- Factors and Tables.

WORKING WITH R

Working with data in R - Reading CSV and Excel Files, reading text files, Writing and saving data objects to file in R, String operations in R - Regular Expressions, Dates in R, Using Visualization tools – Bar Charts, Histograms, Pie Charts, Scatter Plots, Line Plots.

Input / Output – Reading and Writing datasets in various formats - Functions - Creating User-defined functions - Functions on Function Object - Scope of Variables - Accessing Global, Environment - Closures - Recursion. Exploratory Data Analysis - Data Preprocessing - Descriptive Statistics - Central Tendency - Variability - Mean - Median - Range - Variance - Summary - Handling Missing values and Outliers - Normalization
Data Visualization in R : Types of visualizations - packages for visualizations - Basic Visualizations, Advanced Visualizations and Creating 3D plots.

UNIT V Data Visualization with R:
Basic Visualization Tools-Bar Charts, Histograms, Pie Charts, Basic Visualization Tools ContinuedScatter Plots, Line Plots and Regression, Specialized Visualization Tools-Word Clouds, Radar Charts, Waffle Charts, Box Plots, how to create Maps Creating Maps in R, How to build interactive web pages- Introduction to Shiny, Creating and Customizing Shiny Apps, Additional Shiny Features Hands on with ggplot2: Marginal Plots, Bubble Plots & Count Charts, Diverging Charts, Themes, Multi Panel Plots, Multiple Plots, Background Colors.

Text Books:
1. Cognitive computing with IBM Watson (by Rob High (Author), Tanmay Bakshi (Author),30 April 2019)-1st edition.

Reference Books:
1. Nina Zumel, John Mount, “Practical Data Science with R”, Manning Publications, 2014.
2. Jure Leskovec, Anand Rajaraman, Jeffrey D.Ullman, “Mining of Massive Datasets”, Cambridge University Press, 2014.
3. Mark Gardener, “Beginning R - The Statistical Programming Language”, John Wiley & Sons, Inc., 2012.
4. W. N. Venables, D. M. Smith and the R Core Team, “An Introduction to R”, 2013.
5. Tony Ojeda, Sean Patrick Murphy, Benjamin Bengfort, Abhijit Dasgupta, “Practical Data Science Cookbook”, Packt Publishing Ltd., 2014.
6. Nathan Yau, “Visualize This: The FlowingData Guide to Design, Visualization, and Statistics”, Wiley, 2011.
7. Boris lublinsky, Kevin t. Smith, Alexey Yakubovich, “Professional Hadoop Solutions”, Wiley, ISBN: 9788126551071, 2015.
8. R in a Nutshell: Second Edition Paperback– (23 Oct 2012) by Joseph Adler-2nd edition.
9. Applied Predictive Modeling Hardcover– (27 Apr 2018) by Max Kuhn, Kjell Johnson- 1st edition.
10. An Introduction to Statistical Learning: with Applications in R (Springer Texts in Statistics) Hardcover– (29 Sep 2017), by Gareth James, Daniela Witten, Trevor Hastie.

Student Activity
Databases need to undergo pre-processing to be useful for data mining. Dirty data can cause confusion for the data mining procedure, resulting in unreliable output. Data cleaning includes smoothing noisy data, filling in missing values, identifying and removing outliers, and resolving inconsistencies.

RECOMMENDED CO-CURRICULAR ACTIVITIES:
(Co-curricular activities shall not promote copying from textbook or from others work and shall encourage self/independent and group learning) **A. Measurable**
1. Assignments (in writing and doing forms on the aspects of syllabus content and outside the syllabus content. Shall be individual and challenging)
2. Student seminars (on topics of the syllabus and related aspects (individual activity))
3. Quiz (on topics where the content can be compiled by smaller aspects and data (Individuals or groups as teams))
4. Study projects (by very small groups of students on selected local real-time problems pertaining to syllabus or related areas. The individual participation and contribution of students shall be ensured (team activity
B. General
1. Group Discussion
2. Try to solve MCQ's available online.
3. Others
RECOMMENDED CONTINUOUS ASSESSMENT METHODS:
Some of the following suggested assessment methodologies could be adopted;
1. The oral and written examinations (Scheduled and surprise tests)
2. Closed-book and open-book tests
3. Problem-solving exercises
4. Practical assignments and laboratory reports
5. Observation of practical skills
6. Individual and group project reports like "COVID-19 Analysis", "Estimated Quanrantain Period for Covid-19 Contacts", etc.
7. Efficient delivery using seminar presentations,
8. Viva voce interviews.
9. Computerized adaptive testing, literature surveys and evaluations,
10. Peers and self-assessment, outputs form individual and collaborative work.

E BOOKS
1. https://web.itu.edu.tr/~tokerem/The_Book_of_R.pdf
MOOC
1. https://online-learning.harvard.edu/subject/r
2. https://www.udemy.com/course/r-basics/
3. https://www.datacamp.com/courses/free-introduction-to-r

List of Practicals

R Programming LAB

1) Installing R and R studio
2) Create a folder DS_R and make it a working directory. Display the current working directory
3) installing the "ggplot2", "caTools", "CART" packages
4) load the packages "ggplot2", "caTools".

5) Basic operations in r

6) Working with Vectors:

• Create a vector v1 with elements 1 to 20.

• Add 2 to every element of the vector v1.

• Divide every element in v1 by 5

• Create a vector v2 with elements from 21 to 30. Now add v1 to v2.

7) Getting data into R, Basic data manipulation

8) Using the data present in the table given below, create a Matrix "M"

	C1	***C2***	***C3***	***C4***	***C5***
C1	***0***	***12***	***13***	***8***	***20***
C2	***12***	***0***	***15***	***28***	***88***
C3	***13***	***15***	***0***	***6***	***9***
C4	***8***	***28***	***6***	***0***	***33***
C5	***20***	***88***	***9***	***33***	***0***

• Find the pairs of cities with shortest distance.

9) Consider the following marks scored by the 6 students

Section	**Stude_nt no**	**M1**	**M2**	**M3**
A	1	45	54	45
A	2	34	55	55
A	3	56	66	64
B	1	43	44	45
B	2	67	76	78
B	3	76	68	37

- create a data structure for the above data and store in proper positions with proper names
- display the marks and totals for all students
- Display the highest total marks in each section.
- Add a new subject and fill it with marks for 2 sections.

- Three people denoted by P1, P2, P3 intend to buy some rolls, buns, cakes and bread. Each of them needs these commodities in differing amounts and can buy them in two shops S1, S2. The individual prices and desired quantities of the commodities are given in the following table "demand.

	price	
	S1	S2
Roll	1.5	1
Bun	2	2.5
Cake	5	4.5
Bread	16	17

	demand.quantity			
	Roll	**Bun**	**Cake**	**Bread**
P1	6	5	3	1
P2	3	6	2	2
P3	3	4	3	1

- Create matrices for above information with row names and col names.
- Display the demand.quantity and price matrices
- Find the total amount to be spent by each person for their requirements in each shop
- Suggest a shop for each person to buy the products which is minimal.

10) Consider the following employee details:

employee details as follows		
	emp_no:1	
	name: Ram	
	salary	
		basic: 10000
		hra: 2500
		da: 4000
	deductions	
		pf: 1100
		tax: 200
	total salary	
		gs(Gross Salary):
		ns(Net Salary)

- Create a list for the employee data and fill gross and net salary.
- Add the address to the above list
- display the employee name and address
- remove street from address
- remove address from the List.

11) Loops and functions - Find the factorial of a given number

12) Implementation of Data Frame and its corresponding operators and functions

13) Implementation of Reading data from the files and writing output back to the specified file

14) Treatment of NAs, outliers, Scaling the data, etc

15) Applying summary() to find the mean, median, standard deviation, etc

16) Implementation of Visualizations - Bar, Histogram, Box, Line, scatter plot, etc.

E BOOKS

1. https://web.itu.edu.tr/~tokerem/The_Book_of_R.pdf

MOOC

1. https://online-learning.harvard.edu/subject/r
2. https://www.udemy.com/course/r-basics/
3. https://www.datacamp.com/courses/free-introduction-to-r

Semester-III

UDT103	**Python For Data Science**	**L**	**T**	**P**	**C**
Version 1.0		**2**	**0**	**2**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

COURSE OUTCOMES

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

1 Identify the need for data science and solve basic problems using Python built-in data types and their methods.

2 Employ efficient storage and data operations using NumPy arrays.

3 Apply powerful data manipulations using Pandas.

4 Do data pre-processing and visualization using Pandas.

Prerequisites: NIL

Unit 1: INTRODUCTION TO DATA SCIENCE AND PYTHON PROGRAMMING

Introduction to Data Science - Why Python? - Essential Python libraries - Python Introduction- Features, Identifiers, Reserved words, Indentation, Comments, Built-in Data types and their Methods: Strings, List, Tuples, Dictionary, Set - Type Conversion- Operators. Decision Making- Looping- Loop Control statement- Math and Random number functions. User defined functions - function arguments & its types.

Practical Component:

1. Implement basic Python programs for reading input from console.
2. Perform Creation, indexing, slicing, concatenation and repetition operations on Python built-in data types: Strings, List, Tuples, Dictionary, Set
3. Solve problems using decision and looping statements.
4. Apply Python built-in data types: Strings, List, Tuples, Dictionary, Set and their methods to solve any given problem
5. Handle numerical operations using math and random number functions
6. Create user-defined functions with different types of function arguments.

Unit 2: INTRODUCTION TO NUMPY

NumPy Basics: Arrays and Vectorized Computation- The NumPy ndarray- Creating ndarrays- Data Types for ndarrays- Arithmetic with NumPy Arrays- Basic Indexing and Slicing - Boolean Indexing-Transposing Arrays and Swapping Axes. Universal Functions: Fast Element-Wise Array Functions- Mathematical and Statistical Methods-Sorting Unique and Other Set Logic.

Practical Component:

1. Create NumPy arrays from Python Data Structures, Intrinsic NumPy objects and Random Functions.
2. Manipulation of NumPy arrays- Indexing, Slicing, Reshaping, Joining and Splitting.
3. Computation on NumPy arrays using Universal Functions and Mathematical methods.
4. Import a CSV file and perform various Statistical and Comparison operations on rows/columns.
5. Load an image file and do crop and flip operation using NumPy Indexing.

Unit 3: DATA MANIPULATION WITH PANDAS

Introduction to pandas Data Structures: Series, DataFrame, Essential Functionality: Dropping EntriesIndexing, Selection, and Filtering- Function Application and Mapping- Sorting and Ranking. Summarizing and Computing Descriptive Statistics- Unique Values, Value Counts, and Membership. Reading and Writing Data in Text Format.

Practical Component:

1. Create Pandas Series and DataFrame from various inputs.
2. Import any CSV file to Pandas DataFrame and perform the following:

(a) Visualize the first and last 10 records
(b) Get the shape, index and column details
(c) Select/Delete the records(rows)/columns based on conditions.
(d) Perform ranking and sorting operations.
(e) Do required statistical operations on the given columns.
(f) Find the count and uniqueness of the given categorical values.
(g) Rename single/multiple columns.

Unit 4: DATA CLEANING, PREPARATION AND VISUALIZATION

Data Cleaning and Preparation: Handling Missing Data - Data Transformation: Removing Duplicates, Transforming Data Using a Function or Mapping, Replacing Values, Detecting and Filtering Outliers- String Manipulation: Vectorized String Functions in pandas. Plotting with pandas: Line Plots, Bar Plots, Histograms and Density Plots, Scatter or Point Plots.

Practical Component:

1.Import any CSV file to Pandas DataFrame and perform the following:

(a) Handle missing data by detecting and dropping/ filling missing values.
(b) Transform data using apply() and map() method.
(c) Detect and filter outliers.
(d) Perform Vectorized String operations on Pandas Series.
(e) Visualize data using Line Plots, Bar Plots, Histograms, Density Plots and Scatter Plots.

TEXT BOOKS

1. Y. Daniel Liang, “Introduction to Programming using Python”, Pearson,2012.

2. Wes McKinney, “Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython”, O’Reilly, 2nd Edition,2018.
3. Jake VanderPlas, “Python Data Science Handbook: Essential Tools for Working with Data”, O’Reilly, 2017.

REFERENCE BOOKS

1. Wesley J. Chun, “Core Python Programming”, Prentice Hall,2006.
2. Mark Lutz, “Learning Python”, O’Reilly, 4th Edition, 2009.

E BOOKS

1. https://www.programmer-books.com/introducing-data-science-pdf/
2. https://www.cs.uky.edu/~keen/115/Haltermanpythonbook.pdf
3. http://math.ecnu.edu.cn/~lfzhou/seminar/[Joel_Grus]_Data_Science_from_Scratch_First_Princ.pdf

MOOC

1. https://www.edx.org/course/python-basics-for-data-science
2. https://www.edx.org/course/analyzing-data-with-python
3. https://www.coursera.org/learn/python-plotting?specialization=data-science-python

Semester IV

UDT104	**Data Preprocessing and Visualization Using Python**	**L**	**T**	**P**	**C**
Version 1.0		**2**	**0**	**2**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Description

Data Handling and Visualization course deals with Data visualization, implementation, and principles of proportions

Course Objective

1. To explain the basics of Data Visualization
2. To enable students to Implement visualization of distributions
3. To make students to write programs on visualization of time series, proportions & associations
4. To make students to apply visualization on Trends and uncertainty
5. To enable students, understand the principles of proportions

Course Outcome

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

CO1. Understand the significance of data preprocessing in data analysis and machine learning, and be able to articulate its impact on the quality of results.

CO2. Identify and handle missing data, duplicates, and outliers to ensure the data is clean and ready for analysis.

CO3. Perform data transformation: normalizing, scaling, and encoding data to bring it to a consistent format and enable better comparisons.

CO 4. able to use various statistical and visual methods to summarize and explore the data, gaining insights into its distribution, correlations, and patterns.

CO 5. Visualize data effectively: Students should be proficient in using Python libraries like Matplotlib, Seaborn, and Plotly to create various types of visualizations, including histograms, box plots, scatter plots, heatmaps, and more.

CO 6. able to communicate their results effectively through presentations or reports, explaining the data preprocessing steps taken and the insights gained from the visualizations (i.e., able to present finding and insights of real data).

Prerequisites: Nil

1. Introduction to Data Preprocessing

Understanding the importance of data preprocessing

Steps involved in data preprocessing

Handling missing data

Dealing with outliers

2. Data Cleaning and Transformation

Removing duplicates

Data normalization and scaling

Data encoding (e.g., one-hot encoding, label encoding)

Handling categorical variables

3 Exploratory Data Analysis (EDA)

Data summarization and descriptive statistics

Data visualization techniques (e.g., histograms, box plots, scatter plots)

Correlation analysis

Heatmaps and pair plots

4. Data Visualization Libraries

Introduction to popular Python libraries (e.g., Matplotlib, Seaborn, Plotly)

Creating basic plots and customizing visuals

Interactive visualizations

4. Data Preprocessing for Machine Learning

Feature engineering and selection

Handling imbalanced data

Data splitting (train-test split, cross-validation)

5. Integrating Data Preprocessing and Visualization in Python

Applying data preprocessing techniques to real-world datasets

Visualizing data after preprocessing

6. Project Work

Applying data preprocessing and visualization techniques to a specific dataset

Presenting findings and insights

E BOOKS

1. https://www.netquest.com/hubfs/docs/ebook-data-visualization-EN.pdf

MOOC

1. https://www.coursera.org/learn/data-visualization
2. https://www.coursera.org/learn/python-for-data-visualization

Practical Content

Prerequisite: Python Basics

LIST OF EXPERIMENTS:

1. Importing data from various sources (CSV, Excel, SQL).
2. Handling missing data: identifying and imputing missing values.
3. Data cleaning: removing duplicates and handling outliers.
4. Data normalization and scaling techniques.
5. Handling categorical data: encoding categorical variables (Label Encoding, One-Hot Encoding).
6. Feature engineering: creating new features, feature selection.
7. Descriptive statistics and summary metrics.
8. Data visualization with Matplotlib and Seaborn.
9. Customizing plots using Matplotlib and Seaborn.
10. Creating interactive visualizations with Plotly.
11. Aggregating data using Pandas.
12. Grouping data based on categories.
13. Pivot tables and cross-tabulation.

Project (Data Visualization Case Study)

- Visualizing real-world datasets.
- Applying data pre-processing and visualization techniques to a new dataset.
- Creating meaningful and insightful visualizations using Matplotlib, Seaborn, and Plotly.
- Presenting findings and insights.

REFERENCE BOOKS

1. Claus Wilke, "Fundamentals of Data Visualization: A Primer on Making Informative and Compelling Figures", 1st edition, O'Reilly Media Inc, 2019.

2. Data Wrangling with Python by Jacqueline Kazil and Katharine Jarmul.

https://www.datacamp.com/

https://towardsdatascience.com/

https://seaborn.pydata.org/

Semester V

UDT105	**Time Series Analysis & Forecasting Using Python**	**L**	**T**	**P**	**C**
Version 1.0		**2**	**0**	**2**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Unit 1: INTRODUCTION OF TIMESERIES ANALYSIS:

Introduction to Time Series and Forecasting, Different types of data, Internal structures of time series. Models for time series analysis, Autocorrelation and Partial autocorrelation. Examples of Time series Nature and uses of forecasting, Forecasting Process, Data for forecasting, Resources for forecasting.

Unit 2: STATISTICS BACKGROUND FOR FORECASTING:

Graphical Displays, Time Series Plots, Plotting Smoothed Data, Numerical Description of Time Series Data, Use of Data Transformations and Adjustments, General Approach to Time Series Modeling and Forecasting, Evaluating and Monitoring Forecasting Model Performance.

Unit 3: TIME SERIES REGRESSION MODEL:

Introduction Least Squares Estimation in Linear Regression Models, Statistical Inference in Linear Regression, Prediction of New Observations, Model Adequacy Checking, Variable Selection Methods in Regression, Generalized and Weighted Least Squares, Regression Models for General Time Series Data, Exponential Smoothing, First order and Second order.

Unit 4 AUTOREGRESSIVE INTEGRATED MOVING AVERAGE (ARIMA) MODELS:

Autoregressive Moving Average (ARMA) Models - Stationarity and Invertibility of ARMA Models - Checking for Stationarity using Variogram- Detecting Nonstationarity - Autoregressive Integrated Moving Average (ARIMA) Models - Forecasting using ARIMA - Seasonal Data - Seasonal ARIMA Models Forecasting using Seasonal ARIMA Models Introduction - Finding the "BEST" Model -Example: Internet Users DataModel Selection Criteria - Impulse Response Function to Study the Differences in Models Comparing Impulse Response Functions for Competing Models .

TEXTBOOKS:

1. Introduction To Time Series Analysis And Forecasting, 2nd Edition, Wiley Series In Probability And Statistics, By Douglas C. Montgomery, Cheryl L. Jen(2015)

2. Master Time Series Data Processing, Visualization, And Modeling Using Python Dr. Avishek Pal Dr. Pks Prakash (2017)

LAB

1 Task to perform on Time Series data
- Time Series Data Cleaning
- Loading and Handling Times series data
- Preprocessing Techniques

2 How to Check Stationarity of a Time Series. How to make a Time Series Stationary? Estimating & Eliminating Trend.
- Aggregation
- Smoothing
- Polynomial Fitting Eliminating Trend and Seasonality
- Differencing
- Decomposition

3 a) Moving Average time analysis data.
b) Smoothing the Time analysis Data.
c) Check out the Time series Linear and non-linear trends.
d) Create a modelling.

4 Modelling time series
• Moving average
• Exponential smoothing
• ARIMA Seasonal autoregressive integrated moving average model (SARIMA)

Semester VI

UDT106	**Fundamental Of Machine Learning**	**L**	**T**	**P**	**C**
Version 1.0		**2**	**0**	**2**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Objective:

1. To introduce students to the basic concepts and techniques of Machine Learning.

2: To develop skills of using recent machine learning software for solving practical problems.

3: To gain experience of doing independent study and research.

