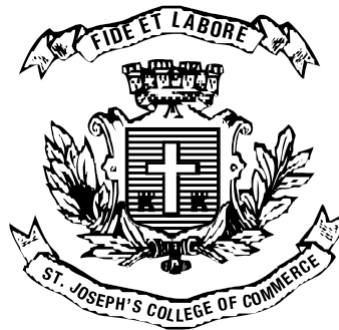# St. Joseph's College of Commerce

(Autonomous)

163, Brigade Road, Bengaluru – 560 025

Accredited with 'A++' Grade (4th Cycle) by the
National Assessment and Accreditation Council
(NAAC)

Recognized by the UGC as

"COLLEGE WITH POTENTIAL FOR EXCELLENCE"

Bachelor of BusinessAdministration

PROPOSED OPEN ELECTIVE COURSES

Syllabus as per National Education Policy

Curriculum Framework w.e.f., 2021-2022

Academic year 2022 – 2023

Proposed Open Elective Courses
Academic Year 2022-2023

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

COURSE OBJECTIVES:

The course is designed to enable students to use the tools of professional design software, also 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, san 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:

1. Baird, R. N., Turnbull, A.T. & McDonald Duncan. (1987). The Graphic Communication.

Canada: Holt, Rinehart and Winston.

2. Crow, W. C.(1986). Communication Graphics. New Jersey: Prentice-Hall
3. 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.
4. Meggs, P. B. (1992). Type and Image: The Language of Graphic Design. New York: John Wiley and Sons Inc.
5. 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 including machine learning and data visualization that will enable them in 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:

1. Introducing Data Science, Davy Cielen, Arno D. B. Meysman and Mohamed Ali, Manning Publications, 2016.
2. Think Like a Data Scientist, Brian Godsey, Manning Publications, 2017.
3. Doing Data Science, Straight Talk from the Frontline, Cathy O'Neil, Rachel Schutt, O' Reilly, 1st edition, 2013.
4. Mining of Massive Datasets, Jure Leskovec, Anand Rajaraman, Jeffrey David Ullman, Cambridge University Press, 2nd edition, 2014
5. **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
Asghar Farhadi, 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 Scorcesse, 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 forcesdriving 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 filmslike 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 our films has to be selected for analysis. Th 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 soas to pro vide a coherent perspective of the experience gathered. Students can be creative and explore other questions and invents 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 groupwill have to choose a theme pertaining to history of cinema and put up a stall exhib itingthat particular theme. The exhibit can involve newspaper clippings, video screeningthrough 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 markswill be calculated based on visitors' perception and the remaining five by a pa nel 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. 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 skill themselves 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 which transforms everything into a commodity.

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 unmatchable 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 extend 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 extend, 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
- Sulliven, 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. Investigate and examine the politics of existing and emerging culture
7. Develop multidisciplinary perspective towards social discourses

BOOKS FOR REFERENCE:
1. Bateman, Anthony: The Cambridge Companion to Cricket
2. Haigh, Gideon: Sphere of Influence: Writings on cricket and its discontents
3. Astill, James: The Great Tamasha: Cricket, Corruption and the Turbulent Rise of Modern India
4. Nandy, Ashis: The Tao of Cricket
5. Guha, Ramachndra: A Corner of a Foreign Field
6. Sen, Ronojoy: Nation at Play: A History of Sport in India
7. Kidambi Prashant: Cricket Country: The Untold History of the First All India Team
8. Boyle, Raymond and Richard Haynes: Power play: sport, the media and popular culture
9. Rowe, David: Sport, Culture and the Media
10. Raney A. Arthur and Jennings Bryant: Handbook of Sports and Media
11. Dayan, Daniel and Elihu Kartz: Media Events: The Live Broadcasting of History
12. Boyle, Raymond: Sports Journalism: Contexts and Issues

13. Coakley, Jay and Eric Dunning: Handbook of Sports Studies
14. Wenner, A. Lawrence: Media, Sports and Society
15. Fox, Andrew: Global Perspectives on Media Events in Contemporary Society
16. Majumdar, Boria and J.A. Mangan: Cricketing Cultures in Conflict: World Cup 2003
17. 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. Evaluate role of modern technology on news gathering, news dissemination and

creating public opinion

3. Illustrate the business model at work behind the emergence of modern advertising

4. Relate the debates in technology about the nature and impact of 'AI', automation and machine learning on the society

5. Examine our engagement with the online spaces and its impact on our identity and self-expression

6. Justify the debate about data surveillance and its possible impact on freedom of expression

7. 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:

1. Alvares, Claude. *Decolonising History: Technology and Culture in India, China, and the West from 1492 to the Present Day*. 1993.
2. 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.
3. Browne, Simone. *Dark Matters: On the Surveillance of Blackness*. 2015.
4. Carr, Nicholas G. *The Glass Cage: Where Automation is Taking Us*. 2014.
5. Chomsky, Edward S. Herman and Noam. *Manufacturing Consent: The Political Economy of the Mass Media*. 1988.
6. Citron, Danielle Keats. *Hate Crimes in Cyberspace*. 2014.
7. Edgerton, David. *The Shock of the Old: Technology and Global History since 1900*. 2006.
8. Jeebesh Bagchi, Monica Narula, Ravi Sundaram, Ravi S Vasudevan & Shuddhabrata Sengupta. *sarai Reader: 03- Shaping Technologies*. 2006.
9. Eichhorn, Kate. *The End of Forgetting: Growing Up With Social Media*. 2019.
10. Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. 1977.
11. Harari, Yuval Noah. *Homo Deus: A Brief History of Tomorrow*. 2015.
12. *Sapiens: A Brief History of Humankind*. 2011.
13. Lovink, Geert. *Dark Fiber: Tracking Critical Internet Culture*. 2002.
14. *Dynamics of critical Internet culture (1994-2001)*. 2009.
15. McLuhan, Marshall. *Understanding Media: The Extensions of Man*. 1964.
16. Morozov, Evgeny. *The Net Delusion: The Dark Side of Internet Freedom*. 2011.
17. Mukherjee, Siddhartha. *The Gene: An Intimate History*. 2016.
18. Noble, Safiya Umoja. *Algorithms of Oppression: How Search Engines Reinforce Racism*. 2018.
19. Pacey, Arnold. *Technology in World Civilization*. 1990.
20. Phillips, Whitney. *This Is Why We Can't Have Nice Things: Mapping the Relationship Between Online Trolling and Mainstream Culture*. 2015.
21. Standage, Tom. *The Victorian Internet*. 1998.
22. Visvanathan, Shiv. *A Carnival for Science: Essays on Science, Technology and Development*. 1997.
23. Wu, Tim. *The Attention Merchants: The Epic Scramble to Get Inside Our Heads*. 2016.

24 .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 Sustainable Development in the context of the environmental, social and economic dimensions along with the issues and conflicts in the implementation and attainment of SD 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. Relate the issues and conflicts in the implementation and attainment of SD goals on the national and global scale.

BOOKS FOR REFERENCES:

1. Baumol, W.J. and W.E. Oates (1988): *The Theory of Environmental Policy* (2e), CUP, Cambridge.
2. Bhattacharya, R.N. (Ed): Environmental Economics: An Indian Perspective, OUP, New Delhi.
3. Dalby, Simon, et al. Achieving the Sustainable Development Goals: Global Governance Challenges. Routledge, 2019.
4. 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.
5. Elliott, Jennifer. An introduction to sustainable development. Routledge, 2012.
6. 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.
7. Hanley, Shogren and White (1997): *Environmental Economics in Theory and Practice*, Macmillan.
8. Kolstad, C.D. (1999): *Environmental Economics*, OUP, ND.
9. Pearce, D.W. and R. Turner (1991): *Economics of Natural Resource Use and Environment*, John Hopkins Press, Baltimore.
10. Sachs, Jeffrey D. The age of sustainable development. Columbia University Press, 2015
11. Tietenberg, T. (1994): *Environmental Economics and Policy*, Harper Collins, NY.
12. NITI AYOG Sustainable development reports

UG 21 OE 007: YOUTH, GENDER AND IDENTITY

COURSE OBJECTIVES:

The course aims to sensitize and to create awareness of gender related issues and laws among students.

