

OPEN ELECTIVE COURSES

Sl. No.	Course Code	Course Name
1	UG 21 OE 001	Graphic Design
2	UG 21 OE 002	Basics of Data Science
3	UG 21 OE 003	Introduction to Film Criticism
4	UG 21 OE 004	Cricket Culture, and Media
5	UG 21 OE 005	Media, Technology and Society
6	UG 21 OE 006	Sustainable development goals
7	UG 21 OE 007	Youth, Gender and Identity
8	UG 21 OE 008	Stories as Therapy
9	UG 21 OE 009	Development Studies
10	UG 21 OE 010	Introduction to Social Work
11	UG 22 OE 011	Basic Programming Skills
12	UG 22 OE 012	Contemporary Indian Economy
13	UG 22 OE 013	Digital Design using HDL
14	UG 22 OE 014	Environment and Public Health in Contemporary Society
15	UG 22 OE 015	Environment and Sustainable Agriculture
16	UG 22 OE 016	Foundation of Behaviour

17	UG 22 OE 017	Globalisation and World Politics
18	UG 22 OE 018	Human Rights
19	UG 22 OE 019	Indian Polity Issues and Challenges
20	UG 22 OE 020	Machine Learning using R Programming
21	UG 22 OE 021	Office Automation
22	UG 22 OE 022	Psychology of Health and Wellbeing
23	UG 22 OE 023	Public Policy and Good Governance
24	UG 22 OE 024	Public Policy in Indian Context
25	UG 22 OE 025	Python Programming
26	UG 22 OE 026	Sociology for Everyday Life
27	UG 22 OE 027	International Tax and Technology - I
28	UG 22 OE 028	International Tax and Technology -II
29	UG 22 OE 029	Understanding Inequalities- An anthropological Perspective
30	UG 22 OE 030	Warring with Words - The Art of Argumentation & Creative Thinking
31	UG 22 OE 031	Introduction to Behavioural Economics
32	UG 22 OE 032	Business Management
33	UG 22 OE 033	Introduction to Finance
34	UG 22 OE 034	Economic Thinkers and their Contributions

UG 21 OE 001: GRAPHIC DESIGN

COURSE OBJECTIVES:

The course is designed to enable students to use the tools of professional design software, to appraise and critique designs based on the visual qualities and technical skills relevant to graphic design.

Module 1: Introduction to Graphic Design

15 Hours

Introduction to Graphic Design - Evolution of Graphic Design; Design - definition, design with a purpose, design as a communication tool, language and grammar of design, visual language and creativity; elements of design: line, shape, form and space, negative space, volume and mass, value, colour, texture.

Module 2: Design Principles and Process

15 Hours

Design Principles and Process - balance, contrast, harmony, rhythm, proportion, emphasis, scale and unity. Focal Point and Visual Hierarchy; movement; Design process - problem definition, information gathering, ideation, design solution and implementation; message presentation from concept to visual: thumbnails to roughs to comprehensives and output.

Module 3: Colour Fundamentals and Typography

15 Hours

Colour Fundamentals and Typography: Defining colour, identity of colour, chromatic interaction; colour systems; emotions and messages. Colour and unity, colour and variety, warm and cool colours, colour and design. Typography - classification groups and subgroups, families, fonts; serifs, sans serifs, hand formed and specialised; craft of typography - point system, selection and use of fonts - type specification.

Skill Development:

(These activities are only indicative, the faculty members can innovate)

1. Design by using basic shapes
2. Exercises on creating perspective
3. Design by using colour
4. Design an image to create a story for social media.
5. Design Process - Research to Design.
6. Exercises on creating thumbnails
7. Exercises on using calligraphy
8. Submit a drawing and design portfolio at the end of the semester.

COURSE OUTCOMES:

After completion of the course the students should be able to:

1. Use the tools of professional design software
2. Analyze and critique designs based on the visual qualities and technical skills relevant to graphic design.
3. Create designs that communicate and articulate their ideas.

Books for Reference:

- ❖ Baird, R. N., Turnbull, A.T. & McDonald Duncan. (1987). *The Graphic Communication*. Canada: Holt, Rinehart and Winston.
- ❖ Crow, W. C.(1986). *Communication Graphics*. New Jersey: Prentice-Hall
- ❖ Dodson, M. & Palmer, J. (1995). *Design and Aesthetics – A Reader*. London: Routledge. Hashimoto, A. & Clayton, M. (2009). *Visual Design Fundamentals: A Digital Approach*, 3rd Ed. Boston: Course Technology.
- ❖ Meggs, P. B. (1992). *Type and Image: The Language of Graphic Design*. New York: John Wiley and Sons Inc.
- ❖ Samara, T. (2014). *Design Elements: A Graphic Design Manual*. 2nd Ed. Massachusetts: Rockport Publishers.

UG 21 OE 002: BASICS OF DATA SCIENCE

COURSE OBJECTIVES:

The course aims to equip students with the fundamental concepts of data science along with machine learning and data visualization pertaining to business data processing.

Module 1: Preparing and Gathering Data and Knowledge 9 Hours

Philosophies of data science - Data science in a big data world - Benefits and uses of data science and big data - facts of data: Structured data, Unstructured data, Natural Language, Machine generated data, Audio, Image and video streaming data - The Big data Eco system: Distributed file system, Distributed Programming framework, Data Integration frame work, Machine learning Framework, NoSQL Databases, Scheduling tools, Benchmarking Tools, System Deployment, Service programming and Security.

Module 2: The Data Science Process 9 Hours

Overview of the data science process- Retrieving data -Data Preparation: Cleansing, integrating, and transforming data - Exploratory data analysis - Data Modeling: Model and variable selection, Model execution, Model diagnostic and model comparison - Presentation and automation: Presenting data, Automating data analysis.

Module 3: Machine Learning 9 Hours

Application for machine learning in data science- Tools used in machine learning- Modeling Process - Training model - Validating model - Predicting new observations -Types of machine learning Algorithm: Supervised learning algorithms, unsupervised learning algorithms.

Module 4: Visualization

9 Hours

Introduction to data visualization – Data visualization options
– Filters – Map Reduce – Dashboard development tools.

Module 5: Case Studies

9 Hours

Distributing data storage and processing with frameworks – Case study: e.g., Assessing risk when lending money.

Skill Development:

(These activities are only indicative, the faculty members can innovate)

1. Data Cleansing on Excel [Removal of Duplicate data, Removal and filling the missing values (Interpolation) through scientific method, Data entry error correction, Data Table joining etc.
2. Understanding the Impact of Data entry error on the Model using Excel.
3. Installation of Python (Anaconda Navigator and Spyder), practically understanding the usage of basic packages and modeling using Basic Conditional statements and Mathematical operations.
4. Data Visualization and Dashboard development on Excel.

COURSE OUTCOMES:

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

1. Explain the fundamental concepts of data
2. Illustrate the steps involved in the fundamental concepts of data science process
3. Apply the Machine Learning in Data Science Process.
4. Develop Dashboard development tools in the context of large data & Data Visualization
5. Evaluate the implement of the case study function in the context of Data Science structure

Books for Reference:

- ❖ *Introducing Data Science, Davy Cielen, Arno D. B. Meysman and Mohamed Ali, Manning Publications, 2016.*
- ❖ *Think Like a Data Scientist, Brian Godsey, Manning Publications, 2017.*
- ❖ *Doing Data Science, Straight Talk from the Frontline, Cathy O'Neil, Rachel Schutt, O' Reilly, 1st edition, 2013.*
- ❖ *Mining of Massive Datasets, Jure Leskovec, Anand Rajaraman, Jeffrey David Ullman, Cambridge University Press, 2nd edition, 2014*
- ❖ *An Introduction to Statistical Learning: with Applications in R, Gareth James, Daniela*
- ❖ *Witten, Trevor Hastie, Robert Tibshirani, Springer, 1st edition, 2013*

UG 21 OE 003: AN INTRODUCTION TO FILM CRITICISM

COURSE OBJECTIVES:

The course equips students to describe the artistic nature of cinema and develop a familiarity with the history of cinema and scrutinize the authorial position of a film director and identify the stylistic and thematic development in the film texts authored by the directors.

Module 1: The Moving Image – Cinema as Art **10 Hours**

Readings from Film Art: An Introduction by David Bordwell and Kristin Thompson Readings from the Story of Film by Mark Cousins

Module 2: Film Auteur – Director as Author **20 Hours**

Stanley Kubrick – Paths of Glory, Dr. Strange love, Full Metal Jacket, Spartacus
Spike Lee – Do the Right Thing, Clockers, Malcolm X, Mo’ Better Blues

Emir Kusturica – Underground, Life is a Miracle, Black Cat White Cat, and Time of the Gypsies AsgharFarhadi, Jafar Panahi, Nadine Labaki, Ava DuVernay, AgnieszkaHolland, Girish Karnad, Girish Kasaravalli, Shyam Benegal, Satyajit Ray, Deepa Mehta, Akira Kurosawa, Hayao Miyazaki, Alfred Hitchcock, Pa Ranjit, Nagaraj Manjule, Anurag Kashyap, Martin Scorsesse, Christopher Nolan, Wes Anderson, Alfonso Cuaron, Orson Wells, Charlie Chaplin

Module 3: Deep Focus – Reading a film **5 Hours**

Pan’s Labyrinth (Guillermo Del Toro), Aadukalam (Vetri Maran)

Module 4: The Cinephile– World Cinema, Film Festivals / Culture and the Internet **5 Hours**

Readings from The Film Festival Reader edited by Dina Iordinova-Bengaluru International Film Festival as a case study

Module 5: Perspective – Writing about cinema **5 Hours**

Roger Ebert & Pauline Kael

BFI’s Sight & Sound, Senses of Cinema, Cineaste

Skill Development:

(These activities are only indicative, the faculty members can innovate)

1. Students are expected to write 1500 words essay by choosing the films of a director or a studio and exploring common themes, styles, concerns or the socio political contexts in which the films are set. In case you choose the works of a particular director you are expected to track the influences on his/her style and identify some distinctive features of the set of films that you will be analysing. In case you choose to look at a set of films produced by a studio (Studio Ghibli or the Marvel films) you are expected to analyse the films by looking the larger socio-economic forces driving the interest in narrative styles and images of heroes among the film going public. In both cases you are expected to identify the importance of the distinctive styles of particular directors or studios and the relationship between the audience and the director/studio.
2. Students are expected to write 1500 words essay exploring particular themes in films like war, migration, love, violence, humour, action, city life, etc. Students can draw from films belonging to different eras or from different languages. However, students need to identify a common connecting thread in the selected movies like common influences, references to a particular historical event or a fictional story or to a personal experience. A minimum of four films has to be selected for analysis. The essay should give a brief summary of the movie and then proceed to the analysis. Summaries can be given when the mention of that film is made. Students are expected to draw on the classroom lectures, readings and personal experiences for writing this essay.
3. Join or create a film club and screen a minimum of 10 movies and gather the experience of watching movies as a group. The experience can be gathered in the form of interviews. Audio recordings can be edited and turned into podcasts and video

recordings can be edited and posted as Vlogs. You should elicit responses from the members of the film club that covers their reason for being part of a film club, the kind of films they like, the kind of relationships they have developed by being part of film clubs and what does watching cinema mean to them. The edited audio/video clip should have a background commentary and should be organized in a proper manner so as to provide a coherent perspective of the experience gathered. Students can be creative and explore other questions and invent novel ways of documenting cinema experience.

4. Attend an international film festival and write a personal essay of 1000 words on the experience of the film festival. Include the conversations you had with others during the festival, behaviour of the audience, reactions of audience to particular films, your own personal favourites. Explore the idea of film festivals being a 'melting pot' of different cultures in the personal essay.
5. Attend movies of all kinds of genres and document the experience of the audience. Find out why different people like different kind of cinemas, what draws them to the big screens, what is their take away from the kind of films they watch and how do they enjoy the theatre experience. The experience can either be video recorded (only if permission is sought from the person) or written down. If it is video recording then the recording has to be edited and a background commentary has to be added to make sense of the video. The whole video should be coherent and provide the viewer with some understanding of your interpretation of the audience responses. If you decide to write then it has to be an essay of 1000 words long.
6. Students will be divided into groups each consisting of seven members and each group will have to choose a theme pertaining to history of cinema and put up a stall exhibiting that particular theme. The exhibit can involve newspaper clippings, video screening through laptops, paintings, posters, cut-outs, arrangements out of cardboard boxes.

7. Plastic or any harmful chemicals cannot be used. The exhibit should effectively convey the theme and pique the curiosity of the visitors. Out of the 10 marks allotted five marks will be calculated based on visitors' perception and the remaining five by a panel of teachers who will visit the exhibits. Creativity and imaginative thinking will be rewarded.

COURSE OUTCOMES:

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

1. 1. Explain the artistic nature of cinema and develop a familiarity with the history of cinema
2. Analyse the authorial position of a film director and identify the stylistic and thematic development in the film texts authored by the directors
3. Develop skills of critical textual reading of a film text by invoking the socio-cultural and political context of the text
4. Illustrate the cinema culture fostered by film festivals and analyze the politics of film festivals
5. Develop skills of writing about cinema under categories like film criticism, cultural analysis or personal essay

UG 21 OE 004: CRICKET CULTURE AND MEDIA

COURSE OBJECTIVES:

The course aims to familiarize students with a general overview of the bond between sport and media and equip them with the much-required ability to observe, critically analyse and understand the current developments in the society and also appraise the challenges offered by the consumer driven world.

Module 1: Cricket as the Synecdoche of Indian Culture Time

10 Hours

Cricket in India involves excessive emotion of the participants and spectators and it has always been highly instrumental in establishing a sense of unconditional togetherness. The game very well accommodates the Indian spirit of vibrant nationalism and the nation's unmatched craving for narratives glorifying masculinity and many other shades of India's cultural framework. Cricket represents everything about the country and the modern trends in the domain of the game evidently demonstrates what would happen when the everyday is merchandised through advertising and the media in the globalized world. Such social developments would result in the braking of existing cultures and the making of new cultures. The module examines the cultural changes instigated due to the recent developments in cricket, specifically in Indian cricket.

READINGS AND VIEWINGS

- Bedi Vikram. Indian Cricket as Synecdoche for Our Times
- Joseph, Manu. India An Unnatural Cricketing Nation
- Rowe, David. Extracts from Sport, Culture and the Media the Unruly
- Trinity
- BBC Documentary The Empire of Cricket – India

Module 2: Cricket in Writing Time

10 Hours

In India the media space enjoyed by cricket across media outlets, such as print media, broadcast media and the new media varies in

comparison with other sport due to numerous reasons. There has been an unprecedented boom in the realm of writings on cricket irrespective of the medium which in turn offers exclusive space for cricket. This module offers ample scope to investigate the factors that triggers this doubtful preference for cricket, even if they fall outside the scope of conventional academic engagement. The role of social media journalism and the latest additions to the broad spectrum of cricket journalism which changed the way the game is played and consumed will also be analysed. Thus, this unit, through a set of carefully designed academic activities studies the relationship between sport– predominantly cricket, and media.

READINGS

- Wanta, Wayne, The Coverage of Sports in Print Media
- Haigh, Gideon, Cricket and the Media: The Pantomime Horse
- Real Michael, Sports Online: The Newest Player in Media Sport
- Choudhury, Angikaar: How social media has changed the way cricket fans consume the game

Module 3: Advertisement and Cricket Time

10 Hours

Advertisement could be viewed as the factor which binds media and cricket together and the chief motivating factor behind the transformation of players into stars and brands. The intrusion of advertisement into the so-called pious space of the game in the era of neoliberalism continuously redefines the definition of stardom and to an extent the game itself. Thus, it is imperative to look at the culture of stardom and branding presently prevalent in the game and its bearings on the character and popularity of the game. Subsequently, the unit evaluates the impact of advertisement industry in the evolution of the game and on the cricket addicted Indian psyche.