4: Ability to identify the characteristics of datasets and compare the trivial data and big data for various applications.

Learning Outcome:

Upon successful completion of the course the student will be able to:

1. Ability to select and implement machine learning techniques and computing environment that are suitable for the applications under consideration.

2. Ability to solve problems associated with batch learning and online learning, and the big data characteristics such as high dimensionality, dynamically growing data and in particular scalability issues.

3. Ability to understand and apply scaling up machine learning techniques and associated computing techniques and technologies.

4. Ability to recognize and implement various ways of selecting suitable model parameters for different machine learning techniques

Course Contents:

Unit I INTRODUCTION TO MACHINE LEARNING:

Application of Machine Learning, Supervised vs Unsupervised Learning, Python libraries suitable for Machine Learning

II DATA PRE-PROCESSINGAND DATA

- Identifying and handling the missing values
- Encoding the categorical data
- Normalization
- Standardization
- PCA

III SUPERVISED LEARNINGREGRESSION AND CLASSIFICATION:

Linear Regression,Non-Linear Regression, Model evaluation methods, KNearest Neighbour, Decision Tree, Logistic Regression, Support Vector Machines, Model Evaluation

IV Unsupervised Learning:

K-means Clustering, Hierarchical Clustering, Density-Based Clustering

Reference Books:

1. Machine Learning - Tom M. Mitchell

2. Python Machine Learning – Sebastian, Raschka and Vahid Mirjalili

3. Hands-On Machine Learning with Scikit-Learn and TensorFlow: Concepts, Tools, and Technique to Build Intelligent Systems - AurélienGéron

4. Understanding Machine Learning - Shai Shalev-Shwartz and Shai Ben-David La

Semester VII

UDT107	**Data Driven Applications**	**L**	**T**	**P**	**C**
Version 1.0		**2**	**0**	**2**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Content

Unit 1 : INTRODUCTION TO POWER BI

• Introduction to Power BI - Need, Imprtance • Power BI - Advantages and Scalable Options • History - Power View, Power Query, Power Pivot • Power BI Data Source Library and DW Files • Cloud Colloboration and Usage Scope • Business Analyst Tools, MS Cloud Tools • Power BI Installation and Cloud Account • Power BI Cloud and Power BI Service • Power BI Architecture and Data Access • OnPremise Data Acces and Microsoft On Drive • Power BI Desktop - Instalation, Usage • Sample Reports and Visualization Controls • Power BI Cloud Account Configuration • Understanding Desktop & Mobile Editions • Report Rendering Options and End User Access • Power View and Power Map. Power BI Licenses • Course Plan - Power BI Online Training

Unit 2 : CREATING POWER BI REPORTS, AUTO FILTERS

• Report Design with Legacy & .DAT Files • Report Design with Databse Tables • Understanding Power BI Report Designer • Report Canvas, Report Pages: Creation, Renames • Report Visuals, Fields and UI Options • Experimenting Visual Interactions, Advantages • Reports with Multiple Pages and Advantages • Pages with Multiple Visualizations. Data Access • PUBLISH Options and Report Verification in Cloud• "GET DATA" Options and Report Fields, Filters • Report View Options: Full, Fit Page, Width Scale • Report Design using Databases & Queries • Query Settings and Data Preloads • Navigation Options and Report Refresh • Stacked bar chart, Stacked column chart • Clustered bar chart, Clustered column chart • Adding Report Titles. Report Format Options • Focus Mode, Explore and Export Settings

Unit 3 : REPORT VISUALIZATIONS and PROPERTIES

• Power BI Design: Canvas, Visualizations and Fileds • Import Data Options with Power BI Model, Advantages • Direct Query Options and Real-time (LIVE) Data Access • Data Fields and Filters with Visualizations • Visualization Filters, Page Filters, Report Filters • Conditional Filters and Clearing. Testing Sets • Creating Customised Tables with Power BI Editor • General Properties, Sizing, Dimensions, and Positions • Alternate Text and Tiles. Header (Column, Row) Properties • Grid Properties (Vertical, Horizontal) and Styles • Table Styles & Alternate Row Colors - Static, Dynamic • Sparse, Flashy Rows, Condensed Table Reports. Focus Mode • Totals Computations, Background. Boders Properties • Column Headers, Column Formatting, Value Properties • Conditional Formatting Options - Color Scale • Page Level Filters and Report Level Filters • Visual-Level Filters and Format Options • Report Fields, Formats and Analytics • Page-Level Filters and Column Formatting, Filters • Background Properties, Borders and Lock Aspect

Unit 4: CHART AND MAP REPORT PROPERTIES

• Chart report types and properties • stacked bar chart, stacked column chartclustered bar chart, clustered column chart • 100% stacked bar chart, 100% stacked column chart • line charts, area charts, stacked area charts • line and stacked row charts • line and stacked column charts • waterfall chart, scatter chart, pie chart • Field Properties: Axis, Legend, Value, Tooltip • Field Properties: Color Saturation, Filters Types • Formats: Legend, Axis, Data Labels, Plot Area • Data Labels: Visibility, Color and Display Units • Data Labels: Precision, Position, Text Options • Analytics: Constant Line, Position, Labels • Working with Waterfall Charts and Default Values • Modifying Legends and Visual Filters - Options • Map Reports: Working with Map Reports.

Text Books

1. "Beginning Power BI: A Practical Guide to Self-Service Data Analytics with Excel 2016 and Power BI Desktop" by Dan Clark
2. "Power BI Step-by-Step Part 1: Up and Running: Power BI Mastery through hands-on Tutorials (Power BI Step by Step)" by Grant Gamble
3. "Mastering Microsoft Power BI" by Brett Powell

Links

https://learn.microsoft.com/en-us/power-bi/

https://docs.microsoft.com/en-us/power-bi/guided-learning/

https://docs.microsoft.com/en-us/learn/paths/analyze-visualize-data-power-bi/

Semester VIII

UDT108	**Project and Case Study**	**L**	**T**	**P**	**C**
Version 1.0		**2**	**0**	**2**	**4**
Pre-requisites/Exposure					
Total Lecture Hrs	**60**				

Course Perspective :

This course is designed to provide students with hands-on experience in applying data science methodologies and techniques to solve real-world problems. Through a combination of projects and case studies, students will work on practical applications of data collection, cleaning, analysis, and visualization, along with machine learning and statistical modeling techniques. The course will cover various domains, including business analytics, healthcare, social sciences, and more, allowing students to gain insights into how data science is transforming industries. By the end of the course, students will develop a portfolio of projects that demonstrate their ability to derive actionable insights from data.

Course Objectives:

- To provide students with practical experience in the full data science workflow, from problem identification to solution implementation.
- To equip students with the skills needed to collect, clean, and manipulate large datasets from various sources.
- To enable students to apply appropriate statistical and machine learning models to real-world datasets.
- To enhance students' ability to interpret and communicate their findings through visualizations and reports.
- To expose students to ethical considerations and challenges in handling data, privacy, and bias.

Course Guidelines:

1. Project Selection:
    - Projects should be chosen from real-world domains that are relevant and have a substantial dataset.
    - Students are encouraged to work on problems from industries like healthcare, finance, marketing, social sciences, e-commerce, or environmental studies.
    - The project should involve data collection, cleaning, analysis, and the application of advanced models for prediction or insight generation.
2. Teamwork and Collaboration:
    - Students can work individually or in teams of 2-3 members.
    - Team members should evenly distribute tasks and collaborate on data analysis, report writing, and presentations.
    - Collaboration tools (e.g., GitHub) should be used for version control and project management.
3. Case Study Approach:
    - A case study will involve detailed examination and analysis of a specific problem, illustrating how data science can provide solutions.
    - Students should choose case studies from real-world scenarios, analyze the existing approaches, and suggest improvements using data-driven methods.
    - Case studies may come from research papers, industry reports, or publicly available datasets.
4. Project Milestones:
    - Proposal Submission: Submit a 1-page project proposal that outlines the problem, data sources, and proposed methodologies.
    - Data Collection and Cleaning: Collect or source the necessary data, ensuring it's cleaned and prepared for analysis.
    - Exploratory Data Analysis (EDA): Perform an initial analysis to understand data patterns, trends, and anomalies.
    - Model Development: Apply appropriate statistical, machine learning, or deep learning models based on the problem.
    - Result Interpretation: Interpret the results, focusing on actionable insights and decision-making.

- Final Report: Write a report that summarizes the problem, data, methodology, results, and recommendations.
- Presentation: Present the project findings in a professional and visually compelling manner to peers and faculty.

5. Ethical Considerations:
   - Ensure data privacy, avoid bias in model development, and adhere to ethical standards in handling and analyzing data.
   - Projects involving human subjects or sensitive data should ensure compliance with ethical guidelines and seek necessary approvals if required.
6. Evaluation Criteria:
   - Problem Definition (10%): Clear articulation of the problem and the relevance of data science in solving it.
   - Data Collection and Preparation (15%): The quality and completeness of the data, including cleaning and handling of missing values.
   - Methodology (25%): The appropriateness and sophistication of the models and techniques applied.
   - Analysis and Insights (25%): The depth of the analysis and the usefulness of the insights derived from the data.
   - Communication and Presentation (15%): The clarity and professionalism of the report, visualizations, and presentation.
   - Ethical Considerations (10%): Handling of ethical issues, such as bias, fairness, and data privacy.

By completing this course, students will acquire practical experience in handling real-world data challenges and demonstrate their ability to apply data science techniques in various domains.

I	UFT101	Basics of Business	3	1	0	4
II	UFT102	The Global Economy	3	1	0	4
III	UFT103	International Business Environment	3	1	0	4
IV	UFT104	Macroeconomics of open economies	3	1	0	4
V	UFT105	Global Political Economy	3	1	0	4
VI	UFT106	Growth Inequality and Conflict	3	1	0	4
VII	UFT107	Foreign Trade	3	1	0	4
VIII	UFT108	International Financial Institutions	3	1	0	4

Semester-I

Course Code	Course Title	L	T	P	S	Credit
UFT101	**Basics of Business**	3	1			4
Pre-requisites/Exposure						

Course Objectives:

- Understand the concept of business and its significance in the modern world.
- Differentiate between various forms of business ownership and organizational structures.
- Develop basic business planning and entrepreneurship skills.
- Explore the impact of globalization on contemporary businesses.

Unit 1: Basis of Business

Understanding Business and Its Importance; Meaning, scope and evolution of commerce & industry, -Industrial Revolution- its effects. -Emergence of Indian MNCs & transnational corporations -Recent trends in business world. Globalization & challenges for Indian Business in new millennium.

Unit 2: Forms of Business Organization

Business sectors & forms of business organizations- private sector, Cooperative sectors, public sector, joint sector, Services sector, Various forms of business organizations – Sole Proprietorship, Partnership firms, Joint stock companies -their features, relative merits, demerits & suitability. Merges & acquisitions-mergers in India. Networking, Franchising, BPOs & KPOs, E-commerce, On-line trading, patents, trademarks & copyright.

Unit 3: Business and Entrepreneurship

Decisions in setting up an Enterprise – opportunity and idea generation, Role of creativity and innovation, Feasibility study and Business Plan, Business size and location decisions, various factors to be considered for starting a new unit, Relevant Government Policies - SEZ (Special Economic Zone) policy etc.

Unit 4: Business and Globalization

Meaning and nature of globalization-Reasons behind globalization-Strategies for internationalization- Globalization of Indian business-Objectives and principles of GATT, Functions of WTO –Structure of WTO- Arguments for joining WTO and arguments against joining WTO

Objectives

➢➢ To explore and offer knowledge on global business environment

➢➢ To explore knowledge on international institutions involved in promotion of global business, and

➢➢ To make future global managers

Unit – I International Business: Nature, importance and scope – Mode of entry into international business - Framework for analyzing international business environment – geographical, economic, socio-cultural, political and legal environment.

Unit – II International Economic Environment: World economic and trading situation; International economic institutions and agreements – WTO, UNCAD, IMF, World Bank; Generalized system of preferences, GSTP; International commodity agreements.

Unit – III Multinational Corporations: Conceptual framework of MNCs; MNCs and host and home country relations; Technology transfers – importance and types – M&A of MNC's

Unit IV –Foreign Investment: Capital flows – types and theories of foreign investment; foreign investment flows and barriers.- Foreign Direct Investment (FDI)

References

- Adhikary, Manab, GLOBAL BUSINESS MANAGEMENT, Macmillan, New Delhi.
- Aswathappa, INTERNATIONAL BUSINESS, Tata Mc Graw Hill publications, New Delhi.
- Bhattacharya.B, GOING INTERNATIONAL RESPONSE STRATEGIES FOR INDIAN SECTOR, Wheeler Publishing Co, New Delhi.
- Black and Sundaram, INTERNATIONAL BUSINESS ENVIRONMENT, Prentice Hall of India, New Delhi.
- Gosh, Biswanath, ECONOMIC ENVIRONMENT OF BUSINESS, South Asia Book, New Delhi.

Semester-II

Course Code	Course Title	L	T	P	S	Credit
UFT102	**The Global Economy**	3	1			4
Pre-requisites/Exposure						

Unit 1: Introduction to Globalization and India

Understanding the concept of globalization, and the role of Globalization in economic growth.The economic reforms of 1991 in India. Impact on trade, investment, and economic growth.

Unit 2: Foreign Direct Investment (FDI) in India

Meaning and Concept of Foreign Direct Investment, Foreign Direct Investment Policies, Regulations, trends and compositions in the different sector of Indian Economy.

Unit 3: Foreign Trade

Foreign Trade: Salient features of India's foreign trade; Trends in foreign trade in the recent past, Balance of payment, Balance of Trade, and trends of the balance of payment in India.

Unit 4: Global Challenges and Opportunities

Global Supply Chains and India, Role of India in Global Supply Chains, Sustainable Development and Climate Change, Sustainable Development and Climate Change.

Reference Books:

- "Globalization and Its Discontents" by Joseph E. Stiglitz
- "Capital in the Twenty-First Century" by Thomas Piketty
- "Economics of the Global Environment" by Ian W. H. Parry and others

Semester-III

Course Code	Course Name	L	T	P	C
UFT103	International Business Environment	3	1	0	4
Prerequisite	-				

Course Perspectives

An understanding of international business is essential for students in today's interdependent global world. This course will provide students with the knowledge, skills, and abilities to understand the global economic, political, cultural and social environment within which firms operate. The module highlights how environmental factors affect business in a global economy. The module will also facilitate students' understanding of the challenges associated with working, communicating, and negotiating in a cross-cultural context. Moreover, the module will reflect upon current world affairs, both in commerce and politics in order to frame and contextualise the current challenges and problems.

Course Outcome

CO1: Understand the international business environment, including economic, political, regulatory, demographic, social, cultural, and technological factors
CO2: Apply international trade theories, such as absolute and comparative advantage
CO3: Analyze the evolution of the international monetary system, including the breakdown of the Bretton Woods system, the emergence of the European Monetary System
CO4: Evaluate the strategies and structures of international business, focusing on the role and impact of multinational corporations.

Course Content

Unit 1: An Overview of International Business Environment

Economic environment –meaning and importance, political and regulatory environment, demographic environment ,social and cultural environment and technological environment. Globalisation and its effects on international business.

Unit- 2 :International Economic Environment and Economic Integration

International Trade Theory: Theory of absolute advantage,Theory of Comparative advantage, The Political Economy of International Trade.New Theories of international Trade. Foreign Direct Investment : Types and significance of foreign investments(FDI Vs FII), factors affecting international investment.

Types of Economic integration- Free Trade Area, Customs Union, Common Market, European union. Integration of developing countries – SAARC,SAPTA,BRICS,BIMSTEC,RCEP. International commodity agreements ,Cartels – Bi-lateral & Multi-lateral contracts.

Unit-3:International Monetary System and Foreign Exchange Market

The Pre-Bretton Wood's period, Breakdown of Bretton Wood system and emergence of EMS, EU and EURO. An overview of international economic institutions: International Monetary Funds (IMF) ,World Bank,WTO, Asian Development Bank, New Development Bank, UNCTAD, The Foreign Exchange Market, Government intervention and influence on exchange rate.

Unit - 4 :The Strategy and Structure of International Business

Importance and dominance of MNCs ,advantages to host and home countries ,criticism of MNCs, Global competitiveness – indicators of competitiveness ,Technology and Global competitiveness. The Organization of International Business ,Entry Strategy and Strategic Alliances . Understanding the role of culture – communicating across cultures – cross cultural negotiations. Social Responsibilities and Ethics in International Business.

TEXT

Francis -Cherunilam, International Business Environment, Mumbai, Himalaya Publishing House, 2008.

REFERENCE

1. V.K.Bhalla, International Business Environment and Management, Anmol publications, 2010

2. Paul, Justin, Business Environment: Text & Cases, McGraw Hill, 2010.

3. Ian Worthington, Chris Britton, The Business Environment, New Delhi, Prentice Hall, 2007.

Semester-IV

Course Code	Course Name	L	T	P	C
UFT104	Macroeconomics of Open Economies	3	1	0	4
Prerequisite	-				

Course Perspectives : This course intends to emphasise on how a country's relations to the rest of the world influence aggregate economic activity, employment, exchange rate and inflation and 40 forms the scope for monetary and fiscal policy. The course includes a thorough

introduction to the foreign exchange market and a discussion of world level interactions. A major part of the course deals with the dynamic effects (effects over time) of economic shocks and policies. The course prepares the student for taking part in professional discussions about the design of monetary and fiscal policy and for any kind of work where it is important to have a good understanding of macroeconomic fluctuations (e.g. for making predictions of macro variables, for choosing investment where the return depend on macro developments) when the economies are open.

Course Outcomes:

CO1: Understand the fundamentals of open-economy macroeconomics

CO2: Apply concepts related to the balance of payments, exchange rates, and foreign exchange markets

CO3: Analyze the theories of Purchasing Power Parity (PPP), including absolute and relative PPP, and assess their applications and limitations

CO4: Evaluate international macroeconomic policies and systems.

Unit 1 Open-Economy Macroeconomics: National Income accounting. Keynesian national income determination model, circular flow of national income

Unit 2: Balance of payment; Exchange Rates and the Foreign Exchange Market; Money, Interest Rates, and Exchange Rates; Price Levels and the Exchange Rate in the Long Run; Output and the Exchange Rate in the Short Run; Fixed Exchange Rates and Foreign Exchange Intervention

Unit 3- Purchasing Power PPP, Absolute & Relative PPP, Long Run Exchange Rate Model Based upon PPP, Problems with PPP, Beyond Purchasing Power Parity,

Unit 4- International Macroeconomic Policy: International Monetary Systems: An Historical Overview; Financial Globalization: Opportunity and Crisis; Optimum Currency Areas and the Euro; Developing Countries: Growth, Crisis, and Reform

Reference Books

1. Feenstra, R., Taylor, A. (2014). International economics, 3rd ed. Worth Publishers.
2. Krugman, P., Obstfeld, M., Melitz, M. (2018). International economics: Theory and policy, 11th ed. Pearson Education.
3. Pugel, T. (2015). International Economics, 16th ed. McGraw-Hill Education.

Semester-V

Course Code	Course Name	L	T	P	C
UFT105	Global Political Economy	3	1	0	4
Prerequisite	-				

Course Perspective

This generic elective course introduces students to the contemporary structures, trends and developments in the Global Economy through a Political Economy lens. It explores the period since the end of Second World War up to recent global economic crisis – from the 'Golden age of capitalism' to the 'neoliberal' shift. It particularly explores changes in the organization of production and corporate structure along with changes in labour processes and labour regimes and also the increasing dominance of finance in the contemporary world. It also examines the shifts in the nature, scope and ideology of the state under globalisation.

Course Outcomes

CO1: Understand the perspectives on the political economy of globalization

CO2: Apply knowledge of the political economy of global trade and the financialization of the global economy

CO3: Analyze the role of the state in the era of globalization, focusing on the challenges and limitations faced by welfare and developmental states

CO4: Evaluate global economic instability and crises and assessing the potential for recurring economic crises in the globalized economy.