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

BOOKS FOR REFERENCES:

1. Berk, L. E. (2010).Child Development (9th Ed.). New Delhi: Prentice Hall.

2. Baron, R.A., Byrne, D. & Bhardwaj. G (2010).Social Psychology (12th Ed).New Delhi:
3. Pearson.
4. Elizabeth Herlock (2015) Developmental Psychology, ,McGraw-Hill
5. 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:
Students will be able to -
1. To equip students to engage with metaphors towards enhanced self-understanding.
2. To become familiar with nuances of similarities and differences of stories from different cultures.
3. Activate the skill of applying narrative wisdom to real life situations.

Book References
1. 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
2. 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
3. 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
4. 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
5. 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.
6. 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

7. 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.
8. 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 clarify among students the imperatives of qualitative indices in the context of current development challenges.

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 REFERENCES:

1. Crocker, D. (2008). Ethics and development theory-practice, Ethics of Global Development Agency, Capability, and Deliberative Democracy, 67-106

2. Des Gasper (2008), 'Denis Goulet and the Project of Development Ethics: Development, 8, 99. 481-9, Elsevier Science, 1, pp.10-26.
3. Drèze, Jean and Amartya Sen (2002), India: Development and Participation, second edition. Oxford: Oxford University Press.
4. Gasper, D. (2004). The ethics of development: From Economism to human development. Edinburgh: Edinburgh University Press
5. Huntington, Samuel (1971), the change to change: Modernization, development and politics. Comparative Politics, 3.
6. Myrdal, Gunnar. (1974), "What is Development?" Journal of Economic Issues 8(4):729-736.
7. Peet, Richard with Elaine Hartwick (2009), Theories of Development: Contentions, Arguments, Alternatives (2nd edition). New York: Guilford.
8. 8. 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. Draw 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 REFERENCES:

1. Encyclopedia of Social Work in India (1968 & 1978). Vol. 1, 2,3. Director, Publications Division, Ministry of Information and Broadcasting. New Delhi.
2. Bhattacharya, S. (2012).Social Work an Integrated Approach. New Delhi: Deep and Deep Publication
3. Manshardt, Clifford (1967), Pioneering on Social Frontiers in India, ,Lalvani Pub House, Bombay
4. Madan, G.R (2003), Indian Social Problems, Allied Publishers Private Limited
5. Desai, M. 2000, Curriculum Development on History and Ideologies for Social Change and Social Work, TISS, Mumbai.
6. Stroup H.H (1965), Social Work: An Introduction to the Field, Second Edition, American Book Company
7. Fink.A.E. (1945) The Field of Social Work. New York: Henry Holt & Co.
8. Fried Lander. W.A.(1958) Concepts and Methods of Social Work, Engle Wood Cliffs: Prentice – Hall
9. Gore. M.S.(1965) Social Work and Social Work Education, Bombay: Asia Publishing House
10. Gunjal, B., and Gangabhushan M. M. (2010).Fields of Social Work Practice. Bangalore: Baraha Publisher.
11. Kinduka, S.K. (1965) Social work in India, Sarvodaya Sahitya Samaj, Rajasthan
12. Ramaswamy, B. (2013). Modern International Encyclpaedia of Social Work. New Delhi: Anmol Publication.
13. Ramesh, B., Parashurama, K., Ashok, A. D., and Lokesha, M. (2012). Social Work Education in India: Issue and Concerns, Tumkur University, Tumakuru.
14. Reamer F.G.(1995)Social work Values and Ethics New York: Columbus
15. Siddiqui, H. (2015). Social Work and Human Relations. Jaipur: Rawat Publication.
16. Suresh, S. (2013).Modernization of Social Work Practices. New Delhi: Centrum Press.
17. Suresh, S. (2013).Realities and Prospectus of Social Work. New Delhi: Centrum Press
18. UGC Review of Social Work Education in India—Retrospect and Prospect, Report of the Second Review Committee, New Delhi 1980, University Grants Commission.
19. S D Gokhale(Ed) Social Welfare-Legend and Legacy, Popular Prakashan, Bombay.
20. 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:
To provide in-depth training for developing programming skills

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
On successful completion of the course the students will be able to do thefollowing:
- To provide an in-depth training for developing programming skills.
- To understand and develop programs independently.
- To understand the methods of debugging and correcting programs.
- To provide a proper foundation for learning other programminglanguages.