READINGS

- Kidambi, Prashant. Hero, celebrity and icon: Sachin Tendulkar and Indian public culture
- Nair Supriya. The great Indian cricket ad Tamasha
- Boyle, Raymond and Richard Haynes. A Sporting Triangle: Television,
- Sport and Sponsorship

Module 4: Representation of Cricket in Cinema Time 5 Hours

In India, cinema remains one of the most popular forms of entertainment, and cricket the favourite sport of the majority. Cricket, to certain extent, has made use of the mainstream Indian cinema and vice versa. Indian cinema with respect to its depiction of cricket has arguably acted as an agency of representation for the so-called non-commercial version of the game and the sentiments of those who are involved in it, categorically in comparison with the other available medium. Hence, the unit looks at the way the game is represented in cinema and the way this portrayal has impacted the popularity of the game.

VIEWINGS

- Gowariker, Ashutosh. Lagan
- Prabhu, Venkat. Chennai 600028
- Shine, Abrid 1983

Module 5: Cricket as a Commodity and Performance in the Time of Live- Media Time 5 Hours

Cricket in the age of visual culture matches the standards of a scripted performance. Cricket beyond doubt keeps the Indian masses on the hook by means of its soap-operatic appeal. It should be noted that the commercial interest of the media houses results in the making of the consumer- friendly version of cricket. Thus, the profit motive triggers the transformation of cricket from just a game to the present

version of “Cricketainment”. During the time of metropolitan modernity, cricket with advent of technology has all the ingredients of a live performance. The game even functions as an alternative to cinematic experience during the time of glamorous flagship events like World Cup and IPL as they are screened at multiplexes and theatres across India. Thus, equal blending of cricket, glamour, and media the present version of cricket a commodity to be produced and consumed.

READINGS

- Astill, James. “Introduction” to The Great
- Tamasha: Cricket, Corruption and the Turbulent Rise of Modern India
- Haigh, Gideon. Cricket and Television: Crowds and Powerlessness
- Boyle, Raymond and Richard Haynes. Power Game: Why Sport Matters to Television
- Sullivan, B. David. Broadcast Television and the Game of Packaging Sports

Module 6: Understanding the Unholy Trinity – Cricket, Media and Bollywood Time **5 Hours**

The advent of IPL has aggravated the progress of cricket beyond its natural identity of being just a game. It has revolutionized the way cricket was being played and watched. Hence, the capsule version of the game deserves to be viewed as the pinnacle of commercialization in sports. IPL added to the theatricality of the game and has Bollywoodized it beyond redemption, thus leaving the game completely into the hands of the capitalistic framework. This unit explores the shades of the aforementioned transformation and what it has cost the game. IPL ideally demonstrated the hitherto unexplored commercial prospects of cricket in India and across commonwealth by bringing together cricket and entertainment and making it “cricketainment”. The course evaluates these

developments and how it symbolizes the changing culture of the country. IPL has increased the depth of addiction for cricket in India certainly for reasons that are outside the purview of the game. Thus, this unit attempts to examine the good, bad and ugly of cricket, Bollywood and media.

READINGS

- Jalarajan, Sony, and Rohini Sreekumar. Bollywood Sporting Spectacles: Indian
- Premier League Cricket as a Bollywoodized Media Event
- Raghavendra, MK. Decoding India's love for cricket,
- Bollywood – and why we value individual growth over team endeavours
- Majumdar, Boria. The Indian Premier League and World Cricket

COURSE OUTCOMES:

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

1. Explain the general overview of the bond between sport and media
2. Develop the much-required ability to observe, critically analyse and understand the current developments in the society
3. Evaluate the challenges offered by the consumer driven world which transforms everything into a commodity
4. Choose sports and media as an academic field of study
5. Examine the role of sports and media in the breaking and making of new cultures
6. Develop multidisciplinary perspective towards social discourses

Books for Reference:

- ❖ *Bateman, Anthony: The Cambridge Companion to Cricket*
- ❖ *Haigh, Gideon: Sphere of Influence: Writings on cricket and its discontents*
- ❖ *Astill, James: The Great Tamasha: Cricket, Corruption and the Turbulent Rise of Modern India*
- ❖ *Nandy, Ashis: The Tao of Cricket*
- ❖ *Guha, Ramachndra: A Corner of a Foreign Field*
- ❖ *Sen, Ronojoy: Nation at Play: A History of Sport in India*
- ❖ *Kidambi Prashant: Cricket Country: The Untold History of the First All India Team*
- ❖ *Boyle, Raymond and Richard Haynes: Power play: sport, the media and popular culture*
- ❖ *Rowe, David: Sport, Culture and the Media*
- ❖ *Raney A. Arthur and Jennings Bryant: Handbook of Sports and Media*
- ❖ *Dayan, Daniel and Elihu Kartz: Media Events: The Live Broadcasting of History*
- ❖ *Boyle, Raymond: Sports Journalism: Contexts and Issues*
- ❖ *Coakley, Jay and Eric Dunning: Handbook of Sports Studies*
- ❖ *Wenner, A. Lawrence: Media, Sports and Society*
- ❖ *Fox, Andrew: Global Perspectives on Media Events in Contemporary Society*
- ❖ *Majumdar, Boria and J.A. Mangan: Cricketing Cultures in Conflict: World Cup 2003*
- ❖ *Bose, Mihir: The Magic of Indian Cricket: Cricket and Society in India*

UG 21 OE 005: MEDIA, TECHNOLOGY AND SOCIETY

COURSE OBJECTIVES:

The course is designed to enable students to examine the role of media in everyday life and to analyse the role of modern technology on news dissemination and its impact on public opinion.

Module 1: 'Medium is the Message' - Understanding the role of media in everyday life **15 hours**

This famous phrase coined by Marshal McLuhan still resonates in the age of internet. From the era of the television to the era of the web, media has been its own message. It is the experience of a particular medium that shapes our perspective of the world more than the message received through that medium. In this module we shall explore the role of media in our everyday life by discussing our experience of various media and its impact on our understanding of society and the self.

READINGS & VIEWINGS:

- a. Extracts from 'Understanding Media' by Marshal McLuhan
- b. Extracts from 'Manufacturing Consent: The Political Economy of the Mass Media' by Edward S. Herman and Noam Chomsky
- c. How WhatsApp has changed news in small-town India -The Caravan Magazine
- d. Forget Newspapers or the Internet. Indian Women are Betting on One of the Oldest Forms of Mass Media (<http://theladiesfinger.com/community-radio-women/>)
- e. Movie: 'Network' by Sidney Lumet

Module 2: 'The Attention Merchants' – Advertising and the war for attention

10 hours

'Attention Merchants' is a term popularized by the writer Tim Wu through his book 'The Attention Merchants: The Epic Scramble to Get Inside Our Heads' in which he not only charts the history of advertising but also unravels the workings of a gigantic business model that is toiling day-in and day-out to get our attention. In this module we shall explore the business model at work behind the emergence of modern advertising and its impact on our everyday life.

READINGS & VIEWINGS:

- a. Extracts from 'The Attention Merchants: The Epic Scramble to Get Inside Our Heads' by Tim Wu
- b. Gillette's Ad Asks Men to Be Better. And Then Sets the Bar Really Low (<http://theladiesfinger.com/gillettes-ad-asks-men-to-be-better-and-then-sets-the-bar-really-low/>)
- c. Movie: Thank You For Smoking (2005)

Module 3: The intelligence of 'Artificial Intelligence' – Automation and its aftermath

10 hours

'Artificial Intelligence' is the new buzzword in technology. While it can be debated whether what is referred to as AI is just sophisticated algorithms and machine learning and not this self-thinking entity like 'Skynet' in the movie Terminator, it is well settled that the direction in which technology is moving is going to disrupt traditional economies. It not only has an impact on the nature of jobs but has the capability of altering human thinking abilities. In this module we shall explore the debates in technology about the nature and impact of 'AI', automation and machine learning on the society. The automation debate will be understood within a larger debate regarding the history of technology – innovation centric history and use centric history.

READINGS & VIEWINGS:

- a. Extracts from 'The Glass Cage: Where Automation is Taking Us' by Nicholas G. Carr
- b. 'Artificial Intelligence's White Guy Problem' by Kate Crawford in The New York Times (June 25, 2016) <https://www.nytimes.com/2016/06/26/opinion/sunday/artificial-intelligences-white-guy-problem.html>
- c. Extracts from 'The Shock of the Old_ Technology and Global History since 1900' by David Edgerton
- d. Movie: 'Modern Times' by Charles Chaplin

Module 4: 'Reality of the Virtual' – Thinking and feeling in the age of internet technology **10 hours**

The web has opened spaces in which we can create our virtual selves and lead virtual lives. This 'virtuality' is increasingly becoming part of our everyday real lives. Social media platforms have created spaces in which individuals enter into relationships and form communities in online space, the effect of which can be felt very sharply in real life. In this module we shall explore our engagement with the online spaces and its impact on our identity and self-expression.

READINGS & VIEWINGS:

- a. Extracts from 'The End of Forgetting: Growing Up With Social Media' by Kate Eichhorn
- b. TedX talks and other video lectures available on YouTube

Module 5: 'Discipline and punish' – Technology as a tool for social control **10 hours**

The era of massive databases or what is referred to as 'Big Data' has dawned, thanks to the endless supply of personal information from the masses to the government and tech companies. This personal information of the individuals is being collected with the excuse of providing us with services. However, there is increasing evidence that such personal data can be used to control the behaviour of

people by the government, assisted by tech companies. In this module we shall explore the debate about data surveillance and its possible impact on freedom of expression.

READINGS & VIEWINGS:

- a. Extracts from 'The Net Delusion – The Dark Side of Internet Freedom' by Evgeny Morozov
- b. The Aadhar Debate – Columns and Essays in EPW and other news magazines
- c. The Different Ways in Which Aadhaar Infringes on Privacy (<https://thewire.in/government/privacy-aadhaar-supreme-court>)
- d. Documentary: Nothing to Hide – The Documentary about Surveillance and You (2017)

Module 6:" 'Library Genesis' – Access to knowledge in the age of internet 5 hours

The traditional education model had within it an asymmetry between access and availability of learning resources and the number of people with a deep desire to learn. The internet reversed this asymmetry by opening up resources to the masses.

However, the traditional gatekeepers of the learning resources – the book publishers, producers of cinema and music – were threatened by this opening up of resources and came down heavily on individuals and communities who were facilitating the access to resources. In this module we shall explore the changing ways in which we access knowledge and the way in which the difference between producer and consumer of knowledge is slowly getting erased.

READINGS & VIEWINGS:

- a. Statement from the 'Library Genesis' community
- b. Documentary: Steal This Film (Part I & II)

COURSE OUTCOMES:

After completion of the course the students should be able to:

1. Explain the role of media in everyday life and its impact on our understanding of the society and the self
2. Illustrate the business model at work behind the emergence of modern advertising
3. Review the debates in technology about the nature and impact of 'AI', automation and machine learning on the society
4. Examine our engagement with the online spaces and its impact on our identity and self-expression
5. Justify the debate about data surveillance and its possible impact on freedom of expression
6. Illustrate the changing ways in which we access knowledge and the way in which the difference between producer and consumer of knowledge is slowly getting erased

Books for Reference:

- ❖ *Alvares, Claude. Decolonising History: Technology and Culture in India, China, and the West from 1492 to the Present Day. 1993.*
- ❖ *Ashis Nandy (ed.), Jatinder K Bajaj, Claude Alvares, Shiv Visvanathan, Manu Kothari, Lopa Mehta, Veena Das, Vandana Shiva. Science, Hegemony and Violence: A Requiem for Modernity. 1990.*
- ❖ *Browne, Simone. Dark Matters: On the Surveillance of Blackness. 2015.*
- ❖ *Carr, Nicholas G. The Glass Cage: Where Automation is Taking Us. 2014.*
- ❖ *Chomsky, Edward S. Herman and Noam. Manufacturing Consent: The Political Economy of the Mass Media. 1988.*
- ❖ *Citron, Danielle Keats. Hate Crimes in Cyberspace. 2014.*

- ❖ *Edgerton, David. The Shock of the Old: Technology and Global History since 1900. 2006.*
- ❖ *Jeebesh Bagchi, Monica Narula, Ravi Sundaram, Ravi S Vasudevan & Shuddhabrata Sengupta. sarai Reader: 03- Shaping Technologies. 2006.*
- ❖ *Eichhorn, Kate. The End of Forgetting: Growing Up With Social Media. 2019.*
- ❖ *Foucault, Michel. Discipline and Punish: The Birth of the Prison. 1977.*
- ❖ *Harari, Yuval Noah. Homo Deus: A Brief History of Tomorrow. 2015.*
- ❖ *Sapiens: A Brief History of Humankind. 2011.*
- ❖ *Lovink, Geert. Dark Fiber: Tracking Critical Internet Culture. 2002.*
- ❖ *Dynamics of critical Internet culture (1994-2001). 2009.*
- ❖ *McLuhan, Marshall. Understanding Media: The Extensions of Man. 1964.*
- ❖ *Morozov, Evgeny. The Net Delusion: The Dark Side of Internet Freedom. 2011.*
- ❖ *Mukherjee, Siddhartha. The Gene: An Intimate History. 2016.*
- ❖ *Noble, Safiya Umoja. Algorithms of Oppression: How Search Engines Reinforce Racism. 2018.*
- ❖ *Pacey, Arnold. Technology in World Civilization. 1990.*
- ❖ *Phillips, Whitney. This Is Why We Can't Have Nice Things: Mapping the Relationship Between Online Trolling and Mainstream Culture. 2015.*
- ❖ *Standage, Tom. The Victorian Internet. 1998.*

- ❖ *Visvanathan, Shiv. A Carnival for Science: Essays on Science, Technology and Development. 1997.*
- ❖ *Wu, Tim. The Attention Merchants: The Epic Scramble to Get Inside Our Heads. 2016.*
- ❖ *Zuboff, Shoshana. The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. 2018.*

Articles:

1. Fast and Furious: The turbulent reign of Arnab Goswami – The Caravan Magazine (01 December 2012)
2. Supreme Being: How Samir Jain created the modern Indian newspaper industry – The Caravan Magazine (01 December 2012)

UG 21 OE 006: SUSTAINABLE DEVELOPMENT GOALS

COURSE OBJECTIVES:

The course aims to enable students to understand the basic concepts of sustainability in the context of the environmental, societal and economic dimensions along with the issues and conflicts in the implementation and attainment of sustainable development goals on the national and global scale.

Module 1: Environment, Development and Pollution 15 Hours

Meaning Characteristics of Environmental Goods and Services

Relationship between Environment and Development-
Environmental Kuznets Curve – Meaning

Resource Use and Management

Resource Taxonomy – Renewable and nonrenewable resources-
Economic Theory of Depletable Resources- Optimal Use of
Renewable Resources- Resource Scarcity and Economic Growth –
Limits to Growth Model- Market failures- Tragedy of Commons
and common property Resources- Resource Conservation

Sustainable Development

Sustainable Development – Definitions, Objectives and Principles-
Processes and Indicators of Sustainable Development- Approaches
– strong and weak and Strategies for Sustainable Development-
Environmental accounting Measures

Module 2: Sustainable Development Goals 15 Hours

Introduction and History

Brundtland Committee Recommendations- Rio Summit and Agenda
21- SDGs: Goals, Targets and Indicators

Government and the SDGs

SDG Policy Instruments- Planning- Localizing the SDGs- Industrial Policies and the SDGs

Financing the SDGs

New financing mechanisms and global funds

Module 3: Issues in Implementing SDGs

15 Hours

Means to Realizing the SDGs

Degrowth and circular economy – concepts – Sustainable production and consumption - Sustainable cities and transportation - Sustainable designs, technology, digital revolution and innovation - Renewable energy

Implementing SDGs

India's framework for sustainable development

Other Issues

Sustainable business- Development Assistance- Cross-Border Cooperation

COURSE OUTCOMES:

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

1. Explain the basic concept of Sustainable Development (SD) in the context of the environmental, social and economic dimensions.
2. Illustrate the targets and indicators of Sustainable Development Goals
3. Examine the issues and conflicts in the implementation and attainment of SD goals on the national and global scale.