Unit 1

Introduction and overview: Perspectives on political economy of globalisation with a historical overview, Changing dynamics of capitalist production, organisational forms and labour processes: Fordist and post-Fordist production regimes; multinational corporations –evolution, structural form and dynamics; global value chains and production networks; the changing nature of employment, job security and labour rights in a globalised economy

Unit 2

The political economy of global trade: Structure and institutions of the international trade regime, The role of finance in the globalised economy: financialisation of the global economy – trends, instruments, features and consequences

Unit 3

The state in the era of globalisation: Globalisation and the limits of the welfare and developmental states; the neoliberal state.

Unit 4

Global economic instability and crisis: The 2008 global economic crisis – prelude, proximate and long term causes; possibility of recurring crises.

References

1. Bhaduri, A. (2002). Nationalism and economic policy in the era of globalization. In D. Nayyar (ed.): Governing globalization: Issues and institutions. Oxford University Press.

2. Chang, D. (2009). Informalising labour in Asia's global factory. Journal of Contemporary Asia, 39, 161-179.60

3. Dore, R. (2008). Financialisation of the global economy. Industrial and Corporate Change, 17, 1097-1112.

4. Harvey, D. (2005). A brief history of neoliberalism. Introduction, Chapters 1-3. Oxford University Press.

5. Hymer, S. (1975). The multinational corporation and the law of uneven development. In H. Radice (ed.): International firms and modern imperialism. Penguin Books.

6. Nayyar, D. (2003). Globalisation and development. In H.-J. Chang (ed.): Rethinking development economics. Anthem Press.

7. Reddy, N. (2003). Economic globalisation, past and present: The challenges to labour. In K. Jomo, K. Jin (eds): Globalization and its discontents, revisited. Tulika Books.

8. Rodrik, D. (2011). The globalization paradox: Why global markets, states and democracy can’t coexist. Oxford University Press.

9. Thun, E. (2011). The globalization of production. In J. Ravenhill (ed.): Global political economy. Chapter 11. Oxford University Press.

10. Tonkiss, F. (2008). Contemporary economic sociology: Globalisation, production, inequality. Chapter 4. Routledge.

11. Vakulabharanam, V. (2009). The recent crisis in global capitalism: Towards a Marxian understanding. Economic and Political Weekly, 44, 144-150.

12. Varoufakis, Y. (2011). The global Minotaur: America, the true origins of the financial crisis and the future of the world economy. Zed Books.

13. Winham, G. (2011). The evolution of the global trade regime. In J. Ravenhill (ed.): Global political economy. Oxford University Press.

Semester-VI

Course Code	Course Name	L	T	P	C
UFT106	**Growth, Inequality and Conflict**	**3**	**1**	**0**	**4**
Prerequisite	**-**				

Course Outcomes:

CO1 : Understand the evolution of economic thought on development, including concepts like economic growth, human development, capabilities, entitlements, deprivation, and various development indicators

CO2: Apply concepts and measures of inequality and poverty

CO3: Analyze poverty concepts, definitions, and dimensions, focusing on the measurement of poverty in India

CO4: Evaluate the relationships and debates between growth, inequality, and poverty

Course Content

Unit 1:

Developments in economic thought-History, expectations and development-Economics growth and human development, Capabilities, entitlements and deprivation-Measurement of Development- Development indicators, Human development index, Human Poverty Index, Gender Development Index

Unit 2- Difference between inequality and poverty; Measures of Inequality: Lorenz Curve; Gini Coefficient; generalized entropy measures Axioms of inequality and satisfying conditions of the measures of inequality;

Unit 3- Poverty Concepts, Definitions, dimensions and analytical context Measures of Poverty - Poverty in India -Definition and measurement of Poverty in India: A Chronological Examination; Properties of multidimensional poverty; Multidimensional poverty measures: issues of identification and aggregation; Multidimensional Poverty Measures.

Unit 4- Decomposition of inequality measures- Growth, inequality and PovertyDebates on Growth versus inequality and poverty growth linkages.

Semester-VII

Course Code	Course Name	L	T	P	C
UFT107	**Foreign Trade**	**3**	**1**	**0**	**4**
Prerequisite	**-**				

Course Outcomes

CO1 : Understanding the significance of foreign trade, including internal and international trade

CO2: Applying the knowledge of global economic scenarios to analyze the historical development of international trade

CO3: Analyze India's foreign trade dynamics, including the directions, composition, and recent trends, to identify patterns and assess the impact of global economic changes on India's trade.

CO4: Evaluate India's foreign trade policies, including import and export substitution strategies.

Course Content

Unit 1

Importance of Foreign Trade: Internal and International Trade. Comparative Advantage & Competitive Advantage. Theoretical development from David Ricardo and Heckcher Ohlin

Unit 2:

Global Economic Scenario: Historical Development of International Trade in context of GATT, UNCTAD, WTO

Unit 3:

India's foreign trade, directions and compositions of foreign trade. Inida's foreign trade in recent years

Unit 4:

India's foreign trade policy, Import and export substitution policy of India, recent foreign trade policy.

Reference Books

- **Paul R. Krugman, Maurice Obstfeld, and Marc Melitz** - *International Economics: Theory and Policy*
- **Dominick Salvatore** - *International Economics*
- **Robert C. Feenstra and Alan M. Taylor** - *International Economics*
- **Douglas A. Irwin** - *Free Trade Under Fire*
- **Jagdish Bhagwati and Arvind Panagariya** - *Why Growth Matters: How Economic Growth in India Reduced Poverty and the Lessons for Other Developing Countries*

Semester-VIII

Course Code	Course Name	L	T	P	C
UFT108	**International Financial Institutions**	**3**	**1**	**0**	**4**
Prerequisite	**-**				

Course Perspective: The course focuses to provide an understanding of both the key features of foreign exchange markets and the actual problems of Multinational Corporation within an environment of free flows of foreign capital and floating exchange rates.

Course Outcomes: On successful completion of this course, the students will be able:

CO1: To revise the Concept of International Financial Management

CO2: To discuss the Concept of International Financial Markets

CO3: To identify with the Concept of International Financial Institutions

CO4: To recognize the concept of International Financial Instruments and FDI

CO5: To assess multinational corporate decisions in Global Markets

Unit I: Introduction to International Finance

International Financial Environment: Overview, Nature and Scope of International Finance Evolution of international financial system–gold standard, Breton woods standard, floating exchange rate; International Finance Management VS Domestic Financial Management.

Unit II: International Financial Markets

Eurocurrency market, international bond market, international equity market, international money market.

Unit III: International Financial Institutions

IMF, Bank for International Settlements; international banking-euro bank, types of banking

offices-correspondent bank, representative office, foreign branch, subsidiary bank, offshore bank.

Unit IV :-International Financial Instruments

Introduction to International Financial Instruments Types of International Financial -Euro CP, Eurobonds, foreign bonds, global bonds, euro equity, ADR, GDRs.

Text Books:

1. O P Agarwal International Financial Management, 3rd Edition 2014 HPH

2. Gupta Shashi K., Rangi Praneet International Finance 2nd Edition 2017, Kalyani Publishers

Reference Books:

1. Eun C.S., Resnick B.G., "International Financial Management", 2010, Tata McGraw Hill Education Pvt. Ltd., 4th Ed. Special Indian Edition

2. Shailaja G, "International Finance", 2010, 2nd Ed. Orient Black'swan.

3. Hendrik Van den Berg, "International Finance and Open Economy Macro Economics", 2009, 1st Ed. Cambridge.

4. Sharan V., "International Financial Management", 2009, 5th Ed. PHI, EEE.

5. Madura J., "International Financial Management", 2010, 4th Ed. Cengage Learning.

6. Apte P.G., "International Finance", 2008, 2nd Ed. McGraw Hill.

7. Madhu Vij, "International Financial Management", 2010, 3rd Ed. Excel Books.

8. Vyuptakesh Sharan, International Financial Management, , 4th Ed, 2006, PHI Learning Pvt. Ltd.

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HUMAN RESOURCE MANAGEMENT (MINOR)						
I	UHR101	Foundations in Organizational Behaviour	3	1	0	4
II	UHR102	Professional HRM Practices	3	1	0	4
III	UHR103	Psychological Assessment in Organizations	3	1	0	4
IV	UHR104	Learning and Development in Organizations	3	1	0	4
V	UHR105	Leadership and Talent Development	3	1	0	4
VI	UHR106	Counseling at Workplace	3	1	0	4
VII	UHR107	Change Management and OD Interventions	3	1	0	4
VIII	UHR108	Total Rewards Management	3	1	0	4

Semester-I

UHR101	**FOUNDATIONS IN ORGANIZATIONAL BEHAVIOR**	**L**	**T**	**P**	**C**
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Co-requisites					

Course Perspective

The **Foundations of Organizational Behaviour** course is vital for students aiming to excel in management and leadership roles. It offers an in-depth understanding of human behavior within organizational settings, emphasizing how individuals and groups interact to influence organizational effectiveness. The course contributes to both academic and professional development by equipping students with essential skills such as critical thinking, leadership, and conflict resolution. These competencies are indispensable for careers in management, human resources, consulting, and other fields where understanding and managing human behavior is crucial.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Analyzing individual, group, and organizational behavior using foundational OB theories and concepts.

CO 2: Evaluating different leadership styles and theories, applying them to various organizational scenarios to assess their effectiveness.

CO 3: **Applying** motivational theories to enhance employee performance and job satisfaction in real-world organizational settings..

CO 4: **assess** the dynamics of workgroups and teams, identifying factors that influence team performance and decision-making.

CO 5: **implement** organizational change strategies, addressing resistance and fostering development within an organization.

Course Content

UNIT I **15 lecture hours**

Introduction

Concept and significance and role of organizational, OB system and assumptions of human behavior in organizations, levels of OB analysis, current trends and challenges in the field of OB, role of beliefs, attitudes, values, emotions, and behavior in the workplace

UNIT II **15 lecture hours**

Perception, Personality, and Learning

The perceptual process, impact on individual decision-making; common perceptual errors, individual differences and personality attributes influence behavior in organizations, Concept and significance of learning in organizational settings models of learning, Application of learning theories to modify and improve behavior in the workplace.

UNIT III **15 lecture hours**

Motivation, Leadership, and Group Dynamics

Motivation process and major theories, Need Hierarchy Theory, Two-Factor Theory, Expectancy Theory, and Equity Theory ,leadership concepts, styles, and key theories such as Trait Theory, Behavioral Theory, Fiedler's Contingency Theory, and Path-Goal Theory, group dynamics, stages of group development, and factors influencing team performance, group decision-making processes, and addressing issues in managing group decisions.

UNIT IV **15 lecture hours**

Organizational Culture, Change, and Development

Meaning, importance, and characteristics of organizational culture, and its impact on organizational behavior, Concept of organizational change, resistance to change, and theories of planned change, Overview of OD, key OD interventions, and the role of learning organizations in fostering development, Understanding organizational conflict, its sources, and types, approaches to conflict management, and strategies for managing stress in the workplace.

Learning Experience

The Foundations of Psychology course, the instructional methods will be dynamic and experiential, incorporating a blend of lectures, discussions, and interactive activities. To ensure that students actively engage with the material, the course will include case studies that require critical analysis and application of psychological concepts. Hands-on learning opportunities, such as role-playing exercises, will allow students to experience psychological theories in practice.

Group work will be a key component, fostering collaboration and peer learning as students work together on projects and presentations. Assignments will be designed to reinforce learning and encourage deeper exploration of topics, with a focus on real-world applications of psychological principles.

Technology will be integrated into the course through the use of online discussion boards, multimedia resources, and virtual simulations that provide immersive learning experiences. Assessments will include a mix of written assignments, group presentations, and experiential projects, allowing students to demonstrate their understanding in varied formats.

Students will receive continuous support and feedback from the course instructor, who will be available for additional help outside of class hours. Peer feedback will also be encouraged, particularly during group activities and peer review sessions, helping students refine their ideas and improve their work through collaborative learning.

Textbooks:

Psychology by Saundra K. Ciccarelli and J. Noland White

Introduction to Psychology by Clifford T. Morgan, Richard A. King, John R. Weisz, and John Schopler

Suggested Readings

Thinking, Fast and Slow by Daniel Kahneman

The Man Who Mistook His Wife for a Hat by Oliver Sacks

Influence: The Psychology of Persuasion by Robert B. Cialdini

Quiet: The Power of Introverts in a World That Can't Stop Talking by Susan Cain

Open Educational Resources (OER)

Introduction to Psychology" by OpenStax

Psychology - Lumen Learning

NOBA Project: Psychology

Boundless Psychology

MIT OpenCourseWare: Introduction to Psychology

Assessment & Evaluation

Components	Continuous Assesment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Semester-II

UHR102	Professional HRM Practices	L	T	P	C
Version 1.0		3	1	0	4
Pre-requisites/Exposure	NIL				
Co-requisites	Not applicable				

Course Perspective

The Professional HRM Practices course provides a comprehensive overview of modern Human Resource Management practices. It focuses on equipping students with professional skills necessary for managing human resources within organizations. The course emphasizes strategic HRM, recruitment and selection, performance management, and employee relations, preparing students to handle practical challenges in HR. Students will learn to align HR practices with organizational goals and manage workforce dynamics effectively. This course is essential for anyone aiming for a career in HR or management, offering insights into legal compliance, talent management, and the latest HR technologies.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understanding the strategic role of HRM in organizational success

CO 2: Apply effective recruitment and selection processes in a variety of organizational contexts.

CO 3: Implement and manage performance management systems to enhance employee productivity.

CO 4: Ensure compliance with HR-related legal regulations and ethical standards.

CO 5: Develop talent management strategies to retain and develop high-potential employees

Course Content

UNIT I **15 lecture hours**

HRM Foundations and Strategic Role

Introduction to HRM: Definitions, importance, and evolution.; Strategic HRM and its alignment with organizational goals; HRM models: Michigan Model, Harvard Model; HR's

role in developing organizational culture; Ethical issues in HR and Corporate Social Responsibility (CSR); Future trends in HR: Digital transformation, the gig economy, and agile HR practices.

UNIT II **15 lecture hours**

Recruitment, Selection, and Talent Management

Job analysis and design: Processes and methodologies; Recruitment strategies: Internal vs. external, employer branding; Selection methods: Interviews, assessments, competency-based selection; Onboarding and induction: Importance and best practices; Talent management and succession planning; Retention strategies and employee engagement.

UNIT III **15 lecture hours**

Performance Management and Employee Development

Performance Management Systems (PMS): Objectives, key components; Performance appraisal methods: 360-degree feedback, BARS, MBO; Training and development: Needs analysis, types of training programs; Career development: Individual development plans, mentoring; Compensation and benefits management: Designing pay-for-performance systems; Handling poor performance and employee termination: Legal considerations.

UNIT IV **15 lecture hours**

Employee Relations, Legal Compliance, and HR Analytics

Employee relations: Conflict resolution, fostering positive relations; Labor laws and compliance: Equal Employment Opportunity, employment rights; Diversity and inclusion in the workplace: Overcoming bias, promoting equity; Employee wellness and work-life balance: HR's role in mental health; HR metrics and analytics: Key performance indicators, predictive analytics; HR technology: HR Information Systems (HRIS), AI in HR processes.

Learning Experience

The Professional HRM Practices course will be delivered through interactive lectures, case studies, and group discussions. Students will engage in practical HR simulations and role-play exercises to understand real-world HR scenarios. Case studies of leading companies will help illustrate the application of HR strategies in diverse contexts. Students will also work on HR analytics tools to understand how data can drive HR decision-making. Assessments will include project work, presentations, and participation in class discussions to ensure a comprehensive understanding of the subject.

Textbooks:

Armstrong, M. (2020). *Armstrong's Handbook of Human Resource Management Practice.* Kogan Page.

Dessler, G. (2021). *Human Resource Management.* Pearson.

Suggested Readings

Torrington, D., Hall, L., & Taylor, S. (2017). *Human Resource Management.* Pearson.

Boxall, P., Purcell, J., & Wright, P. (2016). *The Oxford Handbook of Human Resource Management.* Oxford University Press.

Assessment & Evaluation

Components	Continuous Assesment	Mid Term Examination	End Term Examination
Weightage (%)	**30**	**20**	**50**

Semester-III

UHR103	Psychological Assessment in Organizations	L	T	P	C
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure	**Nil**				
Co-requisites	**---**				

Course Objectives

1-Explaining the concept of groups and their meaning in the work place,

2-Identifying types of group,

3-Proffering explanations of how groups are formed and their roles in the work place,

Course Outcomes

On completion of this course, the students will be able to

CO1 Students will demonstrate the ability to administer, score, and interpret various psychological assessment tools commonly used in organizational settings.

CO2 Students will be able to design and implement effective psychological assessment processes for recruitment, selection, employee development, and performance management.

CO3 Students will critically evaluate the reliability, validity, and fairness of different psychological assessment instruments and their applicability in diverse organizational contexts.

CO 4 Students will effectively integrate psychological assessment data into strategic decision-making processes to support organizational development, change initiatives, and enhance workplace performance.

CO 5 Students will apply ethical principles and practices in conducting psychological assessments, ensuring they are fair, unbiased, and inclusive, promoting diversity and inclusion within organizations.

CO6 Students will stay informed about and adapt to emerging trends and innovations in psychological assessment, including the impact of technology and data analytics on assessment practices in organizations.

Catalog Description

This course provides a comprehensive exploration of psychological assessment and its applications within organizational settings. It is designed to equip students with the knowledge and skills necessary to effectively utilize psychological assessments in various human resource and organizational development processes. Throughout the course, students will delve into the fundamental concepts, principles, and historical evolution of psychological assessment, while also examining ethical and legal considerations.

Students will gain hands-on experience with a variety of assessment tools and techniques, learning to administer, score, and interpret instruments used to evaluate cognitive abilities, personality traits, and behavioral tendencies. The course emphasizes the practical application of these assessments in recruitment and selection, employee development, performance appraisal, and organizational change initiatives.

In addition, the course will address the critical issues of reliability, validity, and fairness of assessment tools, ensuring students can make informed decisions about their use. A special focus will be placed on promoting diversity and inclusion through unbiased assessment practices.

By the end of the course, students will be proficient in utilizing psychological assessments to support and improve organizational effectiveness, making them valuable assets to any workplace.

Course Content

Unit I: **15 lecture hours**

Psychological Testing

Nature, Origins, Functions of Psychological Tests. Test Administration. Effects of Examiner and Situational Variables. Examinee's perspective. Effects of training on test performance

Unit II: **15 lecture hours**

Test authenticity

Test reliability: concept, methods and types of reliability, Validity; concept, method and types, Culture fair test, Individual and group tests, test standardization

Unit III: **15 lecture hours**

Intelligence and Aptitude testing :Stanford- Binet, Wechsler Scales; Differential Aptitude Test. Personality Testing: Self report inventories: MMPI, Neo Personality Inventory; Projective techniques: Inkblot &

Unit IV: **15lecture hours**

Applications of Testing

Achievement tests; Career and Work Values Assessment; Infant and Pre school testing; Assessment of mentally retarded. Special Topics and Issues in Testing. Computer – aided psychological testing and its evaluation; Future of testing.

Reference Books/Materials

REFERENCES:

1. Aiken, L.R., & Groth- Marnat, G. (2009). Psychological Testing and Assessment.

New Delhi: Pearson Education.

2. Anastasi , A., & Urbina, S. (1997). Psychological Testing (7th Ed.). New Delhi: Pearson Education.

3. Gregory, R.J., (2004). Psychological Testing: History, Principles and Applications (4th Ed.). New Delhi: Pearson Education.

4. Kline, P. (1993). The Handbook of Psychological Testing. London: Routledge.

5. Murphy, K.R., & Davidshofer, C.O. (1988). Psychological Testing: Principles and Application. New Jersey: Prentice Hall.