UG 22 OE 012: CONTEMPORARY INDIAN ECONOMY

COURSE OBJECTIVES:
To familiarise students on the current problems of Indian Economy and Identify solutions through specific policies

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 globalperspective.
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'sMoney 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:
At the end of the course the student should be able to:
1. Understand the current problems of Indian Economy
2. Identify the factors contributing to the recent growth of the Indianeconomy
3. Analyze the sector specific policies adopted for achieving the aspirational goals
4. 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. OUPJenkins Rob, 2000, Economic Reform in India, Cambridge, CUP
- Jalan, B. (1996), India's Economic Policy- Preparing for the TwentyFirst 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, AcademicFoundation
- 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:
1. Learn different Verilog HDL constructs.
2. Familiarize the different levels of abstraction in Verilog.
3. Understand Verilog Tasks and Directives.
4. Understand timing and delay Simulation.

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

Books for Reference:
1. Samir Palnitkar, "Verilog HDL: A Guide to Digital Design and Synthesis", Pearson Education, Second Edition.

2. John M Yarbrough,-Digital Logic Applications and Design, Thomson Learning, 2001

3. Donald E. Thomas, Philip R. Moorby, "The Verilog Hardware Description Language", Springer Science+Business Media, LLC, Fifth edition.

4. Michael D. Ciletti, "Advanced Digital Design with the Verilog HDL" Pearson (Prentice Hall), Second edition.

UG 22 OE 014: ENVIRONMENT AND PUBLIC HEALTH IN CONTEMPORAR Y SOCIETY

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 publichealth. 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 substanceabuse.

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: Plauge 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.

Book for References:
- Akhtar, R. (Ed.). (2019). Extreme weather events and human health:International case studies. Springer Nature.
- 2. Bedi and Yashpal. (1971). Handbook of Hygiene and Public Health. Atma Ram   & Sons, Delhi.
- Kessel, A. (2006). Air, the environment and public health. CambridgeUniversity 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).
- Publichealthinformaticsandinformationsystems.
- 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 healthof a population. Oxford University Press.
- Walton, M. (2017).One Planet, One Health. Sydney University Press.

UG 22 OE 015: ENVIRONMENT AND SUSTAINABLE AGRICULTURE

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 pressureson 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.

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. AcademicPress.
- Zeeuw, H., & Drechsel, P. (Eds.). (2015). Cities and agriculture: Developing resilient urban food systems. Routledge.
- Eric Lichtfouse, Mireille Navarrete, Philippe Debaeke,

SouchereVe´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:
1. To understand the dynamics of emotions and motivation.
2. To understand theoretical concepts of Human Intelligence.
3. To analyse and relate the concepts of thinking, problem solving,reasoning and decision making to cognition
4. To understand and classify the different types of Personality.

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 criticalthinking: Meaning and types- Concept Formation: Meaning, importance andprocess 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. Critically evaluate and identify determinants of motivation
3. Compare and contrast different theories of intelligence

4.   Differentiate the human personalities

Books for Reference:

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

UG 22 OE 017: GLOBALIZATION AND WORLD POLITICS

Course Objective:
Develop an understanding about the nature and scope of InternationalRelations as an academic discipline.

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 ofGlobalization – Gender Bias, Inequity, Skewed GDP

Module 2: Globalization and Social Movements   15 Hours
Globalization and Social Movements – Authoritarian Movement - Yellow VestMovement, Arab Spring Movement.

Module 3: India in a Globalized World   15 Hours
Neoliberal Policies (LPG) Development and Displacements of India in GlobalGovernance

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:
1. At the end of the course the students shall understand:
1. Globalization and World Politics, theoretically and will gain knowledge to explain and analyze world politics at large.
2. The dynamics of Globalization and World Politics

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 ofInternational Politics
- Peu Ghosh: International Relations

UG 22 OE 018: HUMAN RIGHTS

COURSE OBJECTIVE:
This course aims to introduce the students to basic concepts and practices of Human Rights in the global and local domain. This course also exposes them to 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 HumanRights - Human Rights and Fundamental Rights, Fundamental Rights andFundamental 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 andits 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 violenceagainst women, children, Dalits and Minorities, Trafficking, Child Labour andBonded 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 atthe left-hand side, a link is provided to the 'instructions. After goingthrough 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. Have necessary knowledge and skills for analyzing, interpreting, and applying the Human Rights standards and sensitize them to theissues.
3. Develop ability to critically analyse Human Rights situations

around them.