Books for Reference:

- ❖ *Baumol, W.J. and W.E. Oates (1988): The Theory of Environmental Policy (2e), CUP, Cambridge.*
- ❖ *Bhattacharya, R.N. (Ed): Environmental Economics: An Indian Perspective, OUP, New Delhi.*
- ❖ *Dalby, Simon, et al. Achieving the Sustainable Development Goals: Global Governance Challenges. Routledge, 2019.*
- ❖ *Day, G.S., and P.J.H. Schoemaker (2011), Innovating in uncertain markets: 10 lessons for green technologies, MIT Sloan Management Review, 52.4: 37-45.*
- ❖ *Elliott, Jennifer. An introduction to sustainable development. Routledge, 2012.*
- ❖ *Gagnon, B., Leduc, R., and Savard, L., Sustainable development in engineering: a review of principles and definition of a conceptual framework. Working Paper 08-18, 2008.*
- ❖ *Hanley, Shogren and White (1997): Environmental Economics in Theory and Practice, Macmillan.*
- ❖ *Kolstad, C.D. (1999): Environmental Economics, OUP, ND.*
- ❖ *Pearce, D.W. and R. Turner (1991): Economics of Natural Resource Use and Environment, John Hopkins Press, Baltimore.*
- ❖ *Sachs, Jeffrey D. The age of sustainable development. Columbia University Press, 2015*
- ❖ *Tietenberg, T. (1994): Environmental Economics and Policy, Harper Collins, NY.*
- ❖ *NITI AYOOG Sustainable development reports*

UG 21 OE 007: YOUTH, GENDER AND IDENTITY

COURSE OBJECTIVES:

The course aims to sensitize students with issues pertaining to identity, gender and relationships along with creating awareness on the various laws and rights.

Module 1: Introduction to Youth, Gender and Identity 9 Hours

Concepts of Youth: Transition to Adulthood, Extended Youth in the Indian context

Concepts of Gender: Sex, Gender Identity, Sexual Orientation, Gender Roles, Gender Role Attitudes, Gender Stereotypes

Concepts of Identity: Multiple identities

Module 2: Youth and Identity **9 Hours**

Family: Parent-youth conflict, sibling relationships, intergenerational gap

Peer group identity: Friendships and Romantic relationships

Workplace identity and relationships d. Youth culture: Influence of globalization on Youth identity and Identity crisis

Module 3: Gender and Identity **9 Hours**

Issues of Sexuality in Youth

Gender discrimination

Culture and Gender: Influence of globalization on Gender identity

Module 4: Issues related to Youth, Gender and Identity 9 Hours

Youth, Gender and violence

Enhancing work-life balance

Changing roles and women empowerment

Encouraging non-gender stereotyped attitudes in youth

Module 5: Law and Youth

9 Hours

Juvenile Justice Act

LGBT rights in India

UNICEF programs for youth

COURSE OUTCOMES:

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

1. Express the concepts of youth, adulthood and gender attitudes.
2. Understand and relate to family and relationships.
3. Outline the issues of sexuality in Youth and gender discrimination.
4. Illustrate situations of gender and violence and understand the changing roles and women
5. Translate the laws relating to Juvenile Justice Act, LGBT rights in India and UNICEF programs for youth

Books for Reference:

- ❖ Berk, L. E. (2010). *Child Development (9th Ed.)*. New Delhi: Prentice Hall.
- ❖ Baron, R.A., Byrne, D. & Bhardwaj. G (2010). *Social Psychology (12th Ed)*. New Delhi:
- ❖ Pearson.
- ❖ Elizabeth Herlock (2015) *Developmental Psychology*, McGraw-Hill
- ❖ Nayana Joshi (2019) : *Handbook of Juvenile Justice* , Lawmanns Publication

UG 21 OE 008: STORIES AS THERAPY

COURSE OBJECTIVES:

The student should be able to engage with metaphors towards enhanced self-understanding, describe nuances of similarities and differences of stories from different cultures and develop the skill of applying narrative wisdom to real life situations.

Module 1: Basic concepts in Narrative and Bibliotherapy 15 hours

Introduction to Narrative Therapy - Bibliotherapy in the context of Narrative Therapy- Nature and Scope of Bibliotherapy

Module 2: Evolution, the Human Mind, and the power of Narratives 15 hours

Sapiens: A Brief History of Humankind by Yuval Noah Harari- The Blind Watchmaker by Richard Dawkins

Module 3: Stories, Cultures and Societies: Select examples 15 hours

Asian: Jataka Tales and Jain Narratives- Panchtantra Tales - The Violet Fairy Book

Arabian : The Arabian Nights

European : Children's and Household Tales(The Clever People, Rapunzel, The Three Spinning Women, The Elves, Cinderella, Little Red Riding Hood and others)

Briar Rose by Jane Yolen

African:

Dark Matter: A Century of Speculative Fiction from the African Diaspora by Sheree Renée Thomas

COURSE OUTCOMES:

After completion of the course the students should be able to:

1. Explain metaphors towards enhanced self-understanding.
2. Outline nuances of similarities and differences of stories from different cultures.
3. Apply narrative wisdom to real life situations.

Book References

- ❖ Jeste D. V. Vahia I. V. (2008). *Comparison of the conceptualization of wisdom in ancient Indian literature with modern views: Focus on the Bhagavad Gita. Psychiatry*, 71, 197–209. doi:10.1521/psyc.2008.71.3.197
- ❖ Jordan J. (2005). *The quest for wisdom in adulthood: A psychological perspective*. In Sternberg R. J. Jordan J. (Eds.), *A handbook of wisdom: Psychological perspectives*, (pp. 160–188). New York: Cambridge University Pressdoi:10.1017/CBO9780511610486.008
- ❖ Keyes C. L. M. (2005). *Mental illness and/or mental health? Investigating axioms of the complete state model of health. . Journal of Consulting and Clinical Psychology*, 73, 539–548. DOI: 10.1037/0022-006X.73.3.539
- ❖ Kunzmann U. Baltes P. B. (2003). *Wisdom-related knowledge: Affective, motivational, and interpersonal correlates. Personality and Social Psychology Bulletin*, 29, 1104–1119. doi:10.1177/0146167203254506
- ❖ Randall W. L. (2011). *Memory, metaphor, and meaning: Reading for wisdom in the stories of our lives*. In Kenyon G. Bohlmeijer E. Randall W. (Eds.), *Storying later life: Issues, investigations, and interventions in narrative gerontology*, (pp. 20–38). Oxford: Oxford University Press.

- ❖ Sternberg R. J. (1985). *Implicit theories of intelligence, creativity, and wisdom*. *Journal of Personality and Social Psychology*, 49, 607–627. doi:10.1037/0022-3514.49.3.607
- ❖ Sternberg R. J. Jarvin L. Reznitskaya A. (2008). *Teaching for wisdom through history: Infusing wise thinking skills in the school curriculum*. In Ferrari M. Potworowski G. (Eds.), *Teaching for wisdom: Cross-cultural perspectives on fostering wisdom*, (pp. 37–57). New York: Springer.
- ❖ Takahashi M. Overton W. F. (2002). *Wisdom: A culturally inclusive developmental perspective*. *International Journal of Behavioral Development*, 26, 269–277. DOI:10.1080/01650250143000139

UG 21 OE 009: DEVELOPMENT STUDIES

COURSE OBJECTIVES:

The course aims to instill in students the imperatives of qualitative indices, development issues and challenges in the context of current economic growth along with the knowledge on theories and approaches to development.

Module 1: Development Concept and Current Challenges

15 Hours

The concept of development,- Growth and Development- Transition from quantitative to qualitative indices- Modern economic growth- Characteristics of modern economic growth- Regional and global disparities- Common characteristics and dissimilarities among developing countries- Current Development Challenges- Inequality- Migration- Conflicts.

Module 2: Approaches to Development

15 Hours

Concept and meaning - Principles and importance of Development Ethics, Assessing Development- Per capita income- PQLI- Choice and Capabilities- HDI

Approaches of Development - Adam Smith- Marx- Schumpeter- Structuralist approach- Neo-liberalism, IMF and structural adjustment- Capabilities Approach

Module 3: Theories and Current Issues in Development 15 Hours

Theorizing Development - Modernization Theory, Dependency Theory- Capitalist World System- The evolution of thought on poverty reduction- Colonial Regimes and Their Legacies

The Industrial Revolution- Genesis and Spread- International specialization of Labour/Industry- Industrial Labour- ILO and its activities to promote labour standards

Environment and development- Increasing degradation of natural environment – water and air pollution and deforestation- Depletion of global commons

Sustainable development - concept and measures- SDGs

Climate Change – Causes, Impact, Measures of Mitigation

Skill Development:

(These activities are only indicative, the faculty members can innovate)

1. A comparative analysis on Growth Model States and Development Model States based on the respective parameters and identify the merits and challenges.
2. An analysis of the Indian economy in terms of HDI, approaches and planning policies.
3. An assessment of the sustainable development goals and the role of foreign financial institutions in the same.

COURSE OUTCOMES

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

1. Explain the imperatives of Qualitative indices in the context of Current Development Challenges.
2. Compare and contrast the approaches to Development and its impact on Per capita income and HDI.
3. Justify the theorizing development in the context of attainment of Sustainable development Goals

Books for Reference:

- ❖ Crocker, D. (2008). *Ethics and development theory-practice, Ethics of Global Development Agency, Capability, and Deliberative Democracy*, 67-106
- ❖ Des Gasper (2008), 'Denis Goulet and the Project of Development Ethics: Development, 8, 99. 481-9, Elsevier Science, 1, pp.10-26.
- ❖ Drèze, Jean and Amartya Sen (2002), *India: Development and Participation*, second edition. Oxford: Oxford University Press.
- ❖ Gasper, D. (2004). *The ethics of development: From Economism to human development*. Edinburgh: Edinburgh University Press
- ❖ Huntington, Samuel (1971), *the change to change: Modernization, development and politics*. Comparative Politics, 3.

- ❖ *Myrdal, Gunnar. (1974), "What is Development?" Journal of Economic Issues 8(4):729-736.*
- ❖ *Peet, Richard with Elaine Hartwick (2009), Theories of Development: Contentions, Arguments, Alternatives (2nd edition). New York: Guilford.*
- ❖ *Sen, Amartya (1999) Development as Freedom. New York: Anchor Books*

UG 21 OE 010: INTRODUCTION TO SOCIAL WORK

COURSE OBJECTIVES:

The course enables students to understand the fundamentals of social work, approaches, techniques, skill and competencies required of social workers in various situations.

Module 1: Fundamentals of Social Work 10 Hours

Meaning, Concept, Definitions, Difference between Social Service, Charity and Social Work, Nature and Scope of Social Work

Methods of Social work.

Values and Ethics of Social Work

Principles, Skills, Approaches and Techniques of Social Worker

Professional attributes for professional Social Workers

Module 2: Social Work with Communities 10 Hours

Concept of Community and Community Development

Types of Community; Rural, Urban and Tribal community

Areas of Intervention of Social Work in Community; Services for marginalized, youth, elderly, Women and children

Competencies required for community worker

Module 3: Social Work with Communities 10 Hours

Concept of Schools, Problems of children in schools

Areas of Social work intervention; children with physical, learning, and emotional problems. School dropout, different forms of Child abuse. Learning Disabilities, Juvenile delinquents, orphans, destitute.

Skill and Competencies required for School Social Worker

Module 4: Social Work in Hospital and Industrial Setting

15 Hours

Medical and Psychiatric Social Work: An introduction

Hospitals: Types, structure, and functions

Areas of Social Work intervention; working with health care teams, patients, care takers, care givers, para-medical staff, and hospital administration

Competencies required for Social Workers in Health Settings

Social Work in Industrial Setting: Introductory Elements of Industrial Social Work.

Problems of Employees; Adjustment, Emotional and Mental Health issues.

Areas of Social work intervention; Employees, Management and unions, Skills and Competencies for Industrial Social Worker.

COURSE OUTCOMES

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

1. Discuss the Fundamentals of Social Work and the Principles, Skills, Approaches and Techniques of Social Worker.
2. Examine the Concept of Community and Community Development and Areas of Intervention of Social Work in Community.
3. Understand the Skill and Competencies required for School Social Worker.
4. Analyze the Social Work in Hospital and Industrial Setting and understand the Problems of Employees and Areas of Social work intervention.

Books for Reference:

- ❖ *Encyclopedia of Social Work in India (1968 & 1978). Vol. 1, 2,3. Director, Publications Division, Ministry of Information and Broadcasting. New Delhi.*
- ❖ *Bhattacharya, S. (2012).Social Work an Integrated Approach. New Delhi: Deep and Deep Publication*
- ❖ *Manshardt, Clifford (1967), Pioneering on Social Frontiers in India, Lalvani Pub House, Bombay*
- ❖ *Madan, G.R (2003), Indian Social Problems, Allied Publishers Private Limited*
- ❖ *Desai, M. 2000, Curriculum Development on History and Ideologies for Social Change and Social Work, TISS, Mumbai.*
- ❖ *Stroup H.H (1965), Social Work: An Introduction to the Field, Second Edition, American Book Company*
- ❖ *Fink.A.E. (1945) The Field of Social Work. New York: Henry Holt & Co.*
- ❖ *Fried Lander. W.A.(1958) Concepts and Methods of Social Work, Engle Wood Cliffs: Prentice – Hall*
- ❖ *Gore. M.S.(1965) Social Work and Social Work Education, Bombay: Asia Publishing House*
- ❖ *Gunjal, B., and Gangabhushan M. M. (2010).Fields of Social Work Practice. Bangalore: Baraha Publisher.*
- ❖ *Kinduka, S.K. (1965) Social work in India, Sarvodaya Sahitya Samaj, Rajasthan*
- ❖ *Ramaswamy, B. (2013). Modern International Encyclpaedia of Social Work. New Delhi: Anmol Publication.*
- ❖ *Ramesh, B., Parashurama, K., Ashok, A. D., and Loksha, M. (2012). Social Work Education in India: Issue and Concerns, Tumkur University, Tumakuru.*
- ❖ *Reamer F.G.(1995)Social work Values and Ethics New York: Columbus*
- ❖ *Siddiqui, H. (2015). Social Work and Human Relations. Jaipur: Rawat Publication.*
- ❖ *Suresh, S. (2013).Modernization of Social Work Practices. New Delhi: Centrum Press.*

- ❖ Suresh, S. (2013). *Realities and Prospectus of Social Work*. New Delhi: Centrum Press
- ❖ UGC Review of Social Work Education in India – Retrospect and Prospect, Report of the Second Review Committee, New Delhi 1980, University Grants Commission.
- ❖ S D Gokhale(Ed) *Social Welfare-Legend and Legacy*, Popular Prakashan, Bombay.
- ❖ UGC, *Social Work Education in Indian Universities*, New Delhi 1965, University Grants Commission.

JOURNALS:

1. The Indian Journal of Social Work, Bi-annual, TISS, Mumbai.
2. Perspectives in Social Work, College of Social Work, Nirmal Niketan, Mumbai.
3. Social Work Journal, Bi-Annual, Department of Social Work, Assam University, Silchar, Assam.

DIGITAL REFERENCES:

1. USC Suzanne Dworak-Peck School of Social Work (2014), Introduction to Social Work (Extended Version): Available at: <https://www.youtube.com/watch?v=jJXRB1V5eVw&t=5s>
2. UH Class OET (2016) Introduction To Social Work, University of Houston: Available at <https://www.youtube.com/watch?v=LtaCmORiP9A>
3. The Audiopedia (2017), what is SOCIAL WORK? What does SOCIAL WORK mean?
4. SOCIAL WORK meaning, definition & explanation, Available at <https://www.youtube.com/watch?v=xj5-Vdh1B3E>
5. USC Suzanne Dworak-Peck School of Social Work (2017), Legacies of Social Change: 100 Years of Professional Social Work in the United States, Available at <https://www.youtube.com/watch?v=a4VzRSnk>

UG 22 OE 011: BASIC PROGRAMMING SKILLS

COURSE OBJECTIVES:

The course aims to develop in students an in-depth knowledge in programming skills and equips them to develop programs independently.

Module 1: Introduction to Programming

10 Hours

Problem Solving Using Computers: Language Classification, Problem Analysis, Algorithm and Flowchart design. Algorithms: Steps in developing algorithms, advantages and disadvantages. Flowcharts: Symbols used in developing flowcharts, advantages and disadvantages. Coding, testing and debugging. Documentation and maintenance. Program development and modular design.