6. Singh, A.K. (2006). Tests Measurements and Research Methods in Behavioural Sciences. New Delhi: Bharati Bhawan

Assessment & Evaluation

Components	Continuous Assesment	Mid Term Examination	End Term Examination
Weightage (%)	**30**	**20**	**50**

Semester-IV

UHR104	Learning and Development in Organizations	L	T	P	C
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure	**Nil**				
Co-requisites	---				

Course Perspective

The **Learning and Development in Organizations** course is crucial for students pursuing careers in human resources, organizational development, educational leadership, and management. This course enhances students' understanding of how effective learning strategies and development initiatives can drive organizational success. By exploring theories and practical methodologies, students will learn to design, implement, and evaluate training programs that align with organizational goals and improve employee performance.This course is a key component of the business and psychology programs, providing the skills needed to foster a continuous learning culture in organizations. The knowledge gained here supports career advancement in HR and management, where strategic development initiatives are critical.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Design effective training and development programs that align with organizational strategies and enhance workforce capabilities.

CO2: Assess organizational development needs through systematic evaluation of performance data and employee feedback.

CO3: Implement and manage training programs, ensuring they meet the learning objectives and organizational goals.

CO4: Evaluate the effectiveness of training and development initiatives using appropriate metrics to measure return on investment and impact on employee performance.

CO5: Apply change management theories to facilitate and manage organizational change driven by development initiatives.

Course Content

UNIT I **15 lecture hours**

Introduction to Employee learning and Development

Meaning and significance, The Forces Influencing Working and Learning, classification of learning capabilities, The Learning Process, Mental and Physical Processes, The Learning Cycle

UNIT II **15 lecture hours**

Training & Development Definition, Need and Importance of Training, Difference between Training, Development and Education,Steps of Training ,Types of Learning-KSA

UNIT III **15 lecture hours**

Training Needs Assessment , Training & Non-Training Needs, Types of Training Needs Determination of Training Needs CO2, TNA Model- A systematic view to TNA

UNIT IV **15 lecture hours**

Careers and Career Management:Introduction, Importance, Career: meaning, A Model of Career Development (Career Stages), Career Management Systems.

Learning Experience

The Learning and Development in Organisations course will be delivered through interactive lectures, case studies, and group discussions. Students will engage in the design, delivery, and evaluation of training programs through practical exercises. They will analyze real-world case studies of organizations successfully implementing L&D strategies and will collaborate on projects that address current challenges in workplace learning. Assessments will include group projects, presentations, and individual assignments that integrate both theoretical knowledge and practical skills.

Textbooks:

- Noe, R. A. (2017). *Employee Training and Development.* McGraw-Hill Education.
- Werner, J. M., & DeSimone, R. L. (2016). *Human Resource Development.* Cengage Learning.

Suggested Readings

1. Blanchard, P. N., & Thacker, J. W. (2013). *Effective Training: Systems, Strategies, and Practices.* Pearson.
2. Watkins, K. E., & Marsick, V. J. (2017). *Strategic Learning in a Knowledge Economy: Individual, Collective, and Organizational Learning Process.* Routledge.

Assessment & Evaluation

Components	Continuous Assesment	Mid Term Examination	End Term Examination
Weightage (%)	**30**	**20**	**50**

Semester-V

UHR105	Leadership and Talent Development	L	T	P	C
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure	**Nil**				
Co-requisites	**---**				

Course Perspective

The Leadership and Talent Development course provides an understanding of how leadership skills and talent development strategies can enhance organizational performance. It explores key leadership theories, talent management frameworks, and practices that drive leadership development, talent retention, and succession planning. The course is designed for students

aspiring to leadership roles in business, education, and other organizational settings, offering both theoretical knowledge and practical tools to foster leadership and develop high-potential employees.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understand the foundational theories and principles of leadership and their application in various organizational contexts.

CO2: Analyze the process of talent identification, development, and retention in organizations.

CO3: Design and implement leadership development programs aligned with organizational goals.

CO4: Explore talent management strategies to ensure effective succession planning and career development.

CO5: Evaluate the role of coaching, mentoring, and training in talent and leadership development.

CO6: Examine the impact of leadership styles on employee engagement, performance, and organizational culture.

Course Content

UNIT I **15 lecture hours**

Introduction to Leadership and Leadership Theories

Definition of leadership: Traits, functions, and roles of leaders; Key leadership theories: Trait theory, behavioral theories, contingency theories, and transformational leadership. Leadership styles: Autocratic, democratic, laissez-faire, transactional, and transformational leadership; Leadership in a changing environment: Adapting leadership approaches in dynamic and diverse workplaces; The relationship between leadership and organizational culture; Emotional intelligence and its role in effective leadership.

UNIT II **15 lecture hours**

Talent Management and Development

Overview of talent management: Definition, scope, and importance in organizations; Identifying and assessing talent: Competency mapping, performance appraisals, and potential assessment tools; Talent acquisition and onboarding: Strategies for attracting and retaining top talent; Talent retention: Addressing challenges and creating engagement through

recognition, rewards, and career development; High-potential employee programs: Identifying and nurturing future leaders; Role of HR in developing and executing talent management strategies.

UNIT III **15 lecture hours**

Leadership Development and Succession Planning

The process of leadership development: Key components and best practices; Designing leadership development programs: Assessing needs, setting goals, and delivering content; Succession planning: Identifying leadership gaps, building talent pipelines, and ensuring smooth leadership transitions; Coaching and mentoring as leadership development tools: Differences, approaches, and benefits; 360-degree feedback and other assessment tools in leadership development; Case studies: Leadership development programs in successful organizations.

UNIT IV **15 lecture hours**

Challenges and Trends in Leadership and Talent Development

Managing leadership challenges in the modern workplace: Globalization, technology, and remote leadership; Diversity and inclusion in leadership and talent development: Strategies for building inclusive leadership; The role of technology in leadership and talent development: E-learning, digital coaching, and AI tools; Leadership in times of crisis: Leading through uncertainty, change, and organizational disruption; Ethical issues in leadership and talent development: Integrity, accountability, and fairness; Future trends: Leadership for the 21st-century workplace, talent analytics, and data-driven leadership development.

Learning Experience

The Leadership and Talent Development course will involve lectures, case studies, and experiential learning through simulations and role-playing. Students will design leadership development programs and analyze real-world talent management strategies through projects and case studies of top-performing organizations. Peer feedback and reflective exercises will allow students to critically assess their leadership potential and approaches to talent development. Assessments will include group projects, individual assignments, and exams focused on both theoretical and practical aspects of leadership and talent development.

Textbooks:

Northouse, P. G. (2021). *Leadership: Theory and Practice.* Sage Publications.

Silzer, R., & Dowell, B. E. (Eds.). (2010). *Strategy-Driven Talent Management: A Leadership Imperative.* Wiley.

Suggested Readings

McCauley, C. D., Van Velsor, E., & Ruderman, M. N. (2010). *The Center for Creative Leadership Handbook of Leadership Development.* Jossey-Bass.

Ulrich, D., & Smallwood, N. (2012). *Leadership Sustainability: Seven Disciplines to Achieve the Changes Great Leaders Know They Must Make.* McGraw-Hill Education.

Assessment & Evaluation

Components	Continuous Assesment	Mid Term Examination	End Term Examination
Weightage (%)	**30**	**20**	**50**

Semester-VI

UHR106	Counselling at Workplace	L	T	P	C
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure	**Nil**				
Co-requisites	**---**				

Course Perspective

The course on Counselling at Workplace provides a comprehensive understanding of how psychological counselling is applied in organizational settings to address employee well-being, performance, and conflict resolution. It covers the theories and techniques used in workplace counselling, focusing on managing stress, career development, interpersonal relationships, and mental health. This course is ideal for students interested in human resources, organizational psychology, and employee assistance programs (EAPs).

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understand the key theories and principles of workplace counselling.

CO2: Apply counselling techniques to resolve workplace conflicts and improve employee well-being.

CO3: Explore the role of counselling in stress management, career development, and organizational change.

CO4: Evaluate the psychological and ethical challenges associated with counselling in a workplace setting.

CO5: Examine the impact of mental health issues and personal challenges on workplace performance and relationships.

CO6: Implement strategies to create a supportive work environment that fosters employee growth and well-being.

Course Content

UNIT I **15 lecture hours**

Introduction to Workplace Counselling

Definition and scope of workplace counselling.

The role of counselling in employee assistance programs (EAPs).

Theories of counselling relevant to the workplace: Person-centered, cognitive-behavioral, and solution-focused approaches.

The importance of emotional intelligence in workplace counselling.

The counselling process: Assessment, goal setting, intervention, and evaluation.

Legal and ethical considerations in workplace counselling: Confidentiality, informed consent, and boundaries.

UNIT II **15 lecture hours**

Stress Management and Work-Life Balance

The impact of stress on employee performance and mental health.

Counselling techniques for managing work-related stress: Cognitive-behavioral interventions, mindfulness, and relaxation techniques.

Work-life balance: Counselling approaches to managing personal and professional responsibilities.

Identifying and addressing burnout: Causes, symptoms, and preventive strategies.

Developing resilience in the workplace: Techniques for coping with organizational change and uncertainty.

Workplace stress management and counselling interventions.

UNIT III **15 lecture hours**

Conflict Resolution and Career Development

The role of counselling in conflict resolution: Mediation, negotiation, and communication skills.

Managing interpersonal relationships at work: Counselling for team dynamics and leadership challenges.

Career counselling: Identifying career aspirations, assessing skills, and developing career plans.

Counselling for career transitions: Managing promotions, job changes, and retirement.

The impact of organizational change on employee well-being: Counselling strategies to support employees during restructuring and downsizing.

Career development and conflict resolution through counselling.

UNIT IV **15 lecture hours**

Mental Health and Employee Well-Being

The role of workplace counselling in addressing mental health issues: Anxiety, depression, and substance abuse.

Recognizing and managing mental health crises in the workplace: Suicide prevention and critical incident stress debriefing (CISD).

Counselling for personal issues affecting work performance: Family conflicts, financial stress, and trauma.

Building a supportive workplace culture: Promoting psychological safety, inclusion, and mental health awareness.

Ethical dilemmas in workplace counselling: Managing dual relationships, confidentiality breaches, and power dynamics.

Future trends in workplace counselling: Digital counselling, teletherapy, and mental health apps.

Learning Experience

The Counselling at Workplace course will include interactive lectures, case studies, and role-playing exercises where students will practice counselling techniques. Students will also engage in group discussions and simulations to resolve workplace conflicts, manage stress, and promote well-being. Practical applications of counselling interventions will be explored through case studies of real-world workplace challenges. Assessments will include research papers, reflective essays, and presentations focused on the integration of counselling theory and practice in workplace settings.

Textbooks:

1. Carroll, M. (2013). *Workplace Counselling: A Systematic Approach to Employee Care.* Sage.
2. Goss, S., & Anthony, K. (2003). *Technology in Counselling and Psychotherapy: A Practitioner's Guide.* Palgrave Macmillan.

Suggested Readings

1. Lewis, R., & Zibarras, L. D. (2013). *Work and Occupational Psychology: Integrating Theory and Practice.* Sage.
2. Cooper, C. L., & Quick, J. C. (2017). *The Handbook of Stress and Health: A Guide to Research and Practice.* Wiley.

Assessment & Evaluation

Components	Continuous Assesment	Mid Term Examination	End Term Examination
Weightage (%)	30	20	50

Semester VII

UHR107	Change management and OD Intervention	L	T	P	C
Version 1.0		3	1	0	4
Pre-requisites/Exposure	Nil				
Co-requisites	---				

Course Perspective

This course provides a comprehensive understanding of change management and organizational development (OD) interventions. It covers the theories, frameworks, and strategies for managing organizational change effectively, and it highlights the tools and techniques used to facilitate development interventions. Students will learn how to apply OD interventions to foster transformation, improve organizational performance, and ensure successful change outcomes.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understand the core principles and theories of change management and organizational development (OD).

CO2: Analyze the forces driving change in organizations and the challenges associated with managing change.

CO3: Apply OD interventions to improve organizational effectiveness and facilitate change.

CO4: Develop strategies for overcoming resistance to change and ensuring stakeholder engagement.

CO5: Evaluate the success of change initiatives and OD interventions using appropriate tools and metrics.

CO6: Examine the role of leadership and communication in managing change and implementing OD interventions.

Course Content

UNIT I **15 lecture hours**

Introduction to Change Management

Definition and importance of change management.

Types of organizational change: Transformational, incremental, planned, and unplanned change.

Models of change management: Lewin's Change Management Model, Kotter's 8-Step Change Model, and ADKAR model.

Drivers of change: External and internal factors influencing change.

Resistance to change: Causes, consequences, and strategies to overcome resistance.

Role of organizational culture in change management.

UNIT II **15 lecture hours**

Theories and Process of Organizational Development (OD)

Introduction to Organizational Development (OD): Concepts, history, and importance.

The OD process: Entry, diagnosis, planning, intervention, and evaluation.

Theories of OD: Systems theory, socio-technical systems theory, and action research model.

Role of OD practitioners: Internal vs. external consultants and change agents.

Ethical issues in OD practice: Confidentiality, trust, and fairness.

Diagnostic tools and techniques: Surveys, interviews, observation, and feedback mechanisms.

UNIT III **15 lecture hours**

OD Interventions and Techniques

Definition and types of OD interventions: Human process-based, techno-structural, and strategic interventions.

Individual-focused interventions: Sensitivity training, coaching, mentoring, and 360-degree feedback.

Group-focused interventions: Team-building, process consultation, and inter-group development.

Organizational-focused interventions: Job design, restructuring, cultural change, and mergers.

Action learning and appreciative inquiry: Techniques for fostering learning and positive change.

Case studies: Successful OD interventions in various organizational settings.

UNIT IV **15 lecture hours**

Managing Change and Evaluating OD Success

Leadership in change management: Roles, styles, and strategies for leading change.

Change communication: Strategies for effective communication during change initiatives.

Change management tools and techniques: Force-field analysis, stakeholder analysis, and change impact analysis.

Sustaining change: Ensuring long-term success through reinforcement and continuous improvement.

Measuring the success of OD interventions: Key performance indicators (KPIs), ROI, and feedback systems.

Future trends in OD and change management: Digital transformation, agile organizations, and the role of AI in change.

Learning Experience

The course will involve lectures, case studies, group discussions, and interactive exercises to help students develop practical skills in change management and OD interventions. Students will work on projects where they diagnose change needs and propose interventions for organizational development. Real-life case studies will be used to understand successful and unsuccessful change initiatives, and students will also engage in simulations of change scenarios.

Textbooks:

Cummings, T. G., & Worley, C. G. (2015). *Organization Development and Change.* Cengage Learning.

Kotter, J. P. (2012). *Leading Change.* Harvard Business Review Press.

Suggested Readings

Cameron, E., & Green, M. (2019). *Making Sense of Change Management: A Complete Guide to the Models, Tools, and Techniques of Organizational Change.* Kogan Page.

French, W. L., Bell, C. H., & Zawacki, R. A. (2006). *Organization Development: Behavioral Science Interventions for Organization Improvement.* Pearson.

Assessment & Evaluation

Components	Continuous Assesment	Mid Term Examination	End Term Examination
Weightage (%)	**30**	**20**	**50**

Semester-VIII

UHR108	Total Reward Management	L	T	P	C
Version 1.0		3	1	0	4
Pre-requisites/Exposure	Nil				
Co-requisites	---				

Course Perspective

Total Reward Management focuses on the strategic approach to managing employee compensation and benefits, aiming to align reward systems with organizational objectives. This course covers the key components of financial and non-financial rewards, including salary, bonuses, benefits, recognition programs, and work-life balance initiatives. The course integrates theoretical foundations with practical applications to equip students with skills necessary to design, implement, and evaluate total reward programs in organizations.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understand the key components and strategic importance of total reward management.

CO2: Design and implement effective total reward systems that align with organizational goals.

CO3: Analyze compensation structures, including base pay, bonuses, and incentives.

CO4: Evaluate non-monetary rewards such as recognition, career development, and work-life balance.

CO5: Examine legal, ethical, and global considerations in reward management.

CO6: Assess the effectiveness of reward systems through metrics and employee feedback.

Course Content

UNIT I **15 lecture hours**

Essentials of Reward Management

Overview of reward management: Objectives and key concepts.

The reward system: Structure and components of an effective reward system.

Total rewards approach: Financial and non-financial rewards.

Strategic reward: Aligning rewards with organizational objectives.

International reward management: Addressing global challenges in reward structures.

Designing reward structures: Grading jobs, pay levels, and grade structures.

UNIT II **15 lecture hours**

Performance and Reward

Performance management and its relationship to rewards.

Engagement and reward: Enhancing employee motivation and retention.

Financial reward: Salary structures, bonuses, and incentive schemes.

Non-financial reward: Recognition programs, career development, and work-life balance initiatives.

Contingent pay schemes: Pay for performance, bonuses, and incentive plans.

Team-based pay and rewarding for business performance.

Valuing jobs: Job evaluation methods and determining pay levels.

Grade and pay structures: Designing equitable and competitive pay systems.

UNIT III **15 lecture hours**

Rewarding Special Groups and Managing Reward Systems

Rewarding directors and senior executives: Compensation packages for top-level management.

Rewarding sales and customer service staff: Performance-based rewards and incentive plans.

Rewarding knowledge workers: Tailoring rewards for specialists and innovators.

Employee benefits: Designing comprehensive benefit programs, including flexible benefits.

The practice of reward management: Developing, implementing, and managing reward systems.

Evaluating reward management: Metrics and feedback mechanisms.

Responsibility for reward management: The role of HR, management, and external stakeholders.

UNIT IV **15 lecture hours**

Compensation Management-Related Labor Laws

Payment of Wages Act, 1936: Regulations for timely wage payments and wage protection.

Minimum Wages Act, 1948: Setting minimum wages to ensure fair compensation.

Payment of Bonus Act, 1965: Guidelines for bonus payments based on company profits and performance.

Equal Remuneration Act, 1976: Ensuring gender equality in compensation practices.

Application of these laws in reward management: Legal compliance and best practices.

Learning Experience

The Total Reward Management course will be delivered through lectures, case studies, and interactive exercises. Students will engage in designing total reward systems, analyzing compensation strategies, and evaluating real-world examples of effective reward management. Group projects will involve creating tailored reward solutions for hypothetical organizations. Assessments will include case analyses, reflective essays, and presentations aimed at applying theoretical knowledge to practical organizational challenges.

Textbooks:

Armstrong, M. (2012). *Armstrong's Handbook of Reward Management Practice.* Kogan Page.

WorldatWork (2015). *The WorldatWork Handbook of Total Rewards: A Comprehensive Guide to Compensation, Benefits, Work-Life, and Performance Management.* Wiley.

Suggested Readings

Schuster, J. R., & Zingheim, P. K. (2012). *High-Performance Pay: Fast Forward to Business Success.* John Wiley & Sons.

Heneman, H. G., & Judge, T. A. (2019). *Compensation.* McGraw-Hill.

Assessment & Evaluation

Components	**Continuous Assesment**	**Mid Term Examination**	**End Term Examination**
Weightage (%)	**30**	**20**	**50**

MEDIA STUDIES (MINOR)

I	UMS101	Understanding Media	3	1	0	4
II	UMS102	Media Ethics and Laws	3	1	0	4
III	UMS103	Reporting and Editing for Print	3	1	0	4
IV	UMS104	Advertising and Integrated Marketing Communication	3	1	0	4
V	UMS105	Public Relation and Corporate Communication	3	1	0	4
VI	UMS106	Media, Development and Society	3	1	0	4
VII	UMS107	Film Appreciation and Cinema Studies	3	1	0	4
VIII	UMS108	Global Media Scenario	3	1	0	4

Semester-I

UMS101	**Understanding Media**	**L**	**T**	**P**	**C**
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Co-requisites	**-**				

Course Outcomes

On completion of this course, the students will be able to:

1. understand the concept of media and its role and functions
2. *The literacy of media vis a vis ownership, representation, and violence*
3. the evolution of media with respect to cinema, television, radio, and new media

Course Content

UNIT I **15 Lectures**

Introduction to Media: Role of Media in our Life, Media Time Line, Media & Mass Media, What makes "Mass" Communication Unique?