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
- 4. 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", RawatPublications, New Delhi , 2019.
- 6. Sunil Deshta and KiranDeshta,"Fundamental Human Rights",Deep and Deep Publications, New Delhi, 2011.
- Donelly, Jack and Rhoda Howard (ed.), International Handbook ofHuman Rights, Westport, Connecticut: Greenwood Press,1987.
- Donelly, Jack, Universal Human Rights in Theory and Practice, NewDelhi, 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,"Human Rights Developments in South Asia", 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, IntroducingHuman 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: To make the students aware on different issues that exists in Indian polity. Through this paper students need to understand the emerging issues and their causes to the Indian Democracy.

Module 1: National Integration and Social Harmony   10 Hours
National Integration and Social Harmony - Meaning and Need of NationalIntegration 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 understandingcaste system as a social system in India, and Role of Caste and its Impact onIndian 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 MeasuresCorruptions- 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 NationalIntegration 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:
At the end of the course the students shall –
1. Understand the reasons behind the causes of these issues and alsothe constitutional provisions that existed.
2. Familiarize with the debates that emerged.
3. Be able to suggest the measures to control such issues.

Book for Reference:
1. 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.
2. C. Jaffrelot, 'The Politics of the OBCs', in Seminar, Issue, 2005.

3. Singh, M.P. & Saxena, R. Indian Politics: Contemporary Issues andConcerns. New Delhi: PHI Learning, 2008.
4. Vanaik, A. & Bhargava, R. (eds.) Understanding ContemporaryIndia: Critical Perspectives. New Delhi: Orient Blackswan, 2010.
5. Dunkin Jalaki "Bharatadalli Jativyavste ideye?", MalladahalliPublication, Malladahalli.

UG 22 OE 020: MACHINE LEARNING USING R PROGRAMMING

COURSE OBJECTIVES:
To make the students learn the statistics & mathematical concepts, Hypothesis& Dimension Reduction Technique, R Programming Concepts 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 MachineLearning Understanding
Supervised learning technique - Unsupervisedlearning technique

Module 5: Predictive Modelling In R   9 Hours
Introduction to predictive modeling - Regression Problem - ClassificationProblem - Linear Regression - Logistic Regression – Clustering - Distancemeasure types- K means clustering – Decision Tree Classifier – Random ForestClassifier – Support Vector Machine.

COURSE OUTCOMES:
1. Understand the fundamental concepts of Statistics & Mathematics
2. Understand Hypothesis & Dimension Reduction Techniques
3. Hands on Experience in R Programming
4. Understand Machine Learning Concepts using R
5. To have basic knowledge of various predictive models.

Books for Reference:

- Introducing Data Science, Davy Cielen, Arno D. B. Meysman andMohamed 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:
To familiarise the students with the basics of computers

Module 1: Starting with MS-Word: **10 Hours**
Introduction to MS-Word: Understanding the start screen, Creating a newblank document, The word screen, How Microsoft Wordworks,Understanding the quick access toolbar, Understanding the status bar, Exitingsafely 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, Deletingtext, Using undo, Using redo, Understanding find and replace, Finding words, Replacing words, Using go to, Understanding cutting and copying, Cuttingand pasting, Copying and pasting, Drag and drop cutting, Drag and dropcopying, 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**
Tabs and tables: Using default tabs, Setting tabs on the rule, Modifying tabs onthe 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 tablesusing 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 tablestyle.
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, AutoFilling 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, ColoringWorksheet 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 Cellswith 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:
1.   Know the basics of computers and prepare documents, spreadsheets, make small presentations with audio, video and graphs and would be acquainted with internet.
2.   Create, edit, save and print documents with list tables, header, footer, graphic, spellchecker, mail merge and grammar checker
3.   Attain the knowledge about spreadsheet with formula, macros spell checker etc.,

BOOKS FOR REFERENCE:
1.   Laura Acklen et al, Microsoft Office 97 Professional Essentials,EEE Que E&T, PHI (1998).
2.   Jennifer fulton, Sherri Kinkoph, and Joe Kraynak, The Big Basics Book of Microsoft Office 1997, PHI, 1998.
3.   Sanjay Saxena, A First Course in Computers (Based on Windows 8 And

MSOffice 2013) Vikas Publishing 2015.