Module 2: Introduction to C Programming

12 Hours

History, Structure of a C program, C Conventions, Character Set, Identifiers, Keywords, Simple Data types, Modifiers, Variables, Constants, Operators (Arithmetic operator, relational operator, logical operator, ternary operator, unary operator, shorthand operator, bit-wise operator and arithmetic operator) Operator precedence. Input and Output operation: Single character input and output, formatted input and output, Buffered input.

Module 3: Control Structures

8 Hours

Introduction, Conditional statement, if statement, if-else statement, nested if statement, else-if statement and switch statement. Go to statement. Looping statement, while statement, do-while statement, for statement, break and continue, nested for statement.

Module 4: Arrays

8 Hours

Introduction (One and two dimensional), Declaration of arrays, Initialization of arrays, processing with arrays. String manipulation, declaration of string arrays, string operations.

Module 5: Functions

7 Hours

Introduction, advantages of subprograms, Function definition, function call, Actual and formal arguments, local and global variables, function prototypes, types of functions, recursive functions, arrays and functions.

COURSE OUTCOMES

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

1. Explain basic programming skills.
2. Outline the basic C programming skills.
3. Understand and develop control structures in programming.
4. Express concepts of arrays and strings.
5. Implement concepts of functions in programming.

UG 22 OE 012: CONTEMPORARY INDIAN ECONOMY

COURSE OBJECTIVES:

The course aims to familiarise students with the various reforms and policies of Indian Government pertaining to current issues and growth of the economy.

Module 1: LPG Policies, Economic Reforms and Agriculture

15 Hours

Recent Issues: Genesis and features of LPG- India's population policy of 2000-Demographic Dividend, meaning- India's human development in global perspective.

Urbanization and governance: Urbanization: meaning- Informal sector- AtmaNirbhar Bharat Abhiyan -features- Smart City Mission

Economic Reforms and Agriculture: Agriculture Price policy and Subsidies- Commercialisation and Diversification of agriculture- Public Distribution System- Agrarian Crisis, Doubling Farm Incomes, green revolution- MGNREGS- Agriculture and WTO - AOA

Module 2: Industry, Business & Fiscal Policy

15 Hours

Industrial Policy: New Industrial Policy 1991- Public Sector Reforms- Privatisation and Disinvestment - Competition Policy

Business Policy: Performance of MSMEs, Role of MNCs in Industrial Development- Concepts of economic and social infrastructure

Fiscal Policy: Tax Expenditure, Budgetary Deficits- Public debt management - VAT and GST (concepts) -Finance Commission and its role - Fiscal Federalism

Module 3: Monetary Policy, Foreign Trade and Investment

15 Hours

Monetary Policy – RBI- Monetary policy (Qualitative and Quantitative methods) - Narasimhan Committee report
Money and Capital Markets- Difference between the money and capital market- Components of India's Money market- Role of SEBI

Foreign Trade and Investment- India's foreign trade- volume, direction and composition (latest trends)- India's Balance of payment since 1991- FDI – Meaning, Trends and Patterns- New EXIM policy

COURSE OUTCOMES:

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

1. Understand the current problems of Indian Economy
2. Analyze the sector specific policies adopted for achieving the aspirational goals.
3. Review various economic policies adopted

Books for References:

- ❖ *Bardhan, P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi.*
- ❖ *Byres Terence J. (ed.), (1998), The State, Development Planning and Liberalisation 'in India, Delhi, OUP*
- ❖ *Dutt Ruddar and K.P.M Sundaram (2001): Indian Economy, S Chand & Co. Ltd. New Delhi*
- ❖ *Frankel Francine R., (2004), India's Political Economy, Delhi. OUP*
Jenkins Rob, 2000, Economic Reform in India, Cambridge, CUP
- ❖ *Jalan, B. (1996), India's Economic Policy- Preparing for the Twenty First Century, Viking, New Delhi.*

- ❖ *Joshi Vijaya and L.M.D. Little, (1998), India's Economic Reform 1991-2001, Delhi, OUP.*
- ❖ *Kapila Uma: Indian Economy: Policies and Performances, Academic Foundation*
- ❖ *Mishra S.K & V.K Puri (2001) "Indian Economy and –Its development experience", Himalaya Publishing House.*
- ❖ *Mukharji Rahul (ed.) (2007), India's Economic Transition: The Politics of Reforms, edited by Rahul Mukherji, Oxford University Press , New Delhi.*

UG 22 OE 013: DIGITAL DESIGN USING HDL

COURSE OBJECTIVES:

The course aims to enable students in understanding the various programming languages and apply in model construction.

Module 1: Design of Combinational Logic & Sequential

Logic

9 Hours

Decoders, Encoders, Digital multiplexers, Adders and subtractors, Look aheadcarry, Binary comparators. Latches, Flipflops, Counters, Design of sequentialcounters, state machine & State diagrams.

Module 2:Overview of Digital Design with Verilog HDL 9 Hours

Evolution of CAD, emergence of HDLs, typical HDL-flow, why Verilog HDL?,trends in HDLs. Hierarchical Modeling Concepts : Top-down and bottom-updesign methodology, differences between modules and module instances,parts of a simulation, design block, stimulus block.

Module 3: Verilog Basic Concepts & Modules & Ports

9 Hours

Lexical conventions, data types, system tasks, compiler directives. Module definition, port declaration, connecting ports, hierarchical name referencing.

Module 4: Gate Level & Data Flow Modelling

9 Hours

Gate-Level Modeling- Modeling using basic Verilog gate primitives, description of and/or and buf/not type gates, rise, fall and turn-off delays,min, max, and typical delays.

Dataflow Modeling - Continuous assignments, delay specification, expressions, operators, operands, operator types.

Module 5: Behavioral Modeling

9 Hours

Structured procedures, initial and always, blocking and non-blocking statements, delay control, generate statement, event control, conditional statements, structural modeling.

COURSE OUTCOMES:

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

1. Design and analyze combinational & sequential circuits
2. Understand different design methodologies
3. Demonstrate Verilog programs in gate, dataflow (RTL), behavioral and switch modeling levels of Abstraction.
4. Illustrate the programs more effectively using Verilog tasks and directives
5. Examine the Behavioral Modeling Concept

Books for Reference:

- ❖ *Samir Palnitkar, "Verilog HDL: A Guide to Digital Design and Synthesis", Pearson Education, Second Edition.*
- ❖ *John M Yarbrough, -Digital Logic Applications and Design, Thomson Learning, 2001*
- ❖ *Donald E. Thomas, Philip R. Moorby, "The Verilog Hardware Description Language", Springer Science+Business Media, LLC, Fifth edition.*
- ❖ *Michael D. Ciletti, "Advanced Digital Design with the Verilog HDL" Pearson (Prentice Hall), Second edition.*

UG 22 OE 014: ENVIRONMENT AND PUBLIC HEALTH IN CONTEMPORARY SOCIETY

COURSE OBJECTIVES:

The course aims to create awareness among students on the contemporary issues of the society relating to health, environment, prevalent diseases and hygiene.

Module 1: Introduction to Environment and Public Health

15 Hours

Environment and public health; Definitions of health and disease. Perspectives on individual health: Nutritional, socio-cultural and developmental aspects, Dietary diversity for good health; Human developmental indices for public health. Effect of quality of air, water and soil on human health.

Diseases in contemporary society: Need for good health- factors affecting health. Types of diseases- deficiency, infection, pollution diseases- allergies, respiratory, cardiovascular and cancer. Personal hygiene- food- balanced diet. Health effects of smoking, alcohol consumption, drug addiction and substance abuse.

Module 2: Malnutrition, Communicable, Non-Communicable & Vector borne Diseases

15 Hours

Malnutrition: Vitamin deficiency diseases and Mineral deficiency diseases; Folic acid requirement during pregnancy; Food Safety- Adulterants and preservatives; Pesticide Toxicity: Endosulfan and DDT; Genetically Modified Food.

Non-communicable diseases and Lifestyle diseases –Diabetes and Hypertension.

Communicable diseases: Definition, mode of transmission- pandemic, epidemic and endemic diseases.

Vectorborne diseases: Plague and Malaria; emerging diseases: Dengue, Chikungunya, Zika, Ebola, Swine Flu, Bird Flu,

Severe Acute Respiratory Syndrome (SARS), Covid -19, Middle East Respiratory Syndrome(MERS); Zoonosis- Leptospirosis; Kyasanur Forest Disease (KFD)Toxoplasmosis and Nipah.

Module 3: Occupational health, Environmental Sanitation, Hygiene and Drug safeties **15 Hours**

Occupational health: Sick Building Syndrome; Noise and Radiation; Ergonomics - Stress and Fatigue; Carpal tunnel syndrome (CTS); Synergistic effect; Irritable Bowel Syndrome; Crohn's disease.

Environmental Sanitation and Hygiene: Safe disposal of human excreta; Solid waste disposal; Case study of Bengaluru. Sanitation value chain.

Drug safeties: Thalidomide Tragedy; Antibiotic stewardship; New Delhi Antibiotic Resistant superbug.

COURSE OUTCOMES:

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

1. Interpret issues relating to environment and public health.
2. Characterize various contemporary diseases.
3. Review numerous environmental and personal health measures.

Book for References:

- ❖ Akhtar, R. (Ed.). (2019). *Extreme weather events and human health: International case studies*. Springer Nature.
- ❖ Bedi and Yashpal. (1971). *Handbook of Hygiene and Public Health*. Atma Ram & Sons, Delhi.
- ❖ Kessel, A. (2006). *Air, the environment and public health*. Cambridge University Press.
- ❖ Lopez, R. P. (2012). *The built environment and public health* (Vol.16).

- ❖ John Wiley & Sons. Nandini N.(2018). *Environment and public Health*. Sapna Book House, Bengaluru.
- ❖ Carroll, P.W., Yasnoff, W.A., Ward, M.E., Ripp, L.H., & Martin, E.L. (Eds.). (2003).
- ❖ *Public health informatics and information systems*.
- ❖ Park, K.(2009). *Park's Text book of Preventive and Social Medicine*, 20th Edition.
- ❖ Rajit Sengupta and Kiran Pandey. (2021). *State of India's Environment 2021: In Figures*. Centre Science and Environment, New Delhi.
- ❖ Van den Bosch, M., & Bird, W. (Eds.). (2018). *Oxford textbook of nature and public health: The role of nature in improving the health of a population*. Oxford University Press.
- ❖ Walton, M. (2017). *One Planet, One Health*. Sydney University Press.

UG 22 OE 015: ENVIRONMENT AND SUSTAINABLE AGRICULTURE

COURSE OBJECTIVES:

The course enables the students to get an understanding on the basics of environment and sustainability of agriculture along with various its facets.

Module 1: Introduction to Environment and Agriculture 15 Hours

Environment – Definition, scope and significance.

Agriculture – Definition, scope and significance. Environmental basis for agriculture and food. Agricultural patterns in India. Socio-economic pressures on agriculture. Food security and food scarcity.

Types of agriculture – rain-fed cultivation and irrigation – water intensive agriculture – Reservoirs and ground water exploitation. Conventional and mechanised agriculture.

Natural and chemical agriculture. Subsistence and commercial agriculture. Environmental effects of land use and landscape changes.

Module 2: Agricultural Diversity, Animal Husbandry & Pisiculture 15 Hours

Environmental determinants of agriculture – role of rainfall, humidity, wind, topography and edaphic factors in crop selection.

Animal husbandry – Dairy and poultry – role of transboundary species of cattle in Indian scenario.

Pisiculture – Environmental effects of intensive pisiculture.

Agricultural biodiversity: Crop diversity – Definition and significance. Poly culture and mono culture. Influences of green revolution on

modern agricultural practices of India – Loss of agro biodiversity – Influence of trans boundary crops. Agricultural biotechnology – Genetically Modified Crops – Influence on environment. Pollination crisis. Integrated pest management.

Module 3: Environmental impacts on agriculture, Contemporary issues and Ecological principles of farming **15 Hours**

Environmental impacts of agriculture – Loss of biodiversity – soil salinity- fertiliser.

and pesticide pollution, Climate change and global warming. Erosion and problems of deposition in irrigation systems. Desertification. Biomagnification – Case studies.

Contemporary issues and management – Farmer distress – market mechanisms - natural farming methods/organic farming. Urban agriculture and hydroponics. Ecological principles of farming – Sustainable agriculture – Significance of indigenous crops and cattle varieties. Watershed management. Agricultural policies of India.

COURSE OUTCOMES:

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

1. Understand environment and agriculture.
2. Review certain concepts of agriculture and animal husbandry.
3. Respond to contemporary issues and management of environment and agriculture.

Books for References:

- ❖ Altieri, M. A. (2018). *Agroecology: the science of sustainable agriculture*. CRC Press. Campanhola, C., & Pandey, S. (Eds.). (2018). *Sustainable food and agriculture: An integrated approach*. Academic Press.

- ❖ Zeeuw, H., & Drechsel, P. (Eds.). (2015). *Cities and agriculture: Developing resilient urban food systems*. Routledge.
- ❖ Eric Lichtfouse, Mireille Navarrete, Philippe Debaeke, Souchere Ve´ronique, Caroline Alberola. (2009). *Sustainable Agriculture*. Springer Science & Business Media.
- ❖ Kazim B. Rahim Debash Sarkar Bidhan Chand. (2012). *Sustainable Agriculture and Environment*. New Delhi Publishers.
- ❖ Satyanarayana, T., Johri, B. N., & Prakash, A. (Eds.). (2012). *Microorganisms in sustainable agriculture and biotechnology*. Springer Science & Business Media.
- ❖ Songstad, D. D., Hatfield, J. L., & Tomes, D. T. (Eds.). (2014). *Convergence of food security, energy security and sustainable agriculture* (Vol. 67). New York: Springer.

UG 22 OE 016: FOUNDATION OF BEHAVIOUR

COURSE OBJECTIVES:

The course enables the students to examine the dynamics of human personalities and the underlying theoretical concepts.

Module 1: Emotions

9 Hours

Meaning and definition- Classification of emotions- primary and secondary- Responses to emotions- physiological, behavioural, psychological and cognitive. Theories of emotions-physiological, neurological, cognitive. Emotional Intelligence- Meaning, definition, components. Application of emotional intelligence.

Module 2: Motivation

9 Hours

Meaning, Definition, Basic Concepts- Instincts, Needs, Drives, Incentives, Motivational cycle. Approaches to the Study of Motivation: Psychoanalytical, ethological, S - R, Cognitive, humanistic- Biological Motives: Hunger, thirst, sleep and sex- Social Motives: Achievement, affiliation, approval.

Module 3: Intelligence

9 Hours

Meaning, Definition of intelligence, characteristics of intelligence- Types- social, crystallized, emotional, fluid- Theories of Intelligence- Factor theories, hierarchical theories, process oriented theories, information processing theories- Educating Gifted children- Assessment of intelligence- Indian tests for intelligence. The concept of intelligence quotient.

Module 4: Thinking and Reasoning

9 Hours

Introduction to cognition- Introduction to Thinking and Problem Solving Process- Elements of Thinking and Types of Thinking- Creative and critical thinking: Meaning and types- Concept Formation: Meaning, importance and process of concept formation- Problem Solving: Meaning, importance, steps, and obstacles- Reasoning and decision making.

Module 5: Personality

9 Hours

Meaning, definition, Theories of personality- Type and trait, Dynamic, behavioural, Humanistic. Assessment of personality- Need. Rating scales, questionnaires, Projective techniques.

COURSE OUTCOMES:

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

1. Evaluate and understand the different human emotions
2. Evaluate and identify critically the determinants of motivation
3. Compare and contrast different theories of intelligence
4. Deduce thinking and problem solving ability
5. Differentiate the human personalities

Books for Reference:

- ❖ *Baron, R. A. Psychology. (5th ed.). Delhi: PHI Learning Pvt. Ltd., 2014*
- ❖ *Feldman, R. S. Understanding Psychology (14th ed.). New York: McGraw Hill, 2018*
- ❖ *Hergenhahn, B. R., & Henley, T. An Introduction to the history of psychology. Cengage Learning, 2013*
- ❖ *Hilgard, E. R., Atkinson, R. C. & Atkinson, R. L. Introduction to psychology. (16th ed.). Boston: Cengage Learning., 2015*
- ❖ *Malim, T. Introductory Psychology. Macmillan International Higher Education., 2017*
- ❖ *Morgan, C. T., King, R. A., Weisz, J. R., & Schopler, J. (2001). Introduction to psychology. (7th ed.). Chennai: McGraw- Hill Education (India) Pvt. Ltd.*

UG 22 OE 017: GLOBALIZATION AND WORLD POLITICS

COURSE OBJECTIVE:

The course enables the students to develop an understanding about the nature and scope of Indian International Relationship.