UNIT II **15 Lectures**

Media and its Role: Functions of Mass Media (Surveillance, Interpretation, Linkage, Entertainment, purveyor of ideologies), Types of Mass Media, Role of Media in a Democracy

UNIT III **15 Lectures**

Media Literacy: Introduction of Media Literacy, Media Ownership, Media Representation, Media Violence

UNIT IV **15 Lectures**

Evolution of Media: Evolution of Cinema, Evolution of Television, Evolution of Radio, Evolution of New Media

Reference Books/Materials

1. McLuhan Marshall. *Understanding Media*. McGraw Hill, 2014.
2. Scott Martin. *Media and Development.* Zed Books, 2014

Semester-II

UMS102	Media Ethics and Laws	L	T	P	C
Version		3	1	0	4
Prerequisites/Exposure					
Co-requisites					

Course Objectives

1. To introduce students to legal and ethical issues related to mass media
2. To help students gain an understanding of media laws in India and their implications on the profession of Journalism
3. To identify and analyze ethical questions pertaining to Journalism

Course Outcomes

On completion of this course, the students will be able to:

1. Students gain an understanding of laws pertaining to media
2. Students gain an analytical knowledge into ethical issues related to media
3. Students learn to apply media laws to case studies and evaluate the relative merits and demerits of laws and ethical questions pertaining to media
4. Creating an understanding among students about the importance of responsible Journalism which works within the framework of laws and ethics

Course Content

UNIT I **15 Lectures**

Indian Media and the Constitution: Media Roles, Responsibilities and Privileges, Fundamental Rights, Directive Principles of State Policy, Media Freedom in a Democracy

UNIT II **15 Lectures**

Indian Media and the State: Parliamentary Privileges and Contempt of Court; Official Secrets Act, Sedition laws, Defamation; Working Journalists Act, Copyright Act, Right to Information

UNIT III **15 Lectures**

Broadcasting Law: Press Council of India, Prasar Bharati Act, Cable TV Network (Regulation) Act, Advertising code, Cinematography Act 1952 and Film Censorship

UNIT IV **15 Lectures**

Ethical Issues in Indian Media: Code of Ethics, Media Bias, Censorship, Privacy issues, Obscenity, Violence, Hate speech, Fake news and post-truth, Trial by media, Women and Children in media, Pressures on Media Freedom (Political, Commercial, Legal)

Reference Books/Materials

1. Development of Media and Media Law – Mittika Singal Bhushan, Aadi Publications, 2014
2. Media Law and Ethics – M. Neelamalar, Prentice Hall India Learning PrivateLimited, 2009
3. Press Laws and Ethics of Journalism - P.K. Ravindranath, Authors Press, 2004
4. Journalism Ethics: Arguments and cases for the twenty-first century - Roger Patching and Martin Hirst, Routledge, 2013
5. Journalism Ethics and Regulation (Longman Practical Journalism) - Chris Frost, Third Edition, Longman, 2011

Semester III

UMS103	Reporting and Editing for Print	L	T	P	C
Version 1.0		3	1	0	4
Pre-requisites/Exposure					
Co-requisites					

Course Outcomes

After completion of the course student will be able to:

CO1: Know about the history and role of print journalism over the years

CO2: Explain the concept, nature, elements of news and news values

CO3: Describe the types of leads and news writing styles

CO4:. Identify the role, need and types of news sources.

CO5: Attain knowledge about various beats of news reporting and differentiate in national and local reporting

CO6: Apply the nuances of writing different types of news stories and understand the concept of editing.

Course Content

Unit I: News writing: concept **15 Lectures**

News Reporting, Concept of News, Elements and structure of news reports, Types of news: Hard and Soft, News Leads and their types, Inverted pyramid style, feature style, sand clock style and nut graph, Feature: Definition, characteristics, types: news and non-news features, Process of feature writing: Ideas and Research, Tools and Techniques of Feature Writing, Interview: types and techniques

Unit II: Beat reporting **15 Lectures**

Analytical reporting, Interpretative reporting, Descriptive reporting, Investigative reporting, Differences in reporting for Newspapers / News agencies, Specialized Reporting and Beats, Understanding Beats and their categories, City reporting: City and local news, Crime Reporting: sources and related laws, Reporting Political Parties and Politics, Legislative (covering Assembly and Parliament), Legal Reporting

Unit III: Editorial Personal **15 Lectures**

News Set-up, Reporting department in newspapers. Role, function and qualities of a Reporter, Chief Reporter and Bureau Chief, News Desk, Editorial structure of newspaper/magazines, Editorial hierarchy and job of various functionaries, functioning of news desk, News Flow and Editing: Role and Responsibility of Gatekeepers, Editing Process, News selection: News Value and other parameters, Handling of news copy, Planning and visualization of news, Rewriting news stories, Headlines and intro, Stylebook and Style sheet

Unit IV: Editing **15 Lectures**

Editing, Editing: concept, process and significance, Editorial Values: objectivity, facts, impartiality and balance, Role and importance of news sources, attribution, Challenges before editor : bias, slants and pressures

Assignments:

1. News Reporting

2. event reporting,

3. Interviews, obits, profiles based on field assignments.

4. Specialised Writing

5. Writing features and human-interest stories, backgrounders

6. Op-ed articles

7. Editorials

8. Articles

Reference Books/ Materials

1. Parthasarathy , R.(1994). Here is the News: Reporting for Media, Sterling Publishers.
2. Stovall , J.G.(2011). Journalism, Prentice Hall
3. Stein, P.& Burnett (2000), News writer's Handbook: An Introduction to Journalism, Blackwell Publishing.
4. Itule & Anderson (2002). News Writing and reporting for today's media, McGraw Hill Publication
5. Flemming and Hemmingway(2005), An Introduction to journalism, Vistaar Publications.
6. Joseph and Sharma (2006). The Media and Women's Issues, Second Edition, SAGE Publication Pvt. Ltd.
7. Richard, K.(2000). The Newspaper's Handbook, Routledge Publication.

8. George, A. H.(1990). News Writing, Kanishka Publications.
9. Frost, C.(2001). Reporting for Journalists, Routledge, London.
10. Garrison, B.(2000). Advanced Reporting, LEA.

Semester IV

UMS104	**Advertising and Integrated Marketing Communication**	**L**	**T**	**P**	**C**
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Co-requisites					

Course objectives

1. To define the concept and nature of advertising, its role in society and business.
2. To explain application of theories and models in the field of advertising
3. To demonstrate knowledge and functioning of advertising agency
4. To compare marketing and advertising using marketing mix, role of segmentation and buying motives
5. To choose the appropriate appeals of advertising to reach target audience keeping ethics in mind
6. To design creative and media strategies for Advertising Campaigns using research methods and study effectiveness

Course Outcomes

After completion of the course students will be able to:
CO1 Define the concept and nature of advertising, its role in society and business.
CO2 Illustrate the theories and models in the field of advertising
CO3 Demonstrate the knowledge and functioning of advertising agency
CO4 Differentiate between marketing and advertising using marketing mix, role of segmentation and buying motives
CO5 Choose the appropriate appeals of advertising to reach target audience keeping ethics in mind
CO6 Design creative and media strategies for Advertising Campaigns using research methods and study effectiveness

Course Content

Unit I: Introduction to Advertising and Integrated Marketing Communication

15 Lectures

Advertising: concepts, definitions, needs, Development of advertising in India and World, Importance and role of advertising in media, economy and society, Difference between traditional advertising and integrated marketing communication, The role of Integrated Marketing Communication in modern marketing.

UNIT II: Advertising Strategies and Media Planning **15 Lectures**

Advertising Strategy Development- (Setting advertising objectives (e.g., awareness, persuasion, behavior change), The creative strategy: Developing key messages, slogans, and calls to action.), Advertising Media and Channel Selection, Media Scheduling and Budgeting.

UNIT III: Integrated Marketing Communication Tools and Tactics **15 Lectures**

Sales Promotions and Public Relations, Direct Marketing and Personal Selling, Social Media and Digital Marketing, Branding and Positioning

UNIT IV: Campaign Development, Analytics, and Future Trends **15 Lectures**

Developing an Advertising Campaign, Campaign Analytics and Measurement, Evaluating Campaign Effectiveness, Emerging Trends in Advertising and Integrated Marketing Communication

Reference Books/ Materials

1. Aaker, D. A., & Mayers, J. G. (1992). *Advertising Management.* Prentice Hall of India.
2. Batra, M., & Aaker. (1992). *Advertising Management.* New Delhi: Prentice Hall of India
3. Jefkins, F. (1991). *Advertising.* New Delhi: Tata Mcgraw Hill.
4. Jethwaney, J., & Jain, S. (2006). *Advertising Management.* Oxford University Press.
5. O'Guinn, A., & Semenik. (2016). *Advertising and Integrated Brand Promotion.* New Delhi: Vikas Publication House.
6. Vilanilam, V. K., & Verghese, A. K. (2004). *Advertising Basics.* New Delhi: Response Books.
7. Wilmshurst, J., & Mackay, A. (1999). *The Fundamentals of Advertising.* Routledge.

Semester V

UMS105	**Public Relation and Corporate Communication**	**L**	**T**	**P**	**C**
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Co-requisites					

Course Objectives

1. To define the concept and nature of Public Relations and Corporate Communication
2. To understand basic process of internal and external Corporate Communication
3. To describe crisis management, brand development and make ambassadors out of employees
4. To develop basic writing skills for Public Relations and Corporate Communication
5. To design strategies and tactics for creating campaigns for raising awareness and changing attitudes.

6. To nurture laws and ethics related to Public Relations required to work in media industry

Course Outcomes

After completion of the course student will be able to:
CO1: Define the concept and nature of Public Relations and Corporate Communication
CO2: Understand basic process of internal and external Corporate Communication
CO3: Describe crisis management, brand development and make ambassadors out of employees
CO4: Develop basic Public Relations and Corporate Communication
CO5: Design strategies and tactics for creating campaigns for raising awareness and changing attitudes.
CO6: Nurture laws and ethics related to Public Relations required to work in media industry

Course Content

Unit I: Introduction **15 Lectures**

Evolution of PR, PR in India, organization of a PR department, PR firms, Role of public Relations Practitioner, PR process – fact finding, planning, implementation, Evaluation, internal and external Publics

Unit II: PR Operations **15 Lectures**

PR tools – press agentry, media conference, press release, house journals, annual reports, interviews, speeches, persuasion, propaganda publicity and public opinion

Unit III: PR Practices **15 Lectures**

PR in government, crises PR, Community Relations, Consumer Relations, PR for the public sector, PR for tourism. Event management, ethics in PR, PR and new media.

Unit IV: Corporate Communication **15 Lectures**

Corporate communication: definition, nature, scope, principles and functions of corporate communication. Corporate social responsibility. Flow of communication in an organization – Bottom-up, top down, vertical and horizontal, barriers to communication.

Reference Books/ Materials

1. J Jethwaney and Shruti Jain : Advertising Management, Oxford Uni. Press, 2006
2. Mehta D. S.: Handbook of Public Relations in India, Allied Publishers Pvt. Ltd. Mumbai
3. Scott and Cutlip : Effective Public Relations
4. J Jethwaney : Public Relations, Sterling, 2000
5. Cutlip S. M. & A. H. Effective Public Relations, Prentice Hall, New Delhi Center
6. Tom Means: Business communication, Thomson
7. Pitman Jackson: Corporate Communication for Managers, Pitman Publishing
8. Clow E Kenneth: Integrated Advertising, Promotion and Marketing Communication, New Jersy, Prentice Hall
9. Sam Black: Practical Public Relations, Universal Book Stall, Delhi
10. Suresh Gaur: Public Relation 4 You: A Guide to PR Theory & Practice

Semester VI

UMS106	Media, Development and Society	L	T	P	C
Version 1.0		3	1	0	4
Pre-requisites/Exposure					
Co-requisites					

Course Objectives

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

1. Understand the role of media in development and social change.
2. Analyze the impact of media on societal issues such as education, health, politics, and human rights.
3. Evaluate different models of media and development.
4. Assess the relationship between media, culture, and social transformation.
5. Examine the role of new and digital media in promoting or hindering development.
6. Critically assess the ethical and political implications of media in development contexts.

Course Outcomes

After completion of the course student will be able to:

CO1: Gain an understating on the key concepts in development and the different models of development

CO2: Critically analyse how media portrays development issues

CO3: Assesses the opportunities of using Journalism as a change agent

CO4: Create alternative media content aimed at development and social change

Course Content

Unit I: Introduction to Media and Development **15 Lectures**

Defining Media and Development, Media's Role in Development, Challenges in Media and Development, Relationship between media and society, Media in socio-cultural and economic context

Unit II: Media Systems and Development Models **15 Lectures**

Development Communication, Development Communication Initiatives in India, Media Systems and Their Impact on Development, Development Communication Models, Global Media, Culture, and Development

Unit III: Media, Society, and Social Change **15 Lectures**

Media and Social Movements; Media, Politics, and Governance; The Role of Media in Public Health and Education; Media and Civil Society

Unit IV: New Media, Digital Technologies, and Development 15 Lectures

The Rise of Digital Media, Social Media and Citizen Journalism, The Ethics of Digital Media in Development, Community Media, Online space and development: Alternative News Coverage; Online Activism

Reference Books/ Materials

1. Benshoff, Harry M. America on Film: Representing Race, Class, Gender and Sexuality at the movies. Wiley Blackwell, 2009.

2. Berger and Asa Arthur. Media and Society: A Critical Perspective. Rowman & Littlefield, 2012.

3. Daramola.l. Mass Media and society, Writing for the Media Society. Lagos: Rothan Press, 2005, 2003.

4. Dines, Gail, and Jean Humez. Gender Race,and class in Media: A critical Reader. 4th ed. New Delhi.

5. Edward Said. Covering Islam: How the Media and the Experts Determine How We See the Rest of the World. New York: Vintage, 1997.

6. Gorman, Lyn, and McLean David. Media and Society into the 21st century: A Historical. London: Sage, 2005.

7. Marshall, McLuhan. Roads and Paper Routes in Understanding Media: Extensions of "Man ". New York: McGraw-Hill Book Co., 1964.

8. McQuail, D. McQuail's Mass Communication Theory. 5th Ed. London: Sage, 2005.

9. Roger, Silverstone. The Sociology of Mediation and communication in Craig Calhoun Chris. Edited by Rojek and Bryan S Turner. London: Sage, 2005

Semester VII

UMS107	Film Appreciation and Cinema Studies	L	T	P	C
Version 1.0		3	1	0	4
Pre-requisites/Exposure					
Co-requisites					

Course Objectives

The course will enable the student-teacher to:

1. To define nature and types of films, and different film movements
2. To explain the features of films and their impact on society and role in our lives
3. To describe various genres like mystery, noir, fantasy, science-fiction, etc.
4. To develop understanding of literary elements in films, themes and symbolism, irony, allegory, etc.
5. To demonstrate the concepts behind storytelling, cinematography, and sound

Course Outcomes

After completion of the course student will be able to:

CO1: Define the nature and types of cinema, and different film movements
CO2: Illustrate knowledge films and their impact on society
CO3: Classify a film into different genres
CO4: Critically interpret films by reading (not just viewing) the film for literary elements
CO5: Apply the knowledge of concepts like direction, cinematography, and sound to critique films

Course Content

Unit I: Introduction to Cinema **15 Lectures**

Introduction, Film Theory, Genre Theory, traditions in world cinema-German Expressionism, Italian neo-realism, French new wave, British new wave, Chinese cinema

Unit II: Types of Cinema **15 Lectures**

Action cinema, Aspects of Cinema-melodrama, Formalism in Cinema, the language of cinema, city cinema

Unit III: Language of Cinema **15 Lectures**

Semiotics of cinema, studio cinema, mobile cinema, ideology in cinema, character in cinema

Unit IV: Film Appreciation **15 Lectures**

Mythology cinema in India, Parallel Cinema, Hindi music film, Hollywood musicals, Iranian cinema, postmodernism and cinema, sequels, remakes, and cult films.

Reference Books/ Materials

1. Ebert, R. (2003). The Great Movies. Broadway.
2. Gilmour, D. (2008). The Film Club. Twelve.

3. Harris, M. (2009). Pictures at a Revolution. Penguin Random House.
4. "Film Art: An Introduction" by David Bordwell and Kristin Thompson, Year: 1979, Publisher: McGraw-Hill Education
5. Understanding Movies" by Louis Giannetti, Year: 2020 (Latest edition), Publisher: Pearson

Semester VIII

UMS108	**Global Media Scenario**	**L**	**T**	**P**	**C**
Version 1.0		**3**	**1**	**0**	**4**
Pre-requisites/Exposure					
Co-requisites					

Course Objectives

- To explain the students with world communication during and after cold war
- To describe the struggle for bridging information gaps in the world
- To explain the students the developments regarding information cooperation in the world
- To acquaint them with the contemporary trends in world media
- To sensitize the students on the benefits of the new order to India

Course Outcomes

After completion of the course student will be able to:
CO1: Explain the students with world communication during and after cold war
CO2: Describe the struggle for bridging information gaps in the world
CO3: Explain the developments regarding information cooperation in the world
CO4: Explain the contemporary trends in world media
CO5: Understand the new order to India to become industry ready professionals

Course Content

Unit I: Global Communication: Historical Perspective 15 Lectures

The Great North – South Divide, Domination of Transnational news agencies, Global news and information flow: the flip side, Barriers to the flow of news and information

Unit II: Struggle for Balance of Information Flows 15 Lectures

Demand for NWICO, MacBride Commission, Recommendations of MacBride Commission & NWICO, Role of UN & UNESCO in bridging the gap between north and south, Bi-lateral, Multi-lateral and Regional /information Co-operation

Unit III: Contemporary Trends 15 Lectures

Emergence of Global village of media, The policies of global communication, Global communication &culture, Democratization of communication

Unit IV: Global Media Impact on India **15 Lectures**

Hegemony of International media Mughals, Transnational media and India, Global media and the promotion of the cult of stars, Hollywood's foray into film industry

Reference Books/ Materials

1. Bride, S. M. (1986). Many Voices One World. UNESCO Publications.
2. Hamelink, C. Trends in World Communication.
3. Nordenstreng, K. Politics of News.
4. "Global Communication and International Relations" by H. O. Schildt
5. "Globalization and Media: Global Village of Babel" by Jack Lule
6. "The Globalization of World Politics: An Introduction to International Relations" edited by John Baylis, Steve Smith, and Patricia Owens
7. "The History of Media and Communication Research: Contested Memories" by David W. Park and Jefferson Pooley
8."Communication and Empire: Media, Markets, and Globalization, 1860–1930" by Dan Schiller

EDUCATION (MINOR)

I	UED101	Foundations of Education	3	1	0	4
II	UED 102	Educational Psychology	3	1	0	4
III	UED 103	Measurement and Evaluation of Learner	3	1	0	4
IV	UED 104	Diversity and Inclusive Education	3	1	0	4
V	UED 105	Guidance and Counseling	3	1	0	4
VI	UED 106	Applied Behaviour Analysis in Education	3	1	0	4
VII	UED 107	Educational Intervention and Teaching Strategies : Intellectual Disability	3	1	0	4
VIII	UED 108	Educational Intervention and Teaching Strategies : Learning Disability	3	1	0	4

Semester I

Course Code	Course Title	L	T	P	S	C
UED101	Foundations of Education	**3**	**1**	**0**	**0**	**4**
Version 1.0						
Pre-requisites/Exposure	NIL					
Co-requisites	Not Applicable					

Course Perspective

One of the Basic premises underlying the concept of Education is the philosophical and sociological thought. Philosophy of Education is essentially a method of approaching educational experience rather than a body of conclusions. This course will endeavor to develop a basic understanding of philosophical and psychological process of solving educational problems through philosophical and psychological method, from a philosophical, psychological attitude to arrive at philosophical and psychological conclusions and results. It will facilitate the understanding of the following: Interpretation of human nature, the world and the universe and their relation with man and society. Interpretation of aims and ideals of education, the relationship of various components of the system of education, relationship of education and various areas of national life (economic system, political order, social progress, social and cultural reconstructions etc.), educational values, theory of knowledge and its relationship to education.