UG 22 OE 022: PSYCHOLOGY OF HEALTH AND WELLBEING

Course Objectives:
To familiarise students with the spectrum of health, stress and illness for betterhealth 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 Mediatorsof Stress; Effects of Stress on Physical and Mental Health; Coping and Stressmanagement

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:
1. Understanding the spectrum of health and illness for better health management
2. Identifying stresses in one's life and how to manage them
3. Understanding a variety of health announcing health protective and health compromising behaviours and to be able to know their application in illness management

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 2DD3) Advanced PsychoIo9Y: Health Psychology. London: Hodder and Stoughton Forshaw, M. (2003).
- Advanced Psychology: Health Psychology. London: Hodder and Stou9htan. 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: To make the students aware on different issues that exists in the sphere of governance. Through this paper students need to understand the emerging issues and their causes to the emergence of 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 andGood 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 inpublic 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:
At the end of the course the students shall –
1. Understand the concept of governance and good governance and also their differences.
2. Familiarize with the ethical foundations of governance and changes witnessed in the initiatives of governance that has bearing on effectiveness of policies.
3. Be able to understand the measures taken to reform the governance and will be able to appreciate the measures taken to control issues of 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 writea brief note
3. Make a comparison of developed and developing countries on various indicators of Human Development.

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

Administrative Innovations Praeger publishers, West Port.

16. Bevier Mark (2013), The Sage Handbook of Governance Sage publications London.

17. Katherine Berscha and Sandra Botero (2014), Measuring Governance: Implications of conceptual choices, European journal of Development and Research, Vol. 26.

18. Shantanan Devarajan (2008), Two comments on Governance Indicators: Where are we, where we should we be going? The world Bank research Observer, Vol. 23.

19. Francis Fukuyama (2013) What is Governance, Working Paper Centre for Global development, New York Washington.

20. 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:
This course aims to introduce the students to basic concepts and practices associated with the policy making in Indian domain. This course also exposes them to certain recent issues confronting the Policy making processes.

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- IdeologicalPreferences 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 developmentcouncil 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 ofLiberalization, 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 IndependencePrimary and Community Health centers as health care components NationalHealth 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 this course students will be able to-
   1.   Explain the basics of Policy making in India.
   2.   Have necessary knowledge and skills for analyzing and interpretingthe existing public policies.
   3.   Develop ability to critically analyses the expected and performed role of statutory and non- statutory authorities in policy making process.

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 comprehensiveand critical analysis of India's economy since 1947-2014.
- Lindblom. C. E and EJ. Woodhouse (1993), The Policy making process 3rd ed., Prentice Hall.
- Francine. R. Frankel, Zoya Hasan, Rajeev Bhargava- TransformingIndia: Social and Political Dynamics of Democracy.
- Agarwal. J.C (2009), Education Policy in India, Neha publishers anddistributors
- Dev Mahendra (2008), Inclusive growth in India, Oxford collegeessays.
- 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 Basic knowledge of Python. Python programming is intended for software engineers, system analysts, program managers and user support personnel who wish to learn the Python programming language.

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

COURSE OUTCOMES:
1.   To understand the basic concepts in Python programming.
2.   Learn how to write, debug and execute Python program.
3.   Understand and demonstrate the use of Branching and LoopingStructures.
4.   To get insight knowledge related to advanced data types such as lists, tuples,   dictionaries.
5.   Acquire the basic knowledge of Object-Oriented Programming Concept and Exception Handling.

Books for Reference:
- Python in easy steps - Mike McGrath, In Easy Steps Limited, SecondEdition
- "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

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 AnthonyGiddens); 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
SocietyRole 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.

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

13. Lemert, Charles 2012, Social Things: An Introduction to the Sociological Life, Rowman and Littlefield Publishers, Maryland

14. MacIver R M and Page C M 1974, Society: An Introductory Analysis,Macmillan India Ltd, New Delhi

15. Macionis, John 2018, Sociology Global Edition, Pearson, England

16. Merton, R K 1968, Social Theory and Social Structure, The Free Press,Glencoe

17. Mulagund, I C 2008 Readings in General Sociology, Srushti Prakashana, Dharwad

18. Mulagund, I C 2008 Readings in Indian Sociology, Srushti Prakashana, Dharwad

19. Ritzer, George and W W Murphy, 2020, Introduction to Sociology,5th edition, Sage Publications, New Delhi