Module 1: Introduction to Globalisation and World Politics

15 Hours

Introduction to Globalization and World Politics Meaning and Nature of Globalization and World Politics Discourses on Globalization - Political Economy of Globalization and its impact on World Politics Dimensions of Globalization - Gender Bias, Inequity, Skewed GDP

Module 2: Globalization and Social Movements

15 Hours

Globalization and Social Movements – Authoritarian Movement - Yellow Vest Movement, Arab Spring Movement.

Module 3: India in a Globalized World

15 Hours

Neoliberal Policies (LPG) Development and Displacements of India in Global Governance

Skill Development

(These activities are only indicative, the Faculty member can innovate)

1. List out the modern elements of State
2. List out the countries and identify the issues related to equality
3. Identify an issue and discuss the role of civil society

COURSE OUTCOME:

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

1. Explain and analyze world politics at large
2. Analyze the dynamics of Globalization and World Politics
3. Determine the impact of globalization in India

Book for Reference:

- ❖ *Hans.J. Morgenthau: Politics Among Nations*
- ❖ *Palmer and Perkins: International Relations*
- ❖ *Quincy R. Wright: A Study of International Relations*
- ❖ *Mahendra Kumar: Theoretical Aspects of International Politics.*
- ❖ *Griffiths and O'Callaghan: International Relations – The Key Concepts*
- ❖ *Andrew Heywood- Key concepts in Politics and International Relations*
- ❖ *Andrew Heywood-Global Politics*
- ❖ *Jon. C Pevehouse and Joshua Goldstein: International Relations*
- ❖ *V.N. Khanna: International Relations*
- ❖ *K.K. Ghai: International Relations-Theory and Practise of International Politics*
- ❖ *Peu Ghosh: International Relations*

UG 22 OE 018: HUMAN RIGHTS

COURSE OBJECTIVE:

The course aims to introduce the students to basic concepts and practices of human rights in the global and local domain along with certain recent issues confronting the human rights debates.

Module 1: Introduction to Human Rights **15 Hours**

Meaning, nature, scope and Classification of Human Rights- The Human Rights of First generation (Civil and Political Rights), Second generation (Economic, Social and Cultural Rights), Third generation (Collective Rights) and Fourth generation (Subjective Rights)- Universal Declaration of Human Rights - Human Rights and Fundamental Rights, Fundamental Rights and Fundamental Duties in India

Module 2: Indian Human Rights Commissions **15 Hours**

National Human Rights Commission (NHRC) - Composition and its function-Karnataka State Human Rights Commissions (KSHRCs) - Composition and its functions - National Commission and Committees for SCs/STs, Minorities' Commission, Women' Commission

Module 3: Issues and Challenges of Human Rights **15 Hours**

Major issues and concerns of Human Rights- Discrimination and violence against women, children, Dalits and Minorities, Trafficking, Child Labour and Bonded Labour, Challenges to Human Rights

Skill Development

(These activities are only indicative, the Faculty member can innovate)

1. Group Discussion on Human Rights and its types (comparison of Western and Eastern concept of Human Rights).
2. Find out the different types of complaints received by NHRC and bring out the end results on any one of such case.

3. In order to make it more participatory learning, the students are required to visit the website of NHRC (www.nhrc.nic.in), wherein at the left-hand side, a link is provided to the 'instructions. After going through the guidelines issued by NHRC's, briefly explain the guidelines on – Custodial death/rape, Encounter death, and Guidelines on arrest.

COURSE OUTCOMES:

After completing this course students will be able to-

1. Explain the basic concept of Human Rights and its various formulations.
2. Review State and National level human rights commission in India.
3. Develop ability to critically analyse Human Rights situations.

Books for Reference:

- ❖ Baxi Upendra (ed.), *The Right to be Human*, Lancer International, Crawford, New Delhi, 1987.
- ❖ James (ed.), *The Rights of People*, Oxford, New York, 1988.
- ❖ Craston, M. *What are Human Rights*, Bodely Head, London, 1973
- ❖ Rhonda L. Callaway & Julie Harrelson - Stephens, "International Human Rights", Published by viva books private limited, New Delhi, 2010.
- ❖ Janusz Symonides, "Human Rights Concept and Standards", Rawat Publications, New Delhi, 2019.
- ❖ Sunil Deshta and Kiran Deshta, "Fundamental Human Rights", Deep and Deep Publications, New Delhi, 2011.
- ❖ Donnelly, Jack and Rhoda Howard (ed.), *International Handbook of Human Rights*, Westport, Connecticut: Greenwood Press, 1987.
- ❖ Donnelly, Jack, *Universal Human Rights in Theory and Practice*, New Delhi, Manas, 2005.

- ❖ *Dr.Tapan Biswal, "Human Rights Gender and Environment", VivaBooks Private Limited Publishers, New Delhi 2006*
- ❖ *Satya.P. Kanan, "Human Rights Evolution and Development", Wisdom Press, New Delhi 2012.*
- ❖ *Gerwith, Human Rights: Essays on Justification and Application, University of Chicago Press, Chicago,1982.*
- ❖ *Khan, Mumtaz Ali, Human Rights and the Dalits, Uppal PublishingHouse, New Delhi, 1995.*
- ❖ *V.T.Patil,"HumanRightsDevelopmentsinSouthAsia", AuthorsPress Publishers, Delhi 2003.*
- ❖ *Dr.S.K. Gupta, "Statewise Comprehensive Information on HumanRight Violation", Published by ALP Books, Delhi. 2009.*
- ❖ *Acharya, B.C. A Handbook of Wome;s Human Rights, WisdomPress, New Delhi, 2011.*
- ❖ *South Asia Human Rights Documentation Centre, Introducing Human Rights, Oxford, New Delhi, 2006.*
- ❖ *Lillich, R. International Human Rights: Law Policy and Practice, Boston: Little Brown and Co., 1991 2ndEdn.*

UG 22 OE 019: INDIAN POLITY: ISSUES AND CONCERNS

COURSE OBJECTIVE:

The course aims to make the students aware of the emerging issues of Indian polity and their impact on the Indian Democracy.

Module 1: National Integration and Social Harmony 10 Hours

National Integration and Social Harmony - Meaning and Need of National Integration and Suggestions for securing National Integration.

Module 2: Society and Politics in India 10 Hours

Society and Politics in India - Caste and Its Impact, Problems in understanding caste system as a social system in India, and Role of Caste and its Impact on Indian Polity.

Module 3: Language, Religion, Local Traditions & Diversity 10 Hours

Language - Role and Constitutional Provisions, Issues and Challenges
Religion and Local Traditions - Role and Constitutional Provisions
Celebrating Diversity - Consensus and Challenges

Module 4: Development and Inclusiveness 6 Hours

Development and Inclusiveness - Issues and Concerns

Module 5: Regionalism, Corruptions and Terrorism 9 Hours

Regionalism - Reasons for the Growth, Forms and Measures. Corruptions - Causes and Measures. Terrorism - Types, Causes and Measures

Skill Development

(These activities are only indicative, the Faculty member can innovate)

1. Classify the major factors which are an impediment to National Integration and give your suggestions

2. Identify the terrorist's group in the world
3. Make a point on 2011 Anti- Corruption movement in India

COURSE OUTCOME:

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

1. Employ suggestions for securing National Integration and Harmony.
2. Translate the role of Caste and its Impact on Indian Polity.
3. Analyse Diversity Consensus and challenges of Indian tradition.
4. Review issues and concerns of inclusive India.
5. Diagnose the causes of Regionalism, Corruptions and Terrorism and their measures.

Book for Reference:

- ❖ M. Galanter, 'The Long Half-Life of Reservations', in Z. Hasan, E. Sridharan and R. Sudarshan (eds.) *India's Living Constitution: Ideas, Practices, Controversies*, New Delhi: Permanent Black, 2002.
- ❖ C. Jaffrelot, 'The Politics of the OBCs', in *Seminar*, Issue, 2005.
- ❖ Singh, M.P. & Saxena, R. *Indian Politics: Contemporary Issues and Concerns*. New Delhi: PHI Learning, 2008.
- ❖ Vanaik, A. & Bhargava, R. (eds.) *Understanding Contemporary India: Critical Perspectives*. New Delhi: Orient Blackswan, 2010.
- ❖ Dunkin Jalaki "Bharatadalli Jativyavaste ideye?", Malladahalli Publication, Malladahalli.

UG 22 OE 020: MACHINE LEARNING USING R PROGRAMMING

COURSE OBJECTIVES:

The course enables the students to learn the basic concepts of statistics & mathematics essential for data analysis along with basic concepts of R programming and Machine Learning.

Module 1: Statistics & Mathematical Essentials **9 Hours**

Measure of Central Tendency - Mean, Median, Mode - Dispersion Technique -Range Inter Quartile Range - Variance, Standard Deviation - Mean Square Error& Root Mean Square - Probability Distribution.

Module 2: Hypothesis and Dimension Reduction Technique **9 Hours**

Types of Hypothesis - Sample testing - T-test - Z-test - Chi-square test - Anovatest -. One Way Anova. Two Way Anova - Principle component analysis -Collinearity and multicollinearity

Module 3: R Programming Concepts **9 Hours**

The Data types in R & its uses -Build in functions in R- Data Manipulation -Data import Techniques – Exploratory Data Analysis – Data Visualization.

Module 4: Machine Learning **9 Hours**

Machine Learning Fundamental & common use cases - Approach to Machine Learning Understanding

Supervised learning technique – Unsupervised learning technique

Module 5: Predictive Modelling In R **9 Hours**

Introduction to predictive modeling - Regression Problem - Classification Problem - Linear Regression - Logistic Regression - Clustering - Distancemeasure types- K means clustering – Decision

Tree Classifier – Random Forest Classifier – Support Vector Machine.

COURSE OUTCOMES:

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

1. Understand the fundamental concepts of Statistics & Mathematics
2. Explain the concepts of Hypothesis & Dimension Reduction Techniques
3. Practice R Programming and its concepts.
4. Outline Machine Learning Concepts using R
5. Discuss the various predictive models

Books for Reference:

- ❖ *Introducing Data Science, Davy Cielen, Arno D. B. Meysman and Mohamed Ali, Manning Publications, 2016.*
- ❖ *Think Like a Data Scientist, Brian Godsey, Manning Publications, 2017.*
- ❖ *Doing Data Science, Straight Talk from the Frontline, Cathy O'Neil, Rachel Schutt, O' Reilly, 1st edition, 2013.*
- ❖ *Mining of Massive Datasets, Jure Leskovec, Anand Rajaraman, Jeffrey David Ullman, Cambridge University Press, 2nd edition, 2014*
- ❖ *An Introduction to Statistical Learning: with Applications in R, Gareth James, Daniela Witten, Trevor Hastie, Robert Tibshirani, Springer, 1st edition, 2013*

UG 22 OE 021: OFFICE AUTOMATION

COURSE OBJECTIVES:

The course aims to equip students with the basics of MS Office applications required in office automation of business.

Module 1: Starting with MS-Word:

10 Hours

Introduction to MS-Word: Understanding the start screen, Creating a new blank document, The word screen, How Microsoft Word works, Understanding the quick access toolbar, Understanding the status bar, Exiting safely from Word.

Documents in Word: Creating documents in word, Typing text, the save as place, Checking spelling and grammar, Page zooming, Viewing the ruler, Showing paragraph marks, Counting words. Viewing multiple pages, Splitting the window, Understanding document views, Changing document views, Understanding read mode, Viewing a document in read mode, Using resume reading.

Working with text: Selecting text using the mouse, Selecting text using the keyboard, Editing text in insert mode, Editing text in overtype mode, Deleting text, Using undo, Using redo, Understanding find and replace, Finding words, Replacing words, Using go to, Understanding cutting and copying, Cutting and pasting, Copying and pasting, Drag and drop cutting, Drag and drop copying, Using the clipboard task pane

Text appearance and Paragraphs: Understanding font formatting tools, changing fonts, Changing font size, Making text bold, Italicizing text, Underlining text, Highlighting text, Changing text color, Using the format painter. Understanding paragraph formatting, Understanding text alignment, Changing line spacing, Changing paragraph spacing, Indenting paragraphs, Out denting paragraphs, Starting a bulleted list, Adding bullets to existing paragraphs, Removing existing bullets, Starting a numbered list, Numbering existing paragraphs, Removing existing numbers, Shading paragraphs, Applying borders to paragraphs, Using the paragraph dialog box.

Working with pages: Changing page margins, Setting custom margins, Changing page orientation, Changing paper sizing, Setting custom paper sizes, Inserting page breaks, Removing page breaks, Inserting page numbers, Formatting page numbers, Removing page numbers.

Module 2: Table and Images in MS-Word

10 Hours

Tab and tables: Using default tabs, Setting tabs on the ruler, Modifying tabs on the ruler, Setting tabs in the tabs dialog box, Setting tab leaders, Setting bar tabs, Setting mixed tabs, Removing tabs, Understanding tables, Creating a table, Adding data to a table, Selecting in tables using the ribbon, Selecting in tables using the mouse, Inserting columns and rows, Deleting columns and rows, Changing column widths, Changing row heights, Auto fitting columns, Shading cells, Modifying borders, Adding custom borders, Choosing a table style.

Clip Art and pictures: Understanding clip art and pictures, Inserting clip art, Selecting clip art, Applying text wrapping styles, Positioning clip art, Resizing clip art, Applying picture styles to clip art, Resetting clip art, Deleting clip art, Inserting a picture, Inserting an online picture, Resizing a picture, Changing the picture, Cropping a picture.

Performing a mail merge: Understanding mail merge, Understanding the mail merge process, Creating a recipient list, Creating the starting document, Starting the mail merge wizard, Selecting a recipient list, Inserting mail merge fields, Previewing the merged documents, Completing the merge.

Printing your documents: Understanding printing, Previewing your document, Quick printing, Selecting a printer, Printing the current page, Specifying a range of pages, Specifying the number of copies.

Module 3: MS- Excel- I

10 Hours

Introduction to MS- Excel: The Excel Environment, The title bar, the ribbon, Scroll bars, The Microsoft office button, the quick access toolbar, the formula bar, the workbook window, the status bar, the workbook view buttons, the zoom slider, the mini toolbar, keyboard shortcuts.

Creating Basic Workbooks: Creating New Workbooks, Saving Workbooks, Closing Workbooks, Opening Workbooks, Selecting Cells, Entering Text into Cells, Entering Numbers into Cells, AutoComplete, Pick from Drop-Down List, Using the “Window” Command Group, Switching to Full Screen View, Renaming Workbooks, Working with Excel File Formats.

Using Ranges and Formulas: Selecting Ranges, Ranged Data Entry, Using AutoFill. Ranged Formula Syntax, Simple Formula Syntax, Writing Formulas, Using AutoSum, Inserting Functions 4.6- Editing a Range, Formula AutoCorrect, Auto Calculate.

Copying & Pasting Formulas: Relative References and Absolute References, Cutting, Copying & Pasting Data, Auto Filling Cells, The Undo Button, The Redo Button.

Columns & Rows: Selecting Columns and Rows, Adjusting Column Width and Row Height, Hiding and Unhiding Columns and Row, Inserting and Deleting Columns and Rows.

Formatting Worksheets: Formatting Cells, The Format Cells Dialog Box, Clearing All Formatting from Cells, Copying All Formatting from Cells to Another Area, Moving between Worksheets, Selecting Multiple Worksheets, Inserting and Deleting Worksheets, Renaming Worksheets, Coloring Worksheet Tabs, Copying or Moving Worksheets.