Course Outcomes

On completion of this course, the student will be able to:

CO1. Understand the relationship between Philosophy, Education and Psychology.

CO2 Evolve a deeper understanding of Constitutional, Cognitive Perspective

CO3. Understand the classroom in social and psychological context.

CO4. Critically analyse pedagogic practices of various thinkers.

CO5. Inculcate the Psychological principles and practices.

CO6. Understand the Psychological theories and fundamentals.

Course Content

Unit I: **12 Contact Hours**

Basic Concepts in Philosophy of Education

- Teaching, training, learning and education in relationship to the child's nature, growth and development.
- Relationship between Philosophy, Psychology and Education. Branches of Philosophy: Metaphysics, Epistemology & Axiology with special reference to school subjects. Branches of Psychology: Educational Psychology, Developmental Psychology, Cognitive Psychology.
- Indian Philosophies: Sankhya, Vedanta
- Western Philosophies: Idealism, Naturalism, Realism, and Pragmatism
- Pedagogical Alternatives to Behaviorism with reference to Activity, Discovery and Dialogue based teaching-learning.
  1. **Activity**: With reference to Dewey's ideas on learning and Gandhi's Nai Talim
  2. **Discovery:** With reference to Montessori's description of children's intellectual growth and Dewey's concept of inquiry
  3. **Dialogue**: With reference to Plato (Allegory of the Cave), the Upanishads (The Nachiketa-Yama dialogue) and Buber's idea of a dialogue between teacher and student ('I and Thou') along with a discussion on the role of a teacher.

Unit II: 12 Contact Hours
Basic Concepts in the Sociology of Education

- State and Democracy
- Constitutional Perspective: Equity, Equality, Freedom, Social Justice, Inclusiveness and Secularism.
- Socialization, Types of Family and their role in Socialization, Role of family and school, conflicts and coherence.
- Political and Psychological ideology with reference to curriculum and textbooks.
- Determinants of Aims of Education: Culture, Economy, History and Psychology.
- Dominance, conflict and resistance in the context of schooling.

Unit III: 8 Contact Hours
Introduction to the main ideas of the following thinkers concerning aims of education, school curriculum, pedagogic practices, role of teachers and discipline

- John Dewey
- M. K Gandhi
- Bronfenbrenner's Ecological systems theory.

- Rabindranath Tagore
- Ivan Illich
- Sigmund Freud
- J. Krishnamurti
- Sri Aurobindo

Unit IV: **8 Contact Hours**
Application of concepts

- A detailed study of one of the thinkers mentioned in the entire syllabus

Suggested Text Books

1. Walia, J.S. (2011). Philosophical, Sociological and Economic Bases of Education. Jalandhar: Ahim Paul Publishers.
2. Pandey, K.P. (2010). Perspectives in Social Foundations of Education. New Delhi: Shipra Publications.
3. Morgan, C. T., King, R. A., & Robinson, N. M. (1956). Introduction to psychology. New York.

Advanced Readings

1. Siegel, Harvey (2009) The Oxford Handbook of Philosophy of Education.; Oxford University Press.
2. Manoj Das (1999). Sri Aurobindo on Education, National Council for Teacher Education, New Delhi.
3. Ciccarelli, S. K., White, J. N., Fritzley, V. H., & Harrigan, T. (2010). *Psychology: an exploration* (p. 672). Upper Saddle River, NJ, USA: Pearson Prentice Hall.

Semester II

UED102	**Educational Psychology**	**L**	**T**	**P**	**C**
Version		**3**	**1**	**0**	**4**
Prerequisites/Exposure					
Co-requisites					

Course Perspective

The course intends to impart knowledge of the basic concepts and modern trends in Educational Psychology. Educational psychology is an application of psychological principles to elementary and middle school education. The major focus of this course is on the learner and the learning process.

Course Outcomes

On completion of this course, the students will be able to

CO1. Identify various cognitive processes involved in understanding human behaviour.
CO2. Explain major perspectives of psychology: behavioural, cognitive, and sociocultural.
CO3. The student will be able to demonstrate knowledge and understanding in learning and cognition.
CO4. The student will be able to analyze various perspectives of teaching.
CO5. The student will be able to understand the classroom practices which can be replicated in their specific contexts.
CO6. The student will be able to address the needs of children with disabilities.

Course Content

15 lecture hours

UNIT I

Social, Cognitive & Developmental Views of Learning Social Cognitive learning principles. Performance and learning effects of modeling, Learners' social and personal characteristics. Piagetian stage theory, assimilation, accommodation, and equilibration. Vygotsky and the zone of proximal development. Bruner and discovery learning and the spiral curriculum
.

15 lecture hours

UNIT II

Teaching Techniques: Behavioral View of teaching- Shaping and chaining, instructional prompts, Feedback, Mastery. Cognitive Models of Teaching - Advance organizers, K-W-L, Adjunct questions, Signals. Constructivist View of Teaching - guided and free/open discovery, Scaffolding, Cooperative learning, Informal cooperative, learning strategies, Problem-Based learning.

15 lecture hours

UNIT III

Classroom Management: Guidelines for classroom rules, classroom procedures, withitnness, overlapping, timing, and target errors. Behavioural View of Classroom Management - Token reinforcement systems, Techniques for reducing inappropriate behaviour, Goals of misbehaviour Personal and Social Development - Person/environment fit, Friendships/Peer acceptance, Moral reasoning, Linguistic diversity.

15 lecture hours

UNIT IV

Psychology And Education of Children with Special Learning Disability; Sensory Impairment – Visual and auditory; High Intellectual capability (Giftedness); Intellectual Impairment; Orthopedically handicapped; Emotional Disturbance.

Text Book

Fetsco, T. G., & McClure, J. (2005). Educational psychology: An integrated approach to classroom decisions. Boston: Allyn & Bacon.

Reference Books

1. Bruner, J. (1996). Folk pedagogy. The culture of education. Cambridge, MA: Harvard University Press.
2. Nasir, N. S., Rosebery, A., Warren, B., & Lee, C. D. (2014). Learning as a cultural process: Achieving equity through diversity. In K. Sawyer (Ed.), The Cambridge Handbook of the Learning Sciences New York, NY: Cambridge University Press.
3. Woolfolk, A. E. (2004). Educational Psychology, 9th ed., Boston, MA: Allyn & Bacon.

Course Code	Course Title	L	T	P	S	C
UED103	Measurement and Evaluation of Learner	3	1	0	0	4
Version 1.0						
Pre-requisites/Exposure	NIL					
Co-requisites	Not Applicable					

(L – Lecture T – Tutorial P – Practical S – Studio C – Credits)

Course Perspective

This course aims to provide a comprehensive understanding of the concepts, processes, and tools involved in educational measurement and evaluation. It covers the theoretical foundations, various evaluation processes, tools and techniques, and the criteria for constructing and standardizing effective measurement tools. This course equips students with the skills needed to assess educational outcomes and improve teaching and learning processes through effective evaluation

Course Outcomes:

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

CO1. Demonstrate knowledge of the foundational concepts and importance of educational measurement and evaluation.

CO2. Explain the relationship and differences between measurement, assessment, and evaluation.

CO3. Apply different evaluation processes and understand their significance in educational settings.

CO4. Utilize various tools and techniques for educational and psychological evaluation.

CO5. Construct and standardize reliable and valid evaluation tools.

CO6. Apply the steps of test construction and standardization.

Course Content

UNIT I 15 lecture hours

Measurement and Evaluation in Education:

Concept Scope and Need of Educational Measurement and Evaluation, Relation between Measurement, Assessment and Evaluation; Scales of Measurement- Nominal, Ordinal, Interval and Ratio.

UNIT II 15 lecture hours

Evaluation Process:

Evaluation Process: Formative and Summative, Types and steps of evaluation, Norm-Referenced Test and Criterion Referenced Test, Grading and Credit system.

UNIT III 15 lecture hours

Tools and Techniques of Evaluation:

Concept of Tools and Techniques; i) Educational Tools: Essay type and Objective type, Written, Oral, ii) Psychological Tools: Personality Tests (Objective and Subjective), Interest Tests, Intelligence Test, Aptitude Tests - Concept and Types

UNIT IV 15 lecture hours

Criteria of a Good Tool and its Construction:

Characteristics of a good tool, (i) Reliability- Concept and methods of determining reliability, (iii)Validity- Concept and types, (iv) Norms- Concept and types, Steps for construction & standardization of Achievement test

Overall Assessments:

- Midterm Exam covering Units 1-2
- Final Exam covering all units
- Continuous assessment through quizzes, assignments, and classroom participation

Textbooks

- Nawani, D (2015). Re-thinking Assessments in Schools, *Economic & Political Weekly,* Jan 17, Vol L, No. 3.
- Nawani, D (2012), Continuously and comprehensively evaluating children, *Economic & Political Weekly,* Vol. XLVIII, Jan 12, 2013.
- Shepard, L. A. (2000). The role of assessment in a learning culture. *Educational Researcher*.
- Black, P. (2015). Formative assessment – an optimistic but incomplete vision. *Assessment in Education: Principles, Policy & Practice, 22*(1).
- Andrade, H. L. (2013). Classroom assessment in the context of learning theory and research. In J. H. McMillan (Ed.), *Sage handbook of research on classroom assessment*. California, USA: Sage.
- Cumming, J., & Maxwell, G. S. (1999). Contextualizing Authentic Assessment. *Assessment in Education: Principles, Policies and Practices, 6*(2),

Reference Books

- Dweck, C. S. (2006). *Mindset : The new psychology of success.* New York: Ballantine Book
- Broadfoot, P. (1979). *Assessment, schools and society.* London, USA: Methuen & Co.
- Byrnes, D.A. (1989), Attitudes of students, parents and educators toward repeating a grade. In L.A. Shepard & M.L. Smith (eds.), *Flunking grades: Research and policies on retention.* London: Falmer Press.

Open Education Resources

- Peer feedback and evaluation in Sanctuary Schools Dr Sudha Premnath and Ranjani Ranganathan (http://www.ashanet.org/projects-new/documents/701/Peer%20feedback%20and%20evaluation%20in%20Sanctuary%20Schools.pdf)

Semester IV

Course Code	Course Title	L	T	P	S	C
UED104	**Diversity and Inclusive Education**	**3**	**1**	**0**	**0**	**4**
Version 1.0						
Pre-requisites/Exposure	NIL					
Co-requisites	Not Applicable					

(L – Lecture T – Tutorial P – Practical S – Studio C – Credits)

Course Perspective

This course aims to provide a comprehensive understanding of the various forms of diversity present in educational settings, including physical, psychological, socio-cultural, and linguistic diversity. It explores the unique needs and challenges faced by individuals with disabilities and other diverse groups, emphasizing the importance of creating inclusive environments. The course will cover historical and policy perspectives on inclusive education, as well as practical strategies for addressing learners' diverse needs through curriculum adaptation, assessment modifications, and supportive learning environments.

Course Outcomes:

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

CO1. Demonstrate an understanding of the types and characteristics of disabilities and the specific needs of individuals with disabilities.

CO2. Develop an understanding of socio-cultural diversities.

CO3. Analyze the historical and policy developments that have influenced inclusive education. CO4. Develop and implement curriculum adaptations and assessments that accommodate diverse learners.

CO5. Advocate for inclusive practices and policies within educational settings.

CO6. Explain the ways of making education inclusive for all.

Course Content

UNIT I **8 lecture hours**

Understanding physical and psychological and socio-cultural diversity

Concept of Impairment, Disability and Handicap; Types of disabilities - physical disability (Orthopedic, Visual, Auditory), sensory disabilities, cognitive disabilities, Cerebral Palsy, Autism, Learning Disability (definition and their specific problems); Nature, Characteristics and Needs of Individuals with Disability

UNIT II **12 lecture hours**

Understanding socio-cultural diversity

Diversity in socio-economic status, Linguistic diversity, issues of gender and race.

UNIT III 12 lecture hours

Inclusive Education

Concept of social exclusion and inclusion; History of inclusion (paradigm shift from segregation to inclusion), Educational Concessions, Constitutional Provisions, Government Policies, Programs and Acts

UNIT IV 8 lecture hours

Implementing inclusive education

Building an inclusive school (system, structure, practice, and culture); (a) Curricular Issues: Curriculum Adaptation/Modifications, Content Contextualization, Continuous Comprehensive Evaluation (CCE), Alternative Means for Assessment and Evaluation; (b) Learning and Learner Support: Assistive and Adaptive Devices, Information and Communication Technology (ICT), Universal Design in Learning (UDL)

Overall Assessments:

- Midterm Exam covering Units 1-2
- Final Exam covering all units
- Continuous assessment through quizzes, assignments, and classroom participation

Textbooks

- Maanum, J. L. (2009). Federal Special Education Disability Category. The General Educator's Guide to Special Education (3rd Ed). Corwin-A Sage Company, California.

Reference Books

- SSA (2003). Sarva Shiksha Abhiyan: Responding to Children with Special Needs-A Manual for Planning and Implementation of Inclusive Education in Sarva Shiksha Abhiyan. Ministry of Human Resource Development, Government of India. New Delhi: MHRD.
- The Right of Children to Free and Compulsory Education Act (2009). Ministry of Human Resource Development, Government of India. New Delhi: MHRD.

Open Education Resources

- Inclusive education in India - UNESCO Digital Library
- Five principles of inclusive education - Monash Education

Semester V

Course Code	Course Title	L	T	P	S	C
UED105	Guidance and Counselling	**3**	**1**	**0**	**0**	**4**
Version 1.0						
Pre-requisites/Exposure	NIL					
Co-requisites	Not Applicable					

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

CO1 Distinguish between various types of guidance and counselling

CO2 apply principles of providing and organizing guidance program in school

CO3 analyse the vital role of a teacher in providing counselling services to students

CO4 identify various areas, tools and techniques in Guidance and Counselling.

CO5 manage psychological, ethical, inclusive and career issues in school.

CO6 empower differently abled students in areas of career, behavioural and emotional

Course Content

Unit I:

Understanding Guidance

• Guidance: Concept, aims, objectives, functions, principles and ethics

• Role of Guidance in human development and adjustment

• Need & Procedure for (Educational, Psychological and Social)guidance

• Group Guidance: Concept, Need, Significance and Principles

• Role of Teacher in providing guidance and organization of guidance programs in schools.

Unit II:

Understanding Counselling

• Counselling: Meaning, Principles, Approaches (Directive, Non-Directive, Eclectic), Types (Individual, Group)

• Process of counselling (Initial Disclosure, In-Depth Exploration and Commitment to Action)

• Counselling Services for Students: Face to Face and Online
• Counsellor: Qualifications and Qualities (including Skills for Listening, Questioning, Responding, Communicating).

• Differences between Guidance and Counselling

• Professional ethics and code of conduct of Teacher as a Counsellor.

• Role of Guidance and Counselling in Distance Education

Unit III:

Major Concerns in Guidance and Counselling

• Dealing with Depression and Academic Stress

• Psychological Tests: Kinds and their importance for Guidance Program

• Guidance Programme in School: Various Guidance Services in School

▪ Orientation Services

▪ Appraisal Service/Pupil Inventory Service

▪ Occupational Information Service ▪ Counselling Service

▪ Placement Service

▪ Follow up Service

Unit IV:

Guiding students for Career Development

• Meaning and Types of Differently-abled (DA)Students

• Behavioral Problems of Children with Special Needs (CWSN) and of Deprived Bachelor of Education Guru Gobind Singh Indraprastha University 93 Groups (DG)

• Behavior Modification Techniques

• Career Development: Teacher's role in dissemination of Occupational Information. Career Planning, Vocational Training and Placement Opportunities for all students including CWSN and of Deprived Groups (DG) students

• Persons with Disabilities Act 1995, Governmental and Non-governmental Facilities, Ethical and Legal Guidelines,RPwD Act 2016.

Practical Assignments/Field Engagement (Any one):

• Group Guidance – One Career Talk

• Design a Questionnaire to collect information on Students 'Educational, Psychological or Social problems.

• Detailed study of the Guidance and Counselling Services available in a given School

• Prepare a list of the online Guidance and Counselling Services available for students and Teachers in India.

• Enrichment Lectures, Seminars, Workshops, Demonstrations by Experts workingas Guidance and Counsellors in Schools or Organizations working specially in the area of Adolescent Psychology.

• Self-Study and Reflective sessions: Field visits to explore the working of Guidance Institutions School Counsellors, Career Counsellors etc.

Reference Books:

▪ Asch, M. (2000). Principles of Guidance and Counseling, New Delhi: Sarupand Sons.

▪ Bhatia, K. K., (2002). Principles of Guidance and Counseling, Ludhiana: Vinod Publications.

▪ Gibson, R.L. and Mitchell (2008). Introduction to counseling and Guidance.New Delhi: PHI LearningPvt.

▪ Goswami, M. (2016). Essentials of Guidance and Counselling, LakshmiPublishers andDistributors.

▪ Joneja G. K. (1997); Occupational Information in Guidance, NCERTpublication

▪ Sharma, Tara Chand, (2002). Modern Methods of Guidance and Counseling, New Delhi: Sarup and Sons.

▪ Shertzer, Bruce and Stone, Shelly C., (1974). Fundamentals of Counseling,London: HoughtonMissli.

▪ Shirley, A. Harmin and Guilford, E., (1987). Guidance in the Secondary Schools, New Delhi:NCERT.

Semester VI

Course Code	Course Title	L	T	P	S	C
UED106	**Applied Behaviour Analysis in Education**	**3**	**0**	**0**	**0**	**3**
Version 1.0						
Pre-requisites/Exposure	NIL					
Co-requisites	Not Applicable					

(L – Lecture T – Tutorial P – Practical S – Studio C – Credits)

Course Perspective

This course offers a comprehensive introduction to Applied Behavior Analysis (ABA) and its application in educational settings. Students will explore foundational principles, techniques, and strategies of ABA and learn how to implement these methods effectively to improve educational outcomes. Through a combination of theoretical and practical approaches, this course aims to equip future educators, psychologists, and behavior analysts with the skills needed to design, implement, and evaluate ABA interventions in schools.

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Describe the key principles and practices of ABA and its application in education.

CO2. Conduct functional behavior assessments and develop behavior intervention plans.

CO3. Apply ABA techniques to modify classroom behaviors in ethical and effective ways.

CO4. Analyze and interpret data to assess the outcomes of behavior interventions.

CO5. Collaborate effectively with educators, parents, and other stakeholders in applying ABA principles.

CO6. Navigate the ethical considerations involved in applying ABA techniques with diverse populations.

Course Content

UNIT I

Introduction to Applied Behavior Analysis

Definition and scope of Applied Behavior Analysis, Historical development of ABA, Basic principles of behavior (reinforcement, punishment, extinction, stimulus control), Understanding behavior in terms of antecedents, behaviors, and consequences.

Unit II

Assessment and Measurement in ABA

Techniques for behavior assessment (e.g., direct observation, ABC analysis, functional behavior assessment), Design and use of data collection tools, Ethical considerations in behavior assessment

Unit III

Intervention Strategies and Techniques

Selecting behavior-change interventions, Strategies for increasing desirable behaviors (positive reinforcement strategies, shaping, chaining), Strategies for decreasing undesirable behaviors (differential reinforcement, extinction), Generalization and maintenance of behavior changes, Case studies in educational ABA interventions

Unit IV

Ethical and Professional Issues in Educational ABA

Ethical considerations in the use of ABA (consent, privacy, dignity), Professional responsibilities and competencies, Collaboration with parents, teachers, and other professionals, Case studies on ethical dilemmas in educational ABA

Overall Assessments:

- Midterm Exam covering Units 1-2
- Final Exam covering all units
- Continuous assessment through quizzes, assignments, and classroom participation

Textbooks

- Alberto, P. A., & Troutman, A. C. (1990). *Applied behavior analysis for teachers*. (3rd ed). New York: Macmillan.
- Axelrod, S., McElrath, K. K., & Wine, B. (2012). Applied behavior analysis: Autism and beyond. *Behavioral Interventions, 27*, 1–15.
- Murphy, John J. (2008). Solution-Focused Counseling in Schools. USA: American Counseling Association.