Module 4: MS- EXCEL- II

7 Hours

Named Ranges: Naming Ranges, Creating Names from Headings, Moving to a Named Range, Using Named Ranges in Formulas, Naming 3D Ranges, Managing Named Ranges

Conditional Formatting and Cell Styles: Conditional Formatting, Finding Cells with Conditional Formatting, Clearing Conditional Formatting, Using Table and Cell Styles.

Paste Special and Sharing Workbooks: Using Paste Special, Pasting Linked Formulas, Sharing Workbooks, Highlighting Changes, Reviewing Changes, Using Comments, Compare and Merge Workbooks.

Creating Worksheet Charts: Creating Charts, Selecting Charts and Chart Elements, Moving and Resizing Charts, Changing the Chart Type, Changing the Data Range, Switching Column and Row Data, Choosing a Chart Layout, Choosing a Chart Style, Printing Charts, Deleting Charts.

Editing and Formatting Charts: Formatting Chart Objects, Inserting Objects into Chart, Changing Chart Labels, Changing Axes Display, Changing the Chart Background, Applying Chart Analysis Lines, Naming Charts, Applying Shape Styles to Chart Elements, Applying WordArt Styles to Chart Elements, Saving Custom Chart Templates.

Module 5: MS-POWER POINT

8 Hours

Getting acquainted with power point:

The PowerPoint Environment, The Title Bar, The Ribbon, The Microsoft Office Button, The Quick Access Toolbar, The Scroll Bars, The Presentation View Buttons, The Zoom Slider, The Status Bar, The Mini Toolbar, Keyboard Shortcuts.

Creating basic presentations and presentation views:

Opening Presentations, Closing Presentations, Creating New Presentations, Saving Presentations, Inserting New Slides, Applying Slide Layouts, Using the “Package for CD” Feature, Working with PowerPoint File Formats Normal View, Slide Sorter View, Notes Page View, Slide Show View.

Using text, clip art and smart art:

Adding Text to Slides, Basic Object Manipulation, Font Formatting, Paragraph Formatting, Applying Custom Bullets and Numbering, Using Tabs, Setting Text Box Options, Checking Spelling. Inserting Clip Art and Pictures, Basic Graphic Manipulation, Using Picture Tools, The Format Picture Dialog Box. Inserting and Manipulating SmartArt, Formatting SmartArt.

Using slide show view and printing your presentation:

Running a Slide Show, Using Custom Shows, Using Page Setup, Setting the Slide Header and Footer, Using Print Preview, Printing.

COURSE OUTCOMES:

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

1. Understand the basics of MS Word.
2. Apply the concepts of MS Word in creating tables and charts.
3. Understand the working of spreadsheet.
4. Implement the working of basic spreadsheet with formula, macros etc.,
5. Determine the various tools and its applications in power point presentations.

Books for Reference:

- ❖ *Laura Acklen et al, Microsoft Office 97 Professional Essentials,EEE Que E&T, PHI (1998).*
- ❖ *Jennifer fulton, Sherri Kinkoph, and Joe Kraynak, The Big Basics Book of Microsoft Office 1997, PHI, 1998.*
- ❖ *Sanjay Saxena, A First Course in Computers (Based on Windows 8 And MS Office 2013) Vikas Publishing 2015.*

UG 22 OE 022: PSYCHOLOGY OF HEALTH AND WELLBEING

COURSE OBJECTIVES:

The course aims to familiarise students with the knowledge on spectrum of health, stress and illness issues for better health management and life enhancement.

Module 1: Illness, Health and Wellbeing 9 Hours

Illness, Health and Wellbeing; Health continuum; models of health and illness: Medical, Bio psychosocial; Holistic Health; Health and Wellbeing.

Module 2: Stress and Coping 12 Hours

Stress and Coping; Nature and Sources of Stress; Personal and Social Mediators of Stress; Effects of Stress on Physical and Mental Health; Coping and Stress management.

Module 3: Health Management 12 Hours

Health Management: Health enhancing behaviours: Exercise, Nutrition, Meditation, Yoga; Health compromising behaviours (alcoholism, smoking, internet addiction); Health Protective behaviours, Illness Management.

Module 4: Human Strengths and Life Enhancements 12 Hours

Promoting Human Strengths and Life Enhancement: Strength: Meaning; Realizing strength; Maximizing Unrealized Strength. Weakness - Meaning, Identifying & Overcoming Weakness. Strategies to develop hope and optimism.

COURSE OUTCOMES:

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

1. Understand the various issues to personal wellbeing.
2. Express the stresses in one's life and how to manage them.

3. Understanding the spectrum of health and illness for better health management
4. Interpret human strength and weaknesses for life enhancement

Books for Reference:

- ❖ Carr. A. (2004) *Positive Psychology: The science of happiness and human strength* UK: Routledge. Di Matteo, M.R & Martin, L.R.(2002).
- ❖ *Health Psychology*. New Delhi: Pearson. Farshaw, M (2003)
- ❖ *Advanced Psychology: Health Psychology*. London: Hodder and Stoughton Forshaw, M. (2003).
- ❖ *Advanced Psychology: Health Psychology*. London: Hodder and Stoughton. Hick, J.W. (2005). *Fifty signs of Mental Health. A Guide to understanding mental health*. Yale University Press. Snyder, C R., & Lopez. S.J.(2007)
- ❖ *Positive Psychology: The scientific and practical explorations of human strengths*. Thousand Oaks, CA Sage.
- ❖ Taylor. S.E. (2006). *Health Psychology*. 6th Edition. New Delhi, Tata McGraw Hill

UG 22 OE 023: PUBLIC POLICY AND GOOD GOVERNANCE

COURSE OBJECTIVE:

The course aims to make the students aware of different issues that exists in the sphere of governance and along with understanding the emerging issues and public policies.

Module 1: Introduction to Good Governance 9 Hours

Historical Roots of Governance Concept of Governance and its features- Concept of Good Governance, World Bank Prescription and Indicators- Conceptual Framework of Governance- Rule of Law, Openness & Transparency, Accountability, Social Audit- Differentiating Governance and Good Governance

Module 2: Models of Measuring Good Governance and Governance Agencies 9 Hours

Models of Measuring Good Governance: Procedural Measure, Capacity Measure and Output Measure. Measuring Governance Agencies: UNDP Human Development Report: HDI Transparency International- Corruption Perceptions Index

Module 3: Corruption 9 Hours

Corruptions - Causes and Measures to combat corruption- Right to Information, Redressal of Citizens' Grievances Protection of Whistle blowers, Local Bodies Ombudsmen.

Module 4: Ethics and Public Policy 9 Hours

Ethical Foundations of Governance Morale, Ethics and Professions standard in public services Constitutional values and its relationship with ethics

Module 5: E- Governance 9 Hours

Evolution of E- Governance- E- Governance Issues and Challenges- E governance Initiatives: A case study of SAKALA

COURSE OUTCOME:

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

1. Understand the concept of governance and good governance and also their differences.
2. Examine good governance models and their agencies.
3. Illustrate the measures to combat corruptions in India.
4. Review the ethical foundations of governance and its policies.
5. Examine the issues and challenges in E-Governance.

Skill Development

(These activities are only indicative, the Faculty member can innovate)

1. Classify the major factors that are hindering effectiveness in governance and give your suggestions
2. Identify the local ombudsman and whistleblowers in India and write a brief note
3. Make a comparison of developed and developing countries on various indicators of Human Development.

Book for Reference:

- ❖ *Bellamy Christine and John Taylor (1998), Governing in the Information Age, Buckingham Open University Press.*
- ❖ *Bhatnagar S.C (2004) E- Government From vision to Implementation: A practical guide with case studies, Sage publications New Delhi.*
- ❖ *Michael.E. Milkovich (2012), Digital Governance- New Technologies for improving public service a participation Routledge, Taylor and Francis group New York.*
- ❖ *Bowler and T. Donovan (2002), Democracy, Institutions and Attitudes about Citizen influence on government, British Journal of Political Science, Vol. 32.*

- ❖ *Ali Farazamand (2004) Sound Governance: Policy and Administrative Innovations Praeger publishers, West Port.*
- ❖ *Bevier Mark (2013), The Sage Handbook of Governance Sage publications London.*
- ❖ *Katherine Berscha and Sandra Botero (2014), Measuring Governance: Implications of conceptual choices, European journal of Development and Research, Vol. 26.*
- ❖ *Shantanu Devarajan (2008), Two comments on Governance Indicators: Where are we, where we should we be going? The world Bank research Observer, Vol. 23.*
- ❖ *Francis Fukuyama (2013) What is Governance, Working Paper Centre for Global development, New York Washington.*
- ❖ *Kathe Callahan (2007), Elements of Effective Governance: Measurement, Accountability and Participation CRC, press, Taylor and Francis group Boca Raton.*
- ❖ *Bellamy Christine and John Taylor (1998), Governing in the Information Age, Buckingham Open University Press.*
- ❖ *Bhatnagar S.C (2004) E- Government From vision to Implementation: A practical guide with case studies, Sage publications New Delhi.*
- ❖ *Michael.E. Milkovich (2012), Digital Governance- New Technologies for improving public service a participation Routledge, Taylor and Francis group New York.*
- ❖ *Bowler and T. Donovan (2002), Democracy, Institutions and*
- ❖ *Attitudes about Citizen influence on government, British Journal of Political Science, Vol. 32.*
- ❖ *Ali Faraz amand (2004) Sound Governance: Policy and Administrative Innovations Praeger publishers, West Port.*

- ❖ *Bevier Mark (2013), The Sage Handbook of Governance Sage publications London.*
- ❖ *Katherine Berscha and Sandra Botero (2014), Measuring Governance: Implications of conceptual choices, European journal of Development and Research, Vol. 26.*
- ❖ *Shantanu Devarajan (2008), Two comments on Governance Indicators: Where are we, where we should we be going? The world Bank research Observer, Vol. 23.*
- ❖ *Francis Fukuyama (2013) What is Governance, Working Paper Centre for Global development, New York Washington.*
- ❖ *Kathe Callahan (2007), Elements of Effective Governance: Measurement, Accountability and Participation CRC, press, Taylor and Francis group Boca Raton.*

UG 22 OE 024: PUBLIC POLICY IN INDIAN CONTEXT

COURSE OBJECTIVE:

The course aims to introduce the students to the basic concepts and practices associated with the policy making and issues in Indian domain.

Module 1: Public Policy Processes in India 10 Hours

Public Policy Processes in India - Structural Characteristics- Preamble, Federalism and Parliamentary system- Actors in Policy Processes- Government & Non - government Institutions, International Donor Agencies- Ideological Preferences and Gradual changes (Pre 1991 and Post 1991)

Module 2: Statutory and Non-Statutory authorities 12 Hours

Statutory and Non-Statutory authorities- Niti Aayog national development council state planning boards think tanks pressure groups and interest groups-trends of public policy in India political economy of development in India.-State directed model of policy making and its failures State- Guided model of Liberalization, Issues and Challenges

Module 3: Education Policy in India 12 Hours

Education Policy in India- Evolutionary Perspective- Education in India National Educational Commission National Education Policy 1986 and 1992- Yash Pal Committee Report NEP 2021- Issues and Challenges

Module 4: National Health Policy 11 Hours

National Health Policy Health Care Development since India's Independence Primary and Community Health centers as health care components National Health Policy 1983 National Health Policy 2017

Skill Development

(These activities are only indicative, the Faculty member can innovate)

1. Group Discussion on Case Studies of Public Policies.
2. Find out the Institutions involved in the policy making in India.

COURSE OUTCOMES:

After completing the course students will be able to:

1. Explain the basics of Public Policy in India.
2. Understand the issues and challenges in statutory and non-statutory bodies.
3. Examine Indian education policy.
4. Review Indian health policy.

Books for Reference:

- ❖ *D.D. Basu Introduction to Constitution of India (2011)*
- ❖ *M.V. Pyle- India's Constitution (2016).*
- ❖ *Uma Kapila- Indian Economy since independence: A comprehensive and critical analysis of India's economy since 1947-2014.*
- ❖ *Lindblom. C. E and E.J. Woodhouse (1993), The Policy making process 3rd ed., Prentice Hall.*
- ❖ *Francine. R. Frankel, Zoya Hasan, Rajeev Bhargava- Transforming India: Social and Political Dynamics of Democracy.*
- ❖ *Agarwal. J.C (2009), Education Policy in India, Neha publishers and distributors*
- ❖ *Dev Mahendra (2008), Inclusive growth in India, Oxford college essays.*
- ❖ *Dube, Akhilesh (1997), Commercialization of Education in India: Policy, Law and Justice, A.P.H public Corp.*
- ❖ *Amit Sen Gupta, (2002), National Health Policy 2002: A brief critique, The National Medical Journal of India, Vol.15, No.4.*
- ❖ *Government of India, National Health Policy 2017.*

UG 22 OE 025: PYTHON PROGRAMMING

COURSE OBJECTIVES:

The course is designed to provide the students with the basic knowledge of Python programming language and its application in the business.

Module 1: Introduction to Python Programming **9 Hours**

Introduction to Python Programming, History of Python, its features, Scope of Python, Downloading and installing Python, Python code execution process, run a simple program on Python interpreter and IDLE.

Module 2: Data Types and Operators **9 Hours**

The concept of data types; variables, assignments; immutable variables; numerical types; arithmetic operators and expressions; comments in the program; understanding error messages; Illustrative programs.

Module 3: Branching and Looping **9 Hours**

Conditions, Boolean logic, logical operators; ranges; Control statements: if-else, loops (for, while); short-circuit (lazy) evaluation. Illustrative programs

Module 4: Lists, Tuples and Dictionaries **9 Hours**

Lists, tuples, and dictionaries; basic list operators, replacing, inserting, removing an element; searching and sorting lists; dictionary literals, adding and removing keys, accessing and replacing values, Illustrative programs

Module 5: OOps and Exception Handling **19 Hours**

Classes and OOP: classes, objects, attributes and methods; defining classes; design with classes, exception handling, Illustrative programs

COURSE OUTCOMES:

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

1. Understand the basic concepts in Python programming.
2. Illustrate various data types and operations Python program.
3. Understand and demonstrate the use of Branching and Looping Structures.
4. Understand advanced data types such as lists, tuples, dictionaries.
5. Illustrate the basic knowledge of Object-Oriented Programming Concept and Exception Handling.

Books for Reference:

- ❖ *Python in easy steps* - Mike McGrath, In Easy Steps Limited, Second Edition
- ❖ *"Hello World" - Computer Programming for Kids and other Beginners* - Warren and Carter, Manning Publications, 2014
- ❖ *Mark Lutz, Programming Python, O'Reilly, 4th Edition, 2010*

UG 22 OE 026: SOCIOLOGY FOR EVERYDAY LIFE

COURSE OBJECTIVES:

The course enables the students to understand the sociology of everyday life along with the social institutions established and with their practices and customs.

Module 1: Introduction to Sociology for Everyday Life 15 Hours

Sociology as a study of Social Interaction and its Need Everyday Life - Meaning; Why Study Everyday Life? (Contributions of Erving Goffman and Anthony Giddens); Role of Socialisation in establishing habits and practices- action, thinking and feeling- Social Institutions as Established Practices and Customs - Definition and Elements Challenges and Problems of Everyday Life.

Module 2: Self and Society 15 Hours

Definition of Situation (W I Thomas' Principle)

The Looking Glass Self; Relation between Individual and Society
Role of social media in Constructing Self and Identity.

Module 3: Culture and Everyday Life 15 Hours

Definition of Culture; Types of Culture: High Culture, Popular Culture, Recorded Culture and Lived Culture Mass Media and Everyday Life Globalisation and Cultural Diffusion.

COURSE OUTCOMES:

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

1. Explain the philosophy of everyday life and its challenges.
2. Examine the role of self-identity in the society.
3. Describe the different types of culture in everyday life.