Reference Books

- Behavior Analyst Certification Board (BACB) (2014). *Professional and Ethical Compliance Code for Behavior Analysts.*
- Mace, F. C. (1994). The significance and future of functional analysis methodologies. *Journal of Applied Behavior Analysis, 27*(2), 385–392.

Open Education Resources

ABA from A to Z: Behavior Science Applied to 350 Domains of Socially Significant Behavior - PMC (nih.gov)

Semester VII

Course Code	Course Title	L	T	P	S	C

UED107	**Educational Interventions and Teaching Strategies for Intellectual Disability**	**3**	**1**	**0**	**0**	**4**
Version 1.0						
Pre-requisites/Exposure	NIL					
Co-requisites	Not Applicable					

Course Perspective: This course is designed to provide students with a comprehensive understanding of the educational strategies and interventions used to support individuals with intellectual disabilities (ID). Students will explore a range of instructional methods, behavioural supports, and adaptive technologies aimed at enhancing the learning outcomes and daily living skills of students with ID. The course is ideal for future special educators, therapists, and other professionals who will work in inclusive or specialized educational settings.

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

- **CO1** Identify and describe various types of intellectual disabilities and their effects on learning and development.
- **CO2** Design individualized education plans (IEPs) that cater to the specific needs of students with intellectual disabilities.
- **CO3** Implement and modify instructional strategies based on assessment data and best practices in special education.
- **CO4** Utilize a variety of teaching aids and technologies to enhance educational outcomes for students with ID.
- **CO5** Collaborate effectively with families, educators, and other professionals to support the educational needs of students with ID.
- **CO6** Advocate for ethical practices and inclusive policies in education for students with intellectual disabilities.

Course Content

Unit 1: Understanding Intellectual Disability: Definitions and classification of intellectual disabilities, Cognitive, linguistic, social, and emotional characteristics, Impact on family and educational systems

Unit 2: Assessment and Individualized Education Plans (IEPs): Assessment tools and techniques for intellectual disability, Legal frameworks and guidelines for IEPs, Writing effective IEP goals and objectives, Monitoring and evaluating student progress

Unit 3: Instructional Strategies and Classroom Management: Teaching methods for enhancing cognitive and language development, Behavioral interventions and management strategies, Use of technology and adaptive tools in teaching, Strategies for promoting social skills and independence

Unit 4: Collaboration, Ethics, and Advocacy: Collaborative approaches involving families, professionals, and community resources, Ethical considerations in the education of students with intellectual disabilities, Advocacy for inclusive education and community integration

Textbooks and Required Materials:

- Main Textbook: Smith, D.D. (2022). *Teaching Students with Special Needs in Inclusive Settings* (7th Edition). Pearson Education.
- Supplementary readings: Articles, case studies, and current research papers will be provided through the course portal.

Method of Instruction:

- Lectures to introduce foundational concepts and theories
- Interactive seminars to discuss readings and diverse perspectives
- Hands-on workshops and simulations to apply theoretical knowledge in practical settings
- Collaborative group projects to foster teamwork and problem-solving skills

This curriculum is structured to provide students with both the theoretical foundation and practical skills necessary to address the unique educational needs of students with intellectual disabilities, preparing them to be effective and compassionate educators.

Semester-VIII

Course Code	Course Title	L	T	P	S	C
UED108	**Educational Interventions and Teaching Strategies for Learning Disability**	**3**	**1**	**0**	**0**	**4**
Version 1.0						
Pre-requisites/Exposure	NIL					
Co-requisites	Not Applicable					

(L – Lecture T – Tutorial P – Practical S – Studio C – Credits)

Course Perspective

This course is designed to provide students with a comprehensive understanding of the educational strategies and interventions used to support individuals with learning disability. Students will explore a range of instructional methods, behavioural supports, and adaptive technologies aimed at enhancing the learning outcomes and daily living skills of students with LD. The course is ideal for future special educators, therapists, and other professionals who will work in inclusive or specialized educational settings

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

CO1: Evaluate different areas of curriculum development and their relevance to educational practices.

CO2: Students will be able to learn assessments to identify specific learning disabilities and determine the most suitable interventions.

CO3: Design individualized education plans (IEPs) that cater to the specific needs of students with learning disability.

CO4: Modify and adapt teaching methods and materials to meet the diverse needs of students with learning disabilities, ensuring inclusivity and accessibility in the classroom.

CO5: Collaborate effectively with families, educators, and other professionals to support the educational needs of students with ID.

CO6: Assess the effectiveness of different intervention programs and strategies in improving the learning outcomes of children with disabilities

Course Content

UNIT 1 **10 hours**

Learning disability: nature, assessment and curriculum development

1.1Definition, Types and Characteristics

1.2 Tools of Assessment

1.3 Approaches to curriculum development: Developmental, Child centered, Subject based, Holistic and Eclectic

1.4 Curriculum adaptation: curricular and co curricular - concept and process

1.5 Individual Education Plan (IEP) Further Education Plan (FEP) and Life Long Education

UNIT 2 **10 hours**

Remedial Approaches

2.1 Remediation: Concept, Principles and Perspectives

2.2 Behavioral approach

2.3 Cognitive approach

2.4 Multi-sensory approach

2.5 Collaborative teaching approach

UNIT 3 **10 hours**

(A) : Remedial intervention in Cognitive and Meta-cognitive Processes

3.1 Attention and perception – strategies for enhancing arousal, sustenance, attention span and auditory and visual motor perception

3.2 Memory – strategies for enhancing short-term, long-term and sequential memory

3.3 Thinking and reasoning – strategies for enhancing thinking and reasoning skills

3.4 Language – strategies for enhancing receptive and expressive language

3.5 Metacognition – strategies for enhancing metacognition and study skills.

(B): **Remedial intervention in Curricular area / skills**

3.6 Reading

3.7 Writing

3.8 Spelling

3.9 Math

3.10 Social skills

UNIT 4 **10 hours**

Management of children with LD

4.1 Management of students with LD in the inclusive classroom:

Peer tutoring, cooperative learning, team teaching and shadow teaching

4.2 Cognitive Behaviour Modification (CBM)

4.3 Guidance and Counselling:

a) Definition, Scope and Technique

b) Guidance & Counselling for Parents

c) Guidance & Counselling for students with LD

4.4 Professional and Teacher Collaboration

4.5 Community Partnerships

Practicum/ Internal Assignment

• Prepare a FEP for a selected case

• Preparation of remedial program for a deficit area in LD

• Preparation of community awareness material for LD

Reference books

1. Ashlock, P. (1972). Errors Patterns in Competition. A Semi-Programmes Approach. Columbus. Ohio-Charles.

2. Adamson& Adamson. (1979) Handbook of Specific Learning Disabilities, Gardner Press USA

3. Bender, W. N.,(1995)Identification and Teaching Strategies Learning Disabilities, characteristics, identification and coaching categories New York: Allyn bacon

4. Chadha A (2002) A guide to educating children with learning disabilities. New Delhi:Vikas publication.

5. Eddy G.L.(1997 Slow learners : Their psychology & instruction, New Delhi: Discovery Pub.

6. Fernald, G. (1943). Remedial Technique in Basic School Subjects: New York: Mc Graw Hill

7. Hayes and Stevenson (1980)Teaching ED/LD Child, Vol. I to IV, Acropolis Books Ltd.

8. John J L.(1985) Handbook for Remediation of Research Difficulties. Boston: Prantice Hall.

9. Langone, J (1990)Teaching Students with Mild & Moderate Learning problems, New York: Allyn & Bacon, Boston.

10. Lerner, J. W. (1985). Learning Disabilities. Boston: Houghton Mifflin

11. Lerner J. W. and Kliner. F (2005) Learning Disabilities and Related Disorder Characteristics and Teaching Strategies, New York Houghton Mifflin Company, 10th Edition,

12. Mather N and Goldstein S (2001) Learning Disabilities and Challenging Behaviors: A Guide to Intervention and Classroom Management Brookes Publishing Company, 1st edition.

13. Myklebust, H (1983) Progress in Learning Disabilities, Gruene and Stratton, New York.

14. Narayan J (2002). Educating children with learning problems in the primary school. NIMH Secunderabad

Open resources

• Accardo, P.J., Magnusen, C., & Capute, A.J. (2000). Autism: Clinical and Research Issues. York Press, Baltimore.

• American Psychiatric Association. (2000). Diagnostic and Statistical Manual of Mental Disorders (4th ed. TR). Washington DC.

• Bala, M.J. (2004). Methods of Teaching Exceptional Children. Discovery, New Delhi.

• Browning, R. E. (2004). Teaching Students with Behaviour and Severe Emotional Problems. http://www.k12.wa.us/specialed/families/pubdocs/bestpractices.pdf

Psychology (Minor)

I	UPS101	Foundations of Psychology	3	1	0	4
II	UPS102	Fundamentals of Social Psychology	3	1	0	4
III	UPS103	Developmental Psychology	3	1	0	4
IV	UPS104	Counseling and Guidance	3	1	0	4
V	UPS105	Health Psychology	3	1	0	4
VI	UPS106	Environmental Psychology	3	1	0	4
VII	UPS107	Positive Psychology	3	1	0	4
VIII	UPS108	Media Psychology	3	1	0	4

SEMESTER I					
Course Code: UPS101	**Foundations of Psychology**	**L**	**T**	**P**	**C**
Version: 1.0		**3**	**1**	**0**	**4**
Category of Course	Generic Elective/Minor				
Total Contact Hours	60				
Pre-Requisites/ Co-Requisites					

Course Perspective

The Introduction to Psychology course is foundational for students, offering essential insights into human behaviour, thought processes, and emotional responses. It equips students with critical thinking skills, enhancing their ability to analyse and interpret psychological phenomena, which is invaluable in both academic and professional settings. Understanding psychology is crucial for careers in mental health, education, business, and more, as it fosters empathy, communication skills, and problem-solving abilities. By learning how psychological principles apply to real-world situations—such as improving workplace dynamics, enhancing learning experiences, or promoting mental well-being—students gain knowledge that is directly applicable to their everyday lives and future careers.

Course Outcomes (use measurable/action verbs -Bloom's Taxonomy. Good course outcomes are aligned with the PSO, PO and the learning outcomes/goals/educational philosophy of the University)

Upon completion of the course the learner will be able to:

CO1: Reading and demonstrating an understanding of complex ideas by identifying key concepts in the field of psychology

CO 2: Applying theory to practice using problem solving techniques and data analysis

CO 3: Analysing and evaluating research data to produce a well-reasoned argument or position on an issue.

CO 4: Synthesizing data from multiple sources to create and support a solution complex human interactions

CO 5: Designing a comprehensive intervention plan that applies psychological theories and principles to address a real-world issue

Course Content

UNIT I **15 lecture hours**

Introduction

Definition of Psychology, Origin and History of psychology, Areas of Psychology and Psychology as a discipline (as arts and science)

UNIT II **15 lecture hours**

Schools of Psychology

Different schools of psychology such as**,** Structuralism, Functionalism, Gestalt, Behaviourism, Cognitive perspective and Humanistic perspective.

UNIT III **15 lecture hours**

Attention and Emotion

Attention: Definition, and its theory, Emotion: Definition, Basic and Mixed emotion, Theories of Emotion (James Lang theory, Cannon-Bard Theory, Schachter singer theory), constructs affecting attention, constructs affecting emotions

UNIT IV **15 lecture hours**

Assessment in Psychology

Definition of psychological testing, Self-report measures (survey-based approach such as intelligence test, aptitude test etc.), projective techniques, interview method, case study and observation method

Textbooks:

Psychology by Saundra K. Ciccarelli and J. Noland White

Introduction to Psychology by Clifford T. Morgan, Richard A. King, John R. Weisz, and John Schopler

Reference Books

Thinking, Fast and Slow by Daniel Kahneman

The Man Who Mistook His Wife for a Hat by Oliver Sacks

Influence: The Psychology of Persuasion by Robert B. Cialdini

Quiet: The Power of Introverts in a World That Can't Stop Talking by Susan Cain

Open Educational Resources (OER)

Introduction to Psychology" by OpenStax
Psychology - Lumen Learning
NOBA Project: Psychology
Boundless Psychology
MIT OpenCourseWare: Introduction to Psychology

SEMESTER II					
Course Code: UPS102	**Fundamentals of Social Psychology**	**L**	**T**	**P**	**C**
Version: 1.0		**3**	**1**	**0**	**4**
Category of Course	Generic Elective/Minor				
Total Contact Hours	60				
Pre-Requisites/ Co-Requisites					

Course Perspective

The course Fundamentals of Social Psychology explores how individual behavior, thoughts, and feelings are influenced by the actual, imagined, or implied presence of others. It introduces key theories and empirical research on social cognition, group behavior, interpersonal relationships, and social influence. Students will gain a deeper understanding of the social aspects of human behavior and the underlying psychological mechanisms. This course is essential for students interested in fields such as psychology, sociology, marketing, and organizational behavior.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understanding the core principles of social psychology and their applications in real-world settings.

CO 2: Analyzing the influence of social factors such as culture, norms, and roles on individual behavior.

CO 3: Applying key theories of group dynamics to understand leadership, decision-making, and social influence.

CO 4: Evaluating research findings in social psychology to assess their relevance in various contexts.

CO 5: Investigating the psychological mechanisms behind prejudice, stereotypes, and discrimination.

Course Content

UNIT I **15 lecture hours**

Introduction to Social Psychology

Definition, history, and scope of social psychology; Research methods in social psychology: Experimental, correlational, and field studies; Social cognition: Perception, attribution, and cognitive biases; Attitudes and behavior: Theories of attitude formation, change, and persuasion; The self in a social context: Self-concept, self-esteem, and social identity.

UNIT II **15 lecture hours**

Social Influence and Group Dynamics

Social influence: Conformity, compliance, and obedience; Theories of social power and influence: Milgram, Asch, and Zimbardo studies; Group behavior: Norms, roles, groupthink, and group polarization; Leadership styles and their impact on group performance; Intergroup relations: In-group vs. out-group dynamics; Social facilitation and social loafing: Impact of group presence on individual performance.

UNIT III **15 lecture hours**

Interpersonal Relationships and Communication

Theories of interpersonal attraction: Proximity, similarity, and reciprocity;Love and close relationships: Sternberg's Triangular Theory of Love; Social exchange and equity theories in relationships; Communication: Verbal and non-verbal communication, barriers to effective communication; Conflict resolution strategies: Mediation, negotiation, and cooperative problem-solving; Prosocial behavior: Altruism, empathy, and helping behavior.

UNIT IV **15 lecture hours**

Prejudice, Stereotypes, and Social Issues

Prejudice: Causes, consequences, and strategies to reduce it; Stereotyping: Formation, maintenance, and impact on behavior; Discrimination: Types, causes, and social impact; Aggression: Theories, causes, and methods of control; Social psychology of collective behavior: Crowds, mobs, and social movements; Application of social psychology to contemporary issues: Bullying, media influence, and social justice movements.

Learning Experience

The Fundamentals of Social Psychology course will involve a blend of lectures, interactive group discussions, and real-world case studies. Students will engage in role-playing exercises and simulations to understand key social psychological concepts. Case studies will allow for the application of theories to understand social phenomena in various contexts such as organizational behavior, social movements, and interpersonal relationships. Assessments will include reflective essays, group presentations, and research projects aimed at analyzing social psychological processes in everyday life.

Textbooks:

Myers, D. G. (2018). Social Psychology. McGraw-Hill Education.

Aronson, E., Wilson, T. D., & Akert, R. M. (2019). The Social Animal. Worth Publishers.

Reference Books

Hogg, M. A., & Vaughan, G. M. (2018). Social Psychology. Pearson.

Fiske, S. T., & Taylor, S. E. (2017). Social Cognition: From Brains to Culture

SEMESTER III					
UPS103	**Developmental Psychology**	**L**	**T**	**P**	**C**
Version: 1.0		**3**	**1**	**0**	**4**
Category of Course	Minor /Generic Elective				
Total Contact Hours	60				
Pre-Requisites/ Co-Requisites					

Course Perspective

The "Developmental Psychology" course is crucial for students seeking a deep understanding of human growth and development across the lifespan. It contributes to academic and professional development by equipping students with the ability to analyze and interpret developmental stages, from infancy to old age, through various psychological perspectives. This course is essential for careers in psychology, education, healthcare, and social work, as it provides insight into the cognitive, emotional, and social changes individuals experience over time. Students will gain critical skills in observation, assessment, and application of developmental theories to real-world scenarios, such as designing age-appropriate educational programs, supporting mental health in different life stages, or creating interventions that address developmental challenges. The knowledge acquired in this course is directly applicable in professions that involve working with individuals across different age groups, making it an invaluable part of the psychology program.

Course Outcomes (use measurable/action verbs -Bloom's Taxonomy. Good course outcomes are aligned with the PSO, PO and the learning outcomes/goals/educational philosophy of the University)

Upon completion of the course the learner will be able to:

CO1: Analyzing the major developmental milestones across the lifespan, identifying key physical, cognitive, and socio-emotional changes from infancy through old age.

CO 2: Evaluating various developmental theories and research findings, comparing and contrasting their explanations of human growth and behavior.

CO 3: Applying developmental concepts and theories to real-world scenarios, such as designing interventions for developmental challenges or creating educational materials tailored to specific age groups.

CO 4 : Assessing the impact of cultural, social, and environmental factors on development, considering how these factors influence individual differences and life outcomes.

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CO 5: Creating a comprehensive developmental profile of an individual or case study, integrating knowledge from various developmental stages to propose appropriate support strategies or interventions.

Course Content

Unit 1 **No. of Hours: 15**

An Introduction to Lifespan Development

Defining lifespan development, scope, historical development; Research Methods experiments: determining cause and effect measuring developmental change; Earliest Development, Genes and Chromosomes; twin studies, Prenatal Growth and Change, Fertilization, Conception, Stages of the Prenatal Period

Unit II **No. of Hours: 15**

Infancy and Childhood

Emotions in Infancy, Stranger Anxiety and Separation Anxiety, Social Referencing; Intellectual Development- Piagetian Approaches to Cognitive Development, Information Processing in Middle Childhood, Vygotsky's Approach to Cognitive Development, Developing Self, Psychosocial Development, Self-esteem

Unit III **No. of Hours: 15**

Adolescence

Identity Formation, Depression and Suicide, Psychological Difficulties in Adolescence Relationships- family, peers, society, Dating and Sexual Behavior; Sexual Orientation : Heterosexuality, Homosexuality, Bisexuality, and Transsexualism

Unit IV **No. of Hours: 15**

Adulthood

Career Choices, Skill Development and Government Policies in India; Gender and Career Choices, Wellness and Illness of Middle Adulthood, Individual Variations in Health; Personality Development- Normative Crisis versus Life events, Erikson's Stage of Generatively versus Stagnation

Learning Experience

The Introduction to Psychology course, the instructional methods will be dynamic and experiential, incorporating a blend of lectures, discussions, and interactive activities. To ensure that students actively engage with the material, the course will include case studies that require critical analysis and application of psychological concepts. Hands-on learning opportunities, such as role-playing exercises, will allow students to experience psychological theories in practice.

Group work will be a key component, fostering collaboration and peer learning as students work together on projects and presentations. Assignments will be designed to reinforce learning and encourage deeper exploration of topics, with a focus on real-world applications of psychological principles.

Technology will be integrated into the course through the use of online discussion boards, multimedia resources, and virtual simulations that provide immersive learning experiences. Assessments will include a mix of written assignments, group presentations, and experiential projects, allowing students to demonstrate their understanding in varied formats.

Students will receive continuous support and feedback from the course instructor, who will be available for additional help outside of class hours. Peer feedback will also be encouraged, particularly during group activities and peer review sessions, helping students refine their ideas and improve their work through collaborative learning.