Books for Reference:

- ❖ *Berger, P L 1963, Invitation to Sociology: A Humanistic Perspective, Doubleday, Garden City, N.Y*
- ❖ *Bruce, Steve, 2018, Sociology: A Very Short Introduction, 2nd edition, Oxford University Press, New York*
- ❖ *Corrigall-Brown, Catherine 2020, Imagining Sociology: An Introduction with Readings, 2nd Edition, Oxford University Press, Canada*
- ❖ *Coser, Lewis 1977 Masters of Sociological Thought, Harcourt Brace Jovanovich, New York*
- ❖ *Davis, Kingsley 1949, Human Society, Macmillan, Delhi*
- ❖ *Ferrante, Joan 2013, Seeing Sociology: An Introduction, 3rd Edition, Cengage Learning, USA*
- ❖ *Ferris, Kerry and Jill Stein, 2018, The Real World: An Introduction to Sociology, 6th Edition, WW Norton, New York*
- ❖ *Giddens, Anthony and Philip W Sutton, 2013, Sociology, 7th edition, Wiley India Pvt. Ltd. New Delhi*
- ❖ *Harlambos, M and R M Heald, 1980, Sociology: Themes and Perspectives, Oxford University Press, Delhi*
- ❖ *Inkeles, Alex 1987, What is Sociology? Prentice-Hall of India, New Delhi*
- ❖ *Jayaram, N 1989, Sociology - Methods and Theories, Macmillan India Ltd. Bangalore*
- ❖ *Johnson, H M 1995, Sociology: A Systematic Introduction, Allied Publishers, New Delhi*

- ❖ *Lemert, Charles 2012, Social Things: An Introduction to the Sociological Life, Rowman and Littlefield Publishers, Maryland*
- ❖ *MacIver R M and Page C M 1974, Society: An Introductory Analysis, Macmillan India Ltd, New Delhi*
- ❖ *Macionis, John 2018, Sociology Global Edition, Pearson, England*
- ❖ *Merton, R K 1968, Social Theory and Social Structure, The Free Press, Glencoe*
- ❖ *Mulagund, I C 2008 Readings in General Sociology, Srushti Prakashana, Dharwad*
- ❖ *Mulagund, I C 2008 Readings in Indian Sociology, Srushti Prakashana, Dharwad*
- ❖ *Ritzer, George and W W Murphy, 2020, Introduction to Sociology, 5th edition, Sage Publications, New Delhi*

UG 22 OE 027: INTERNATIONAL TAX AND TECHNOLOGY - I

COURSE OBJECTIVES

The course aims to equip students with an overview of the US Legal system and an understanding about the US Income Tax principles and regulations applicable to individuals.

Module -1 Common Topics - Introduction to US Legal & Tax System 8 Hours

Recognize the structure of the US Government and US Tax Jurisdictions, Overview, of Tax Reforms, Key differences among types of US Tax Payers, Identify various types of taxation in US, Identify sources of US tax law and navigation of the Code and Regulations, Recognize fundamental differences between home country and US Tax Systems.

Module – 2: US Individual Income Tax 14 Hours

Overview and Computation of Income (Part 1)

Basic concepts of US tax and Overview of form 1040, Filing Requirement, Filing Status, Substantial Presence Test, Dependents, Compensation, Basics of Income Sourcing & W-2, Stock Options, Interest, Dividend Income, Capital Gains and Sale of Main Home, Business Income (Schedule C and self-employment tax), Income and Loss from Rental Property, Additional Medicare Tax and Net Investment Income Tax, Filing due date, Extensions, Penalty and Interest, Tax rates and calculation of Taxes, Form 1040 Page 1 and Page 2.

Module – 3: US Individual Income Tax 14 Hours

Overview and Computation of Income (Part 2)

Passive Activity Loss limitations, State and Local tax refunds, Other Income, Health Savings Account deduction, IRA deduction, Student loan and Interest, Tuition and Fees and other deductions, Taxes - State & Local Taxes, Real Estate Taxes, Personal Property

Taxes, Mortgage Interest, Investment Interest Expense, Charitable, Contribution, Casualty & Theft Losses, Medical and Dental and Other Miscellaneous Itemized Deductions, Education Credits (AOC and LLC), Child & Dependent Care Credit, Child Tax Credit, Alternate Minimum Tax.

**Module – 4: US Individual Income Tax-
Advanced Topics**

6 Hours

Who is an Expat, What is Sec 911 exclusion and overview of Form 2555, Introduction to Foreign Tax Credit, Who is an Inpat, overview of Form 1040NR, Income recognition for foreign nationals.

Module 5 - Introduction to Technology

18 Hours

Demonstration / Functionality of Data Transformation (SQL) and Data visualization (Power BI/Query) tools, Basic computing and data handling, Case study 1 with IRS Data in Power BI, Case Study 2 & 3 with Power Query, Case Study 4, 5 & 6 with Power Query, Comprehensive Case Study 7 to prepare Form 1040 with Power BI and Power Query.

Skill Development

(These activities are only indicative, the Faculty member can innovate)

1. Participate in simulations, case studies and quizzes on different topics related to corporate taxation during the tenure of the course
2. Lab sessions will be conducted on SQL, Power BI and SharePoint to gain the practical application/knowledge of the subject

COURSE OUTCOMES:

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

1. Illustrate the role Accounting Professionals in the context of US Legal and Tax systems and tax life cycle.
2. Outline the usual sources of Income of Individual Assessee for the computation of Gross Income and Taxable income permissible under the US Tax laws.

3. Outline the adjustments to Income, deductions and credits with respect to an Individual Assessee for the computation of Taxable income and Net tax Payable permissible under the US Tax laws.
4. Devise tax treatments for Foreign Nationals, Expats and Inpats.
5. Use digital tools for filing Individual returns with Power Business Intelligence.

Book for Reference

- ❖ *CCH Tax Law; U.S Master Tax; 102nd Edition; Illinois; CCH Publications; 2018.*
- ❖ *EA Review Part 1: Individuals by Irvin N Gleim and James R. Hasselback*
- ❖ *EA Review Part 2: Businesses by Irvin N Gleim and James R.Hasselback*
- ❖ *EA Review Part 3: Representation, Practices & Procedures by Irvin N Gleim and James R. Hasselback*
- ❖ <https://taxmap.irs.gov/taxmap/tmhome.htm>

UG 22 OE 028: INTERNATIONAL TAX AND TECHNOLOGY - II

COURSE OBJECTIVES

The course enables students with the knowledge and computation of taxable income of partnerships and corporations as per the US Tax regulations along with an overview of certain corporate technological tools.

Module -1: Partnership Basics

8 Hours

Check the box regulation, Subchapter K provisions, Partnership tax return filing and timing, Partnership Formation, record cash and property contributions on a partnership balance sheet, Compute partner's outside basis, explain the tax consequences of partnership organization and syndication fees

Module - 2: Partnership Taxable Income

10 Hours

Compute partnership taxable income, explain the function of guaranteed payments to partners, partner's Distributive shares, Determine partners distributive share of income, gain, loss, deduction or credit, Partners' Basis Calculation, Adjust outside basis for Schedule K-1 information

Module - 3: Comprehensive case studies for Partnerships using technology tools

6 Hours

Partnerships and types of Partnerships (using Power BI), Partners and types of Partners (using Power BI), Identify separately state items on Schedule K, Form 1065 (using Power BI), Reconcile book and taxable income on Schedule M-1 Form 1065 & Schedule M-3, Simulation - Comprehensive case study using technology tools, solving case study on relevant tax forms using Power query

Module - 4: US Corporations

12 Hours

Overview of GAAP and the GAAP standard setting bodies, comparison of US GAAP vs India GAAP, entities overview,

identify taxes imposed by different jurisdictions, describe Legal characteristics of business entities, explain the federal income tax treatment of business entities, identify common non business entities, taxable Income Overview, explain relationship between Corporate book income and taxable Income, describe Schedule M1 and M3 disclosure requirements, Define Gross Income, recognize common exclusion from Gross Income, general rules for timing of income recognition, determine the effect of income related book tax differences on Schedule M3, identify broad categories of deductible expenses, recognize common examples of non-deductible expenses, general rules for timing of deductions.

Module - 5: Analyse Income and Expenses of US Corporations

16 Hours

Asset basis and cost recovery, determine the Initial tax basis of business property, distinguish between deductible repairs and Capitalized improvements, calculate allowable cost recovery deductions, determine the effect of cost recovery book to tax differences on Schedule M3

Calculate gain or loss realized and recognized on business property dispositions, Identity the character of recognized gain or loss on property dispositions, explain the Sec. 1231 netting rules and capital loss limitations, determine the effect of asset sale book tax differences on Schedule M3, Calculate Corporate Taxable Income, tax treatment of Charitable Contributions, net operating losses, and dividends received deductions, finalize corporate taxable income, compute Corporate Tax Liability.

Module - 6: Comprehensive case studies for Corporations using technology tools

8 Hours

Introduction to Power BI and Case study, solving case study on relevant tax forms using Power query, Case Study: Disposal of Fixed Assets and Gain / (Loss) Computation, Identifying Property Type, Class Type, Convention, Method and Computation of Depreciation using Power BI

Skill Development

(These activities are only indicative, the Faculty member can innovate)

1. Participate in simulations, case studies and quizzes on different topics related to corporate taxation during the tenure of the course
2. Lab sessions will be conducted on SQL, Power BI and SharePoint to gain the practical application/knowledge of the subject.

COURSE OUTCOMES:

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

1. Compute Taxable income of Partnership within the framework of US Partnership Tax Act.
2. Illustrate for filing Tax return of individual partner after incorporating the requisite information shown in K-1.
3. Use the digital tools for filing partnership returns with Power Business Intelligence.
4. Design the procedure for filing requirements of Controlled foreign corporations and US Shareholders within the framework of US Tax System.
5. Calculate a corporation's taxable income and tax liability taking into account all necessary/ required adjustments.
6. Use the digital tools for filing corporate returns with Power Business Intelligence.

Books for Reference

- ❖ *CCH Tax Law; U.S Master Tax; 102nd Edition; Illinois; CCH Publications; 2018*
- ❖ *EA Review Part 1: Individuals by Irvin N Gleim and James R. Hasselback*
- ❖ *EA Review Part 2: Businesses by Irvin N Gleim and James R. Hasselback*
- ❖ *EA Review Part 3: Representation, Practices & Procedures by Irvin N Gleim and James R. Hasselback*
- ❖ <https://taxmap.irs.gov/taxmap/tmhhome.html>

UG 22 OE 029: UNDERSTANDING INEQUALITIES - AN ANTHROPOLOGICAL PERSPECTIVE

COURSE OBJECTIVES:

In this course we learn to distinguish among domination, exploitation, authority, and oppression. Why are some people “worth” more than others? What are the core features of gender, racial, class, and other forms of inequality? Is a generalized theory of inequality possible? Is there such a thing as a “free slave”? These are some of the questions this course will address, by tracing specific instances of inequality from the most simple human societies (egalitarian bands) to modern racialized capitalist states.

Module 1: Introduction to the origin of inequality 15 Hours

This module will focus on the origin of inequality and how do different anthropologists and historians have argued about the birth of inequality and how it continued throughout human history.

- Marshall Sahlins, “The original affluent society” (Excerpt)
- David Graeber and David Wengrow “The Dawn of Everything: A New History of Humanity”

Module 2: Primitive egalitarianism 15 Hours

In this module we will look at specific primordial societies’ egalitarian way of living. How did small bands of hunter-gatherer societies co-exist with each other? What can the modern capitalist societies can learn from such primitive egalitarian societies?

- Richard B. Lee, “Eating Christmas in the Kalahari” James Woodburn, “Egalitarian society”
- James Woodburn “Egalitarian Societies”

Module 3: Gender inequality: sexual politics in classless societies 15 Hours

This module will focus on how gender differs from other frameworks of inequality, the difference between productive labor and the labor of social reproduction (or care work)

- Sherry Ortner, “Is female to male as nature to culture?”
- Claude Meillassoux, *Maidens, Meals, Money*
- Jane F. Collier & Michelle Z. Rosaldo, “Politics and gender in simple societies”

COURSE OUTCOMES:

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

1. Conceptually understand the notions of inequality
2. How different is anthropological study from other social-science researches
3. How to make close observations on societies

Suggested Reading

1. Elizabeth Anderson. 2017. *Private Government: How Employers Rule Our Lives (and Why We Don't Talk about It)*. Princeton University Press.
2. Quentin Skinner, “On the Liberty of Republics” (lecture)
3. Kristen R. Ghodsee. 2018. *Why Women Have Better Sex Under Socialism: And Other Arguments for Economic Independence*. Hachette UK.
4. Matt Bruenig, “Working Women and the Conundrums of Family Benefits” (lecture)
5. Quinn Slobodian. 2018. *Globalists: The End of Empire and the Birth of Neoliberalism*.
6. Leah N. Gordon. 2015. *From Power to Prejudice: The Rise of Racial Individualism in Midcentury America*. University of Chicago Press.
7. Cedric Johnson. 2007. *Revolutionaries to Race Leaders: Black Power and the Making of African American Politics*. University of Minnesota Press.

8. Jo Littler. 2017. *Against Meritocracy: Culture, Power and Myths of Mobility*. Routledge.
9. Richard V. Reeves. 2018. *Dream Hoarders: How the American Upper Middle Class Is Leaving Everyone Else in the Dust, Why That Is a Problem, and What to Do About It*. Brookings Institution Press.
10. Richard Sennett & Jonathan Cobb. 1972. *The Hidden Injuries of Class*. Cambridge University Press.

UG 22 OE 031: WARRING WITH WORDS - THE ART OF AUGMENTATION & CREATIVE THINKING

INTRODUCTION

This certificate course introduces students to the art of argumentation and creative thinking. The premise of the course is that argumentation and thinking go hand-in-hand and that they are a part of our everyday life in a democracy. Arguments are the end result of a process of thinking, but 'to argue' is a continuous process of thinking, a verb denoting action. To argue is to be in relationship with the external world and with oneself. Argumentation comprises both, the arguments and the process of arguing. This course hopes to explore the idea of argumentation and thinking as an art form and uses philosophy, literature and literary theory as inspiration to find novel ways of learning this art form.

COURSE OBJECTIVES:

1. To develop familiarity with the art of critical inquiry through the use of 'Socratic Method'.
2. To introduce to the art of entering into imaginative dialogue that allows for plurality of perspectives and beliefs.
3. To identify and utilize elements of narrativity that goes into constructing arguments and also to weaving narratives that can act as arguments.
4. To introduce to the art of metaphorical thinking through an engagement with poetry and fiction.
5. To engage with a thinker/creator through a critical reading/viewing their texts.

Module - 1: Socratic Method - The art of critical inquiry

10 Hours

Is asking meaningful and relevant questions an art? How does introspection lead to the art of critical inquiry? Is there a victory or defeat in argumentation?

Socrates, the ancient Greek philosopher, had a unique method of confronting his intellectual opponents. Instead of putting forth his own ideas he would critically examine the accepted notions of his opponents by asking a series of questions. Unable to answer the questions his opponents would concede their defeat and accept their lack of knowledge. The Socratic Dialogues are an interesting resource to learn the art of critical inquiry into our accepted beliefs, notions and perspectives.

Learnings: In this module students will be introduced to the dialectical method of argumentation of the Greek antiquity that uses logical reasoning to carry out a debate. It will also examine other notions of dialectic pertaining to the understanding of history and social processes.

Assessment: Students will engage in a critical dialogue with each other on various topics and capture the conversation either through writing or video. Students will be assessed on their ability to critically examine the statements, perspectives and beliefs of the fellow conversationalist.

Module - 2: Dialogic Imagination - The many voices within

10 Hours

How to accommodate multiple opinions in a democracy? Should one be confrontational when faced with a contrary opinion?

Our opinions and beliefs are not rooted in a singular thought. There are always multiple voices both within and outside which are competing with each other in order to gain dominance in our minds. The establishment of a singular ideology on everyone is a result of snuffing out the multiplicity of viewpoints, either through the use of force or through propaganda. However, literature, through its dialogic imagination, accommodates many voices and allows them to have a dialogue with each other.

Learnings: In this module the students will be introduced to the art of entering into imaginative dialogue that allows for plurality of perspectives and beliefs.

Assessment: Students will be presented with a discourse and then asked to identify the multiplicity of voices in the given discourse. They will be assessed on their ability to identify differing viewpoints and the creative methods they employ to initiate dialogue between those viewpoints.

Module - 3: Narrative Argument and Narratives as Arguments

10 Hours

Is logical reasoning the only form of thinking? Can I reply to an argument with a narrative?

It has been assumed that logical reasoning is the only way of constructing and presenting arguments. Most debates proceed with an established pattern in which a set of data is used as evidence in support of a statement. Within the legal system and academia this is considered to be an authentic form of debate. However, historically, human beings have engaged in another form of argumentation: creating and disseminating narratives and counter-narratives. Narratives have worked in the form of arguments and have been able to persuade people into accepting a particular perspective – usually the perspective of the narrative voice.

Learnings: In this module students will be taught to identify and utilize elements of narrativity that goes into constructing arguments and also to weaving narratives that can act as arguments.

Assessment: Students will be assessed on their ability to identify narrative arguments that are part of everyday public discourse. They will also be assessed on their ability to create a narrative that can act as an argument.

Module - 4: Metaphorical and Analogical Reasoning

10 Hours

Do I follow the path of a butterfly or an ant?

The art of comparison and substitution in language is as old as language itself. Metaphors are not just figures-of-speech used for ornamental purposes, instead, they are fundamental to how we think and express ourselves. A metaphor not only changes the meanings

of words and images but also alters entire categories of knowledge. Metaphorical thinking implies the kind of thinking that enables us to create new metaphors. This is fundamentally different from logical reasoning, in the sense that this involves imagination and creativity to look for patterns and connections between disparate ideas. It could even be argued that metaphorical thinking is the foundation to all logic.

Learnings: In this module students will be introduced to the art of metaphorical thinking through an engagement with poetry and fiction.

Assessment: Students will be assessed on their ability to identify and use methods of metaphorical thinking in building their arguments/creative work.

Module - 5: Thinking through Thinkers

10 Hours

How does one think/create? Whom should I imitate? Who should be my inner voice?

Thinking is never original. It has been said that the entire Western philosophy is nothing but a footnote to Plato, the Greek philosopher. Every age produces its own thinkers who act as a mirror to its society and helps it to engage in intellectual discourse and creative pursuits. Individual thinkers and artists both embrace and reject their masters and through such dialectics new ideas are born. Shakespeare took stories from the ancient past and presented it in an utterly transformed English language that made the viewers of his plays look at the world differently. Modern day artists used the most ancient of all arts – painting, to create a new art form all together – the Graphic Novel.

Learnings: In this module students will engage with a thinker/creator by reading/viewing their texts. Students will attempt to identify the method that the thinker/creator uses to come up with new and creative ideas/works of art. Students will also attempt to form a new idea/work of art by working through the text/work-of-art of a thinker/creator.

Assessment: Students will be assessed on their extent of engagement with a thinker/creator and their creative attempts at forming new ideas/works of art.

Module - 6: Project – Public Debate and Creative Work 10 Hours

I own this, yet it's not my own.

Students will engage in an extended public debate on a topic of their interest/exhibit a creative work by making use of the learnings from this course.

Assessment: Students will be assessed on their ability to make use of ideas learnt through the course and the creativity they display in their project work.

COURSE OUTCOMES:

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

1. Display skills of critical inquiry through an application of 'Socratic Method'.
2. Engage in an imaginative dialogue that fosters plurality of perspectives and beliefs.
3. Construct an argument using narrative techniques and identify/create narratives that can act as arguments
4. Display an understanding of the working of metaphors and apply it in argumentation
5. Create a new idea/work of art by working through the text/work-of-art of a thinker/creator.

UG 22 OE 031: INTRODUCTION TO BEHAVIOURAL ECONOMICS

COURSE OBJECTIVES:

The students will be able to:

1. Examine critically the evolution of Behavioural Economics and its implications on from Neuro economics, Cognitive and emotional biases and Mental Accounting.
2. Examine the implications of Bounded rationality, Certainty/possibility effects, Dunning-Kruger effect, and Dual-system theory to mental accounting in the context of behavioural Economics.
3. Evaluate the role of Heuristics, emotion, beliefs and institution in investment decision making.
4. Illustrate the role Nudge vs. boost that shape the Consumer decision making

Module 1: Origin, Nature and scope of Behavioural Economics

10 Hours

Introduction to Behavioural Economics- Origins of Behavioural Economics- evolution and culture-methods, Objective and scope- Neuro economics- Money illusion- Behavioural Science in Practice- Principle agents and rational choice – Cognitive and emotional biases – Mental Accounting

Module 2: Basic Concepts of Behavioural Economics

10 Hours

Behavioural Economics Concepts - Bounded rationality- Certainty/possibility effects- Choice architecture- Choice overload- Biases in Behavioural Economics-IKEA effect-Licensing effect-Mental accounting

Module 3: Economic behaviour

10 Hours

Heuristics- simple heuristics for complex choices- biases heuristics -judgement under risk and uncertainty - role of emotion, beliefs and institution in decision making

Module 4: Intertemporal choice and Game Theory **15 Hours**

Intertemporal Choice- Temporal Choice- (Discounted utility model)
- Market Implications (Samuelson's experiential discounting model, hyperbolic discounting) - modifying the instantaneous utility model- alternative Intertemporal choice

Choice architecture: Nudge, Nudge vs. boost- -Understanding Consumer decision making and using behavioural insights

Skill Development:

(These activities are only indicative, the faculty member can innovate)

1. Extrapolate any three pivotal concepts of Behavioural economics; and keeping the present scenario in mind formulate any four applications of it.
2. Identify the behavioural patterns enabling Individuals to attain an outcome on making decisions. Formulate a road and present it in the form of a report.
3. Scrutinise the theory of Nudge, and identify the concepts discussed in it
4. Analyse the concept of strategic interactions and evaluate – (i) Mixed strategies (2) Bargaining (iii) Iterated games
5. Create a custom economic model encompassing the factors affecting social preferences

COURSE OUTCOMES:

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

1. Examine critically the evolution of Behavioural Economics and its implications on from Neuro economics, Cognitive and emotional biases and Mental Accounting.
2. Examine the implications of Bounded rationality, Certainty/possibility effects, Dunning-Kruger effect, and Dual-system theory to mental accounting in the context of behavioural Economics.

3. Evaluate the role of Heuristics, emotion, beliefs and institution in investment decision making.
4. Illustrate the role of Behavioral Game Theory, Nudge vs. boost that shape the Consumer decision making in the context of Strategic interaction.

Books for Reference:

- ❖ Erik Angner, *"A Course in Behavioral Economics"*, Palgrave Macmillan
- ❖ M. Altman, *Handbook of Contemporary Behavioural Economics: Foundation and Developments*, Prentice Hall India, (2007)
- ❖ E. Cartwright, *Behavioural Economics*, Routledge, 2011
- ❖ D. Kahneman, *Thinking Fast and Slow*, Allen Lane, Penguin Books, 2011
- ❖ G. Loewenstein, *Exotic Preferences: Behavioural Economics and Human Motivation*, Oxford University Press, 2007
- ❖ Sanjit Dhami, *"The Foundations of Behavioral Economic Analysis"*, Oxford University Press, 2016
- ❖ Nick Wilkinson; Matthias Klaes, *an Introduction to Behavioral Economics*, 2nd Edition, Palgrave Macmillan, 2012

UG 22 OE 032: BUSINESS MANAGEMENT

COURSE OBJECTIVE:

The objective of this course is to impart elementary knowledge of the functional areas of Management.

Module 1: Introduction to Management **9 Hours**

Introduction, Concepts, Objectives, Nature, Scope and Significance of Management; Evolution of Management Thoughts – Traditional Vs. Modern.

Module 2: Planning **9 Hours**

Planning: Concept, Objectives, Nature, Limitations; Process of Planning, Importance, Forms, Techniques

Decision Making: Concept, Objectives & Process of Decision Making.

Module 3: Organising **9 Hours**

Organizing: Concept, Objective, Nature of Organizing; Types of Organizing, Delegation of Authority; Authority and Responsibilities; Centralization and Decentralization; Span of Control.

Module 4: Directing, Leadership & Coordination **9 Hours**

Directing: Concept, Principles and Techniques of Directing and Coordinating; Concept of Leadership-Meaning, Importance and Styles; Supervision, Motivation (concept only), Communication as a Tool for Coordination.

Module 5: Controlling **9 Hours**

Controlling: Concept, Principles, Process and Techniques of Controlling; Relationship between Planning and Controlling.

Skill Development:

(These activities are only indicative, the Faculty member can innovate)

1. Take different types of organisation of your choice and make a chart of the type of organisation structure followed at the institution. Also create a chart on Media of Communication followed at the organisations.
2. Take a company of your choice and create a chat on the hierarchy that exists in the company or create a graphical representation of Maslow's Theory and present it in class
3. Critically analyze the corporate strategies that are adopted by Indian Companies to face the challenges of competition. Make a report of your findings
4. Select a successful retail store and give details of factors leading to its success or Select a failed venture, if any known to you, and bring out reasons for its failure. Make a presentation of the same in class.

COURSE OUTCOMES:

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

1. Describe the forms of organisation and evolution of management thought
2. Integrate the planning, forecasting with decision making process of a given organization.
3. Relate the function of organizing with staffing in consideration of their effort on individual actions.
4. Identify the range of leadership theories, Directing and controlling tools available in the management.

Books for Reference:

- ❖ *Gupta, R.S, Sharma B.D, Bhalla N.S., Principles and Practices of Management, Kalyani Publishers, Edition 2012.*
- ❖ *Sharm,a R.K and Gupta S., Principles of Management, Kalyani Publishers, 1st Edition 2011.*
- ❖ *Prasad, L.N., Principles and Practices of Management, Sultan Chand and Sons, 8th Edition 2012.*
- ❖ *Gupta, C.B., Management Concepts and Practices, Sultan Chand and Sons, 12th Edition Reprint.*
- ❖ *Sherlekar, S.A., Business Management, Himalaya Publishing House, Edition 2012.*

UG 22 OE 033: INTRODUCTION TO FINANCE

COURSE OBJECTIVES:

1. To familiarise students with basic concepts & trends in finance
2. To enable students, understand scope of branches in finance

Module 1: Personal Finance

12 Hours

Scope and importance of personal finance; Steps in personal financial planning; Identifying life financial goals; Investor's life cycle, Accounting for income and expenses; Translating savings into investments; Understanding risk profile; Examining investment avenues; Creating portfolio to meet financial goals.

Module 2: Corporate Finance

12 Hours

Scope and Goals of Corporate Finance; Finance Functions; Interface between Finance and Other Business Functions; Steps in Financial Planning; Considerations in Investment Decisions; Dividend Policy and its relevance; Concept of Working capital Management and its Components.

Module 3: Public Finance

10 Hours

Scope of Public Finance; Role of Public Finance in Economic Development; Types of Public Budget; Structure of Public Budget; Classification and Sources of Public Revenue; Classification and Cannons of Public Expenditure; Budget analysis of the Government of India (Previous Financial Year).

Module 4: Trends in Finance

11 Hours

FinTech companies – Role and Importance; Cryptocurrency – Pros and Cons; Factors driving growth of Digital wallets and Payments' bank; Sustainable Finance and its importance; Framework of Peer-to-peer lending; Credit score – Importance and process; Islamic finance – Concept and underlying principles.

Skill Development:

(These activities are only indicative, the Faculty member can innovate)

1. Collect and scrutinize share application forms of IPOs.
2. Calculate the EPS of various companies of your choice.
3. Elucidate the operating cycle for a manufacturing and non – manufacturing firm.

COURSE OUTCOMES:

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

1. Illustrate the framework for financial planning to understand the overall role finances play in his/her personal life.
2. Demonstrate an understanding of role and importance of the finance function in business.
3. Explore the role of government in the economy & demonstrate the components of a public budget and its impact on social welfare and economic development.
4. Summarize emerging trends in finance

Books for Reference:

- ❖ *Dr. Maheswari S. N., Financial Management, 15th, New Delhi, Sultan Chand & Sons, 2013.*
- ❖ *Pandey I.M., Financial Management, 11th Edition, Noida, Vikas Publishing, 2015.*
- ❖ *Ravi M. Kishore, Financial Management, 1st Edition, New Delhi, Taxmann Publications, 2017.*
- ❖ *Sathya Prasad B.G. & Kulkarni P. V, Financial Management, 14th, Mumbai, Himalaya Publishing House, 2015.*

UG 22 OE 034: ECONOMIC THINKERS AND THEIR CONTRIBUTIONS

COURSE OBJECTIVE:

The course aims to widen the understanding of students with regard to new research in the field of economics. The course will cover different economics laureates and their contribution to the field of economics. It traces the development of modern economic thought and discusses the evolution of economic ideas through the important traditions. The course provides a bird's eye view of the main controversies in the discourse in economics and discusses their policy implications with regard to their contemporary relevance.

Module 1: 2000-2004

10 Hours

James J. Heckman and Daniel L. McFadden- Methods of statistical analysis of individual and household behaviour

George A. Akerlof, A. Michael Spence, Joseph E. Stiglitz- Analysis of markets with asymmetric information

Daniel Kahneman, Vernon L. Smith- integration of psychological research into economic science

Finn E. Kydland, Edward C. Prescott- dynamic macroeconomics

Module 2: 2005-2009

10 Hours

Robert J. Aumann, Thomas C. Schelling- game theory analysis

Nouriel Roubini: Sub prime mortgage crisis

Edmund S. Phelps- intertemporal trade-offs

Paul Krugman- analysis of trade patterns

Module 3: 2010-2014

12 Hours

Peter A. Diamond, Dale T. Mortensen, Christopher A. Pissarides - analysis of markets with search frictions

Alvin E. Roth, Lloyd S. Shapley - market design and matching theory

Eugene F. Fama, Lars P. Hansen, Robert J. Shiller- asset prices

Jean Tirole- market power and regulation

Module 4: 2015-2022

13 Hours

Angus S. Deaton- Consumption, poverty and welfare

Richard H. Thaler- Behavioural economics

William D. Nordhaus- Climate change

Abhijit Banerjee- Experiential approach to alleviating global poverty

Ben Bernanke, Douglas Diamond, Phillip Dybvig- banks and financial crisis

COURSE OUTCOMES:

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

1. A thorough comprehension of recent research activities in some more specialised areas as well as knowledge and understanding of the evolution of ideas within the field of economics.
2. The capacity to gather and assess complex evidence and arguments as well as research and investigative skills including problem formulation and solution.
3. The students will have developed a thorough understanding of the long-term development of economic thought.
4. The course is intended to foster students' intense interest in a range of economic development-related topics as well as their theoretical, empirical, and analytical abilities.

Note: This subject will use research papers for study and give an overview of the economic thinkers and their contributions to the field in economics.

Books for Reference:

- ❖ *Blaug, Mark, "No History of Ideas Please, We're Economists," The Journal of Economic Perspectives, Volume 15, No. 1, (Winter 2001), 145-164*
- ❖ *<https://www.kva.se/app/uploads/2000/10/globalassets-priser-nobel-2000-scibackeken00.pdf>*
- ❖ *James J. Heckman and Daniel L. McFadden: Microeconomics and Microdata," Nobel Prize in Economics documents 2000-1, Nobel Prize Committee.*
- ❖ *Nudge: Improving Decisions About Health, Wealth, and Happiness, Richard H. Thaler, Cass R. Sunstein, 2009*
- ❖ *Climate Change Economics, Commemoration of Nobel Prize for William Nordhaus, William D. Nordhaus, 2022, World Scientific*
- ❖ *Poor Economics: Rethinking Poverty & the Ways to End it, Abhijit V Banerjee, Esther Duflo, 2011, Penguin Random House India Private Limited*
- ❖ *Bailouts Or Bail-Ins? Responding to Financial Crises in Emerging Economies, Nouriel Roubini, Brad Setser, 2004, Columbia University Press*
- ❖ *Noise, Daniel Kahneman, Olivier Sibony, Cass R. Sunstein, 2021, Harper Collins Publishers*
- ❖ *Rethinking International Trade, Paul Krugman, 1994, MIT Press*
- ❖ *The Great Escape, Health, Wealth, and the Origins of Inequality, Angus Deaton, 2013, Princeton University Press*
- ❖ *Understanding Poverty, 2006, Abhijit Vinayak Banerjee, Dilip Mookherjee, Roland Benabou, Oxford University Press*