Textbooks:

Development Across the Lifespan, Feldman Robert S. & Babu Nandita

Introduction to Psychology by Clifford T. Morgan, Richard A. King, John R. Weisz, and John Schopler

Reference Books

Developmental Psychology: A Life Span Approach, Hurlock E. B.

Human Development, Papalia, Diane E., and Olds Sally Wendkas.

Open Educational Resources (OER)

Introduction to Psychology" by OpenStax
Psychology - Lumen Learning
NOBA Project: Psychology
Boundless Psychology

SEMESTER IV					
Course Code: UPS104	Counselling and Guidance	**L**	**T**	**P**	**C**
Version: 1.0		**3**	**1**	**0**	**4**
Category of Course	Discipline Specific Course				
Total Contact Hours	60				
Pre-Requisites/ Co-Requisites					

Course Perspective

The course on Counselling and Guidance explores the theories, techniques, and applications of counselling in various settings. Students will learn about the processes involved in providing professional guidance to individuals across different life stages, including children, adolescents, and adults. The course covers key therapeutic approaches, ethical considerations, and the development of practical counselling skills. This course is essential for those pursuing careers in mental health, education, social work, and organizational psychology.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understand the core concepts, theories, and approaches of counselling and guidance.
CO2: Apply various counselling techniques to address issues related to personal, academic, and career development.
CO3: Conduct client assessments and develop counselling plans tailored to individual needs.
CO4: Evaluate ethical standards in the counselling profession and apply them in practice.
CO5: Explore the role of guidance in educational and career contexts.
CO6: Demonstrate practical counselling skills through role-plays and case studies.

Course Content

UNIT I **15 lecture hours**

Introduction to Counselling and Guidance

Definition, nature, and scope of counselling and guidance; The role of a counsellor: Skills, qualities, and professional responsibilities; Theories of counselling: Psychoanalytic, humanistic, cognitive-behavioral, and eclectic approaches; Types of counselling: Individual, group, career, and crisis counselling; The process of counselling: Assessment, goal setting, intervention, and termination; Ethical considerations in counselling and guidance: Confidentiality, boundaries, and informed consent.

UNIT II **15 lecture hours**

Counselling Techniques and Approaches

Building a therapeutic relationship: Rapport, trust, and empathy; Counselling skills: Active listening, reflection, questioning, and summarization; Techniques in counselling: Role-play, cognitive restructuring, behavior modification, and mindfulness; Crisis intervention strategies: Dealing with trauma, grief, and emergency situations; Group counselling: Dynamics, advantages, and techniques for effective group therapy; Case studies of different counselling approaches applied in various contexts.

UNIT III **15 lecture hours**

Guidance in Educational and Career Settings

Educational guidance: Role in academic success, dealing with learning difficulties, and special education; Career guidance and counselling: Assessing interests, skills, and career aspirations; Career development theories: Holland's RIASEC model, Super's life-span theory; Use of psychometric tools in career guidance: Interest inventories, aptitude tests, and personality assessments; The role of counsellors in educational institutions: Addressing student needs and providing support; Case studies: Career guidance in schools, colleges, and organizational settings.

UNIT IV **15 lecture hours**

Counselling Special Populations and Ethical Issues

Counselling children and adolescents: Addressing developmental and behavioral challenges. Counselling in multicultural settings: Cultural competence and diversity in counselling practice; Counselling for special populations: Individuals with disabilities, mental health issues, and the elderly; Ethical dilemmas in counselling: Dual relationships, handling confidentiality breaches, and managing boundaries; Supervision in counselling: Importance of professional guidance for counsellors; Future trends in counselling: Online counselling, teletherapy, and advancements in mental health technology.

Learning Experience

The Counselling and Guidance course will involve a mix of theoretical lectures, practical demonstrations, and interactive role-playing exercises. Students will develop core counselling skills through supervised practice and feedback. Case studies will be used to explore real-world counselling scenarios in diverse settings, including educational institutions, mental health clinics, and corporate environments. Practical assessments will involve students participating in mock counselling sessions, allowing them to apply their skills in simulated environments. Ethical dilemmas and multicultural sensitivity will be key themes throughout the course.

Textbooks:

Corey, G. (2016). *Theory and Practice of Counseling and Psychotherapy.* Cengage Learning.

Gladding, S. T. (2018). *Counseling: A Comprehensive Profession.* Pearson.

Reference Books

Nelson-Jones, R. (2015). *Practical Counselling and Helping Skills.* Sage.

Egan, G. (2019). *The Skilled Helper: A Problem-Management and Opportunity-Development Approach to Helping.* Cengage Learning.

SEMESTER V					
UPS105	**Health Psychology**	**L**	**T**	**P**	**C**
Version: 1.0		**3**	**1**	**0**	**4**
Category of Course	**Generic Elective/ Minor**				
Total Contact Hours	**60**				
Pre-Requisites/ Co-Requisites					

Course Perspective

The Health Psychology course explores the psychological, behavioral, and social factors that influence health and illness. It examines the role of psychology in the prevention and treatment of disease, the promotion of health, and the improvement of healthcare systems. Students will learn about the biopsychosocial model of health, stress management, health behavior change, and how psychological principles are applied to improve health outcomes. This course is vital for those pursuing careers in healthcare, counseling, and psychology.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understand the biopsychosocial model of health and illness and its application to health psychology.
CO2: Analyze the psychological and behavioral factors contributing to physical health and illness.
CO3: Apply theories of health behavior change to improve individual and community health outcomes.
CO4: Explore the role of stress and coping mechanisms in health and illness.
CO5: Examine the impact of psychological factors on chronic illness, pain, and healthcare utilization.
CO6: Critically evaluate health promotion interventions and the role of health psychologists in healthcare settings.

Course Content

UNIT I **15 lecture hours**

Introduction to Health Psychology

Definition and scope of health psychology; The biopsychosocial model: Integration of biological, psychological, and social factors in health; Historical perspectives on health and illness: From mind-body dualism to the holistic approach; Research methods in health psychology: Experimental, correlational, and longitudinal studies; The role of health psychologists in healthcare: Prevention, intervention, and policy advocacy; Ethical issues in health psychology research and practice.

UNIT II **15 lecture hours**

Stress, Coping, and Health

Theories of stress: General adaptation syndrome, transactional model of stress; Physiological responses to stress: The role of the autonomic nervous system and endocrine system; Psychological responses to stress: Cognitive appraisal, perceived control, and resilience; Coping mechanisms: Problem-focused and emotion-focused coping, and their impact on health; The relationship between stress and illness: Cardiovascular disease, immune function, and mental health; Stress management techniques: Relaxation training, biofeedback, mindfulness, and cognitive-behavioral therapy (CBT).

UNIT III **15 lecture hours**

Health Behaviors and Interventions

Health-compromising behaviors: Smoking, alcohol consumption, poor diet, and physical inactivity; Theories of health behavior change: Health Belief Model, Theory of Planned Behavior, and Transtheoretical Model; Designing health interventions: Targeting individual, group, and community health behaviors; Preventive healthcare: Screening programs, immunizations, and health education campaigns; Health promotion strategies: Reducing risk factors and enhancing protective factors; Role of health psychology in chronic disease management: Diabetes, hypertension, and asthma.

UNIT IV **15 lecture hours**

Chronic Illness, Pain, and Healthcare Systems

Psychological aspects of chronic illness: Impact on quality of life and mental health; Pain perception and management: Theories of pain, psychological factors influencing pain, and pain treatment; Patient-practitioner relationships: Communication, trust, and adherence to treatment; Psychological interventions for chronic illness and pain management: CBT, acceptance and commitment therapy (ACT), and biofeedback; Healthcare systems and health psychology: Improving patient outcomes through integrated care; Cultural and societal influences on health and healthcare access

Learning Experience

The Health Psychology course will be delivered through interactive lectures, case studies, and group discussions. Students will engage in role-plays and practical exercises to understand the psychological aspects of health and illness. They will analyze case studies on stress management, chronic illness, and health behavior change interventions. Students will also design health promotion programs targeting specific health issues. Assessments will include

project work, reflective essays, and exams that integrate theoretical understanding with practical application.

Textbooks:

1. Taylor, S. E. (2017). *Health Psychology.* McGraw-Hill Education.
2. Sarafino, E. P., & Smith, T. W. (2020). *Health Psychology: Biopsychosocial Interactions.* Wiley.

Reference Books

1. Brannon, L., & Feist, J. (2019). *Health Psychology: An Introduction to Behavior and Health.* Cengage Learning.
2. Ogden, J. (2019). *Health Psychology: A Textbook.* Open University Press.

SEMESTER VI					
UPS106	**ENVIRONMENTAL PSYCHOLOGY**	**L**	**T**	**P**	**C**
Version: 1.0		**3**	**1**	**0**	**4**
Category of Course	Discipline Specific Elective				
Total Contact Hours	60				
Pre-Requisites/ Co-Requisites					

Course Perspective

Environmental Psychology explores the dynamic relationship between individuals and their physical environment. This course examines how natural and built environments impact human behavior, well-being, and cognition. Key topics include environmental stress, place attachment, sustainable behavior, and urban design. The course is ideal for students interested in the interdisciplinary study of human behavior in relation to ecology, sustainability, and urban planning, offering both theoretical frameworks and practical applications.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understand the key theories and concepts in environmental psychology and their application to human behavior.

CO2: Analyze the effects of physical environments on psychological well-being and behavior.

CO3: Explore the role of environmental design in promoting sustainability and improving quality of life.

CO4: Examine the impact of environmental stressors, such as noise and crowding, on behavior and mental health.

CO5: Evaluate the psychological factors involved in pro-environmental behavior and sustainable practices.

CO6: Apply environmental psychology principles to issues such as urban planning, conservation, and climate change mitigation.

Course Content

UNIT I **15 lecture hours**

Introduction to Environmental Psychology

Definition and scope of environmental psychology. Theoretical frameworks: Behavior settings theory, ecological psychology, and transactional models. Research methods in environmental psychology: Field studies, laboratory experiments, and surveys. Person-environment fit Environmental perception and cognition: How individuals perceive and mentally represent their surroundings. Place identity and place attachment: The emotional and cognitive bonds people form with specific places.

UNIT II **15 lecture hours**

Environmental Stressors and Human Behavior

Environmental stress: Definition and impact on behavior and mental health. Types of environmental stressors: Noise, crowding, pollution, and climate change. The impact of natural disasters on psychological well-being. Coping mechanisms and adaptation strategies for dealing with environmental stress. The effects of noise pollution and crowding on cognitive performance and social behavior. Case studies: Psychological impact of extreme environmental conditions, such as heatwaves and urban pollution.

UNIT III **15 lecture hours**

Sustainable Behavior and Environmental Conservation

The psychology of sustainable behavior: Theories of behavior change (e.g., Theory of Planned Behavior, Value-Belief-Norm theory). Factors influencing pro-environmental behavior: Attitudes, values, norms, and knowledge. Interventions to promote sustainable practices: Recycling, energy conservation, and water use reduction. Environmental education and communication strategies for encouraging sustainable behavior. Social dilemmas and collective action: Overcoming barriers to environmental responsibility. Role of environmental psychologists in promoting conservation and sustainability

UNIT IV **15 lecture hours**

Applications of Environmental Psychology in Urban Planning and Design

The role of environmental psychology in urban design and architecture.

Designing spaces for well-being: Green spaces, walkability, and restorative environments.

The impact of urbanization on mental health and social behavior.

The concept of biophilia: Integrating nature into urban environments.

Climate change and its psychological impacts: Promoting climate adaptation and resilience.

Future directions in environmental psychology: Smart cities, sustainable architecture, and community building.

Learning Experience

The Environmental Psychology course will include interactive lectures, case studies, and group discussions. Students will explore the psychological impact of different environments through field trips and practical projects, such as designing environmentally sustainable spaces. Group projects will allow students to apply environmental psychology principles to real-world issues, such as urban design or promoting sustainable behavior. Assessments will involve research papers, reflective essays, and presentations focused on environmental stressors, sustainability, and urban planning.

Textbooks:

Gifford, R. (2014). Environmental Psychology: Principles and Practice. Optimal Books.

Steg, L., van den Berg, A. E., & de Groot, J. I. M. (2019). Environmental Psychology: An Introduction. Wiley.

Reference Books

Clayton, S., & Myers, G. (2015). *Conservation Psychology: Understanding and Promoting Human Care for Nature.* Wiley.

Bechtel, R. B., & Churchman, A. (2002). *Handbook of Environmental Psychology.* Wiley.

SEMESTER VII					
UPS107	**Positive Psychology**	**L**	**T**	**P**	**C**
Version: 1.0		**3**	**1**	**0**	**4**
Category of Course	Generic Elective/Minor				
Total Contact Hours	60				
Pre-Requisites/ Co-Requisites					

Course Perspective

Positive Psychology focuses on the scientific study of human strengths, well-being, and flourishing. This course explores topics such as happiness, resilience, optimism, and mindfulness, aiming to provide students with tools and techniques for enhancing life satisfaction and psychological well-being. It integrates theoretical models with practical applications in personal growth, health, and work contexts. This course is ideal for students interested in psychology, counseling, coaching, and personal development.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understand the key concepts and theories of positive psychology.
CO2: Analyze the role of strengths, virtues, and well-being in human development.
CO3: Apply positive psychology interventions to enhance happiness, resilience, and well-being.
CO4: Explore the impact of mindfulness, gratitude, and optimism on mental health.
CO5: Evaluate the relevance of positive psychology in educational, organizational, and therapeutic settings.
CO6: Use techniques from positive psychology to improve personal growth and interpersonal relationships.

Course Content

UNIT I **15 lecture hours**

Introduction to Positive Psychology

Definition and scope of positive psychology.
Historical roots: From humanistic psychology to the positive psychology movement.
Key concepts: Happiness, well-being, and flourishing.
The PERMA model of well-being: Positive emotions, engagement, relationships, meaning, and accomplishment.
Research methods in positive psychology: Measuring well-being, happiness, and life satisfaction.
The role of positive psychology in mental health and personal growth.

UNIT II **15 lecture hours**

Strengths and Virtues

Understanding strengths: The role of personal strengths in well-being.
Classification of strengths: VIA Character Strengths and Gallup StrengthsFinder.
Developing and applying strengths in daily life.
The role of virtues: Wisdom, courage, humanity, justice, temperance, and transcendence.
Strengths-based interventions: Identifying, nurturing, and leveraging strengths in various life contexts.
Case studies on the application of strengths and virtues in personal development.

UNIT III **15 lecture hours**

Positive Emotions and Cognitive Processes

The broaden-and-build theory of positive emotions.
The role of optimism and hope in psychological resilience.
Gratitude: Enhancing well-being through gratitude practices.
The science of happiness: Exploring factors that contribute to lasting happiness.
Mindfulness and positive psychology: The impact of mindfulness on emotional regulation and well-being.
Cognitive restructuring in positive psychology: Enhancing positive thinking patterns.

UNIT IV **15 lecture hours**

Applications of Positive Psychology

Positive psychology in education: Enhancing student engagement, resilience, and achievement.

Positive psychology in the workplace: Employee well-being, engagement, and positive leadership.

Positive psychotherapy: Using positive interventions in therapeutic settings.

Techniques for promoting well-being: Meditation, gratitude journaling, and strengths-based activities.

Role of positive psychology in promoting physical health and longevity.

Future directions in positive psychology: Emerging trends and potential challenges.

Learning Experience

The Positive Psychology course will include interactive lectures, group discussions, and experiential learning exercises. Students will engage in activities such as strengths assessments, gratitude journaling, and mindfulness practices. Case studies will help illustrate the practical application of positive psychology interventions in various contexts such as education, work, and therapy. Assessments will include reflective essays, project work, and presentations focused on applying positive psychology principles to real-life situations.

Textbooks:

Seligman, M. E. P. (2011). *Flourish: A Visionary New Understanding of Happiness and Well-being.* Free Press.

Peterson, C. (2006). *A Primer in Positive Psychology.* Oxford University Press.

Reference Books

Lopez, S. J., Pedrotti, J. T., & Snyder, C. R. (2018). *Positive Psychology: The Scientific and Practical Explorations of Human Strengths.* Sage.

Lyubomirsky, S. (2008). *The How of Happiness: A New Approach to Getting the Life You Want.* Penguin Press.

SEMESTER VIII					
UPS108	**Media Psychology**	**L**	**T**	**P**	**C**
Version: 1.0		**3**	**1**	**0**	**4**
Category of Course	Discipline Specific Elective				
Total Contact Hours	60				
Pre-Requisites/ Co-Requisites					

Course Perspective

Media Psychology explores the psychological impact of media, including traditional media (television, radio) and digital platforms (social media, online content). This course examines how media influences cognition, emotions, behavior, and social interactions. Topics include media effects, audience analysis, the role of media in shaping identity, and the use of media for educational, therapeutic, and marketing purposes. This course is ideal for students interested in psychology, communication studies, media, and advertising.

Course Outcomes

Upon completion of the course the learner will be able to:

CO1: Understand the key concepts and theories of media psychology and its influence on behavior and cognition.
CO2: Analyze how different forms of media affect individual and group attitudes, perceptions, and behavior.
CO3: Explore the role of media in shaping identity, social norms, and culture.
CO4: Evaluate the psychological impact of media consumption on mental health and well-being.
CO5: Examine the use of media in educational, therapeutic, and marketing contexts.
CO6: Apply media psychology principles to the design and evaluation of media content for positive psychological outcomes.

Course Content

UNIT I **15 lecture hours**

Introduction to Media Psychology

Definition and scope of media psychology.
Historical development of media psychology as a field.

Key theories in media psychology: Uses and Gratifications Theory, Cultivation Theory, Social Learning Theory.

Media effects on cognition: Perception, memory, and information processing.

Research methods in media psychology: Surveys, experiments, content analysis, and ethnographic studies.

Ethical considerations in media research and practice.

UNIT II **15 lecture hours**

Media Influence on Attitudes, Behavior, and Identity

The impact of media on attitudes: Persuasion, framing, and agenda-setting.

Media and behavior: Theories of media influence on aggression, prosocial behavior, and socialization.

The role of media in identity formation: Gender roles, body image, and social identity.

The psychology of social media: Self-presentation, social comparison, and the effects on self-esteem.

Media consumption patterns: Habit formation, addiction, and media multitasking.

Case studies: Media portrayal of violence, gender stereotypes, and political messaging.

UNIT III **15 lecture hours**

Media, Mental Health, and Well-Being

The relationship between media exposure and mental health: Anxiety, depression, and stress.

The impact of social media on adolescent development and well-being.

Positive media: The role of media in promoting mental health and resilience.

Media interventions for behavior change: Public health campaigns, educational content, and digital therapeutics.

Cyberbullying and online harassment: Psychological effects and intervention strategies.

Role of media in shaping societal norms: Social justice, inclusivity, and cultural diversity.

UNIT IV **15 lecture hours**

Applications of Media Psychology

Media psychology in marketing and advertising: Consumer behavior, branding, and persuasion techniques.

The use of media in education: E-learning, gamification, and interactive media.

Media and therapy: The use of virtual reality, apps, and online counseling in therapeutic contexts.

Designing media content for positive psychological outcomes: Social messaging, interactive platforms, and community building.

Future trends in media psychology: Artificial intelligence, virtual environments, and augmented reality.

Ethical and legal considerations in media content creation and distribution.

Learning Experience

The Media Psychology course will include lectures, case studies, and hands-on projects where students will analyze media content and its psychological impact. Students will engage in discussions on how media influences behavior, identity, and societal norms. They will also design media interventions and evaluate existing media campaigns. Assessments will include research projects, media content analysis, reflective essays, and group presentations aimed at bridging theory with practical applications.

Textbooks:

Giles, D. (2010). *Psychology of the Media.* Palgrave Macmillan.

Dill, K. E. (2013). *The Oxford Handbook of Media Psychology.* Oxford University Press.

Reference Books

Bryant, J., & Oliver, M. B. (Eds.). (2009). *Media Effects: Advances in Theory and Research.* Routledge.

Valkenburg, P. M., & Piotrowski, J. T. (2017). *Plugged In: How Media Attract and Affect Youth.* Yale University Press.