

UNIVERSITY OF DELHI

CNC-II/093/1(22)/2022-23/ 197

Dated: 14.09.2022

NOTIFICATION

Sub: Amendment to Ordinance V

[E.C Resolution No. 18-1-20 dated 18.08.2022]

Following addition be made to Appendix-II-A to the Ordinance V (2-A) of the Ordinances of the University;

Add the following:

**VALUE ADDITION COURSES (SECs)
UNDER
UGCF-2022
LISTED UNDER APPENDIX-II-A TO THE ORDINANCE V (2-A) OF THE
ORDINANCES OF THE UNIVERSITY
(With effect from Academic Year 2022-23)**

In pursuance of the objectives outlined in the National Education Policy 2020, the Value Addition Courses (VACs) seek to fulfil the mandate of providing holistic education to the students. As the NEP elucidates, "the purpose of the education system is to develop good human beings capable of rational thought and action, possessing compassion and empathy, courage and resilience, scientific temper and creative imagination, with sound ethical moorings and values." The Value Addition Courses will introduce students to the rich heritage of the nation as well as to important social concerns of the current times, helping them to make connections between what they learn and how they live.

The courses have a sound theoretical base as well as appropriate hands-on components. At the same time, they clearly set out measurable and attainable Learning Outcomes. Knowledge, in essence, being integrated, these courses are essentially multidisciplinary in nature.

Designed to ignite the intellectual curiosity of the learners, the Value Addition courses will inspire and guide them in their journey of personal and professional development making them thoughtful, well-rounded, and creative individuals, with a sense of service and responsibility towards the Nation.

A student who pursues any undergraduate programme in the University and its Colleges is offered a pool of Value Addition Courses, from which he has to choose one to study in the first Semester. A list of such courses as passed by the Executive Council in its meeting dated 18.08.2022 is as below:

SL.NO.	COURSE TITLE	TOTAL CREDITS: 2
1	Ayurveda and Nutrition	
✓2	Constitutional Values and Fundamental Duties	
3	Culture and Communication	
4	Digital Empowerment	
5	Emotional Intelligence	
6	Ethics and Culture	
7	Ethics and Values in Ancient Indian Traditions	
8	Financial Literacy	
9	Fit India	
10	Gandhi and Education	
11	Language and Literature	
✓12	National Cadet Corps-I	
13	Panchkosha: Holistic Development of Personality	
14	Reading Indian Fiction in English	
✓15	Science and Society	
✓16	Social and Emotional Learning	
17	Sports for Life-I	
18	Swachh Bharat	
✓19	The Art of Being Happy	
20	Vedic Mathematics-I	
21	Yoga: Philosophy and Practice	
22	भारतीय भक्ति : परम्परा और मानव मूल्य	
23	साहित्य संस्कृति और सिनेमा	
24	सृजनात्मक लेख के आयाम	



VAC 1: CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Constitutional Values And Fundamental Duties	02	1	0	1	Pass in Class 12 th	NIL

Learning Objectives

The Learning Objectives of this course are as follows:

- Enrich students with knowledge and relevance of the Constitution.
- Develop awareness about Duties and Values.
- Inculcate a sense of Constitutionalism in thought and action.

Learning outcomes

The Learning Outcomes of this course are as follows:

- Understand the Constitution and its relevance
- Appreciate the values and goals embedded in the Constitution.
- Recognise the importance of Fundamental Duties enshrined in the Constitution.
- Apply the spirit of fundamental values and duties in everyday national life.

SYLLABUS OF CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

UNIT – I The Constitution of India – An Introduction (5 Weeks)

- Federal Republic, Rule of Law, Separation of Powers
- Sovereignty, Socialism, Democracy
- Secularism and Sarva Dharma Sama Bhava

UNIT – II Constitutional Values (5 Weeks)

- Justice: Social, Political, Economic

- Liberty: Thought, Expression, Belief, Faith, Worship
- Equality: Equality before law & equal application of laws
- Fraternity: Dignity, Unity and Integrity

UNIT – III Fundamental Duties

(5 Weeks)

- Reflecting on the ancient Indian notions of righteousness and duty consciousness
- Fundamental Duties- Article 51A [(a) – (k)]
- Legal status of Fundamental Duties - Judicial approach

Practical component (if any) –

(15 Weeks)

- Reflections on some of the constitutional values/ fundamental duties and its contemporary relevance in day-to-day national life through group discussions and projects.
- Conduct workshops to spread awareness on the Fundamental Duties and Values.
- Students are required to conduct a survey (minimum 25 respondents) on assessing the awareness of the constitutional duties amongst the citizens.
- Students may share their experiences on Fundamental Duties and Values in the form of a Project Report.
- Any other Practical/Practice as decided from time to time

Essential/recommended readings

- Preamble to the Constitution of India, 1950.
- The Constitution of India, Articles - 14, 19, 21.
- The Constitution of India, Fundamental Duties [Ar. 51 A (a) – (k)].

Suggested readings

- Durga Das Basu, et al., Introduction to the Constitution of India (LexisNexis, 26th edn, 2022).
- Leila Seth, We, the Children of India: The Preamble to Our Constitution (New Delhi, Puffin Books, Penguin Books India, 2010).
- Mahendra Pal Singh, V.N. Shukla's Constitution of India, (Eastern Book Company, Lucknow, 13th revised edn. 2017)
- B.R. Ambedkar Selected Speeches, (Prasar Bharati, New Delhi, 2019) available at: https://prasarbharati.gov.in/whatsnew/whatsnew_653363.pdf.

Examination scheme and mode: Subject to directions from the Examination Branch/University of Delhi from time to time

VAC 1: NATIONAL CADET CORPS- I

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
National Cadet Corps -I	02	1	0	1	Pass in Class 12 th	Enrolled as NCC Cadet

Learning Objectives

The Learning Objectives of this course are as follows:

- Provide knowledge about the history of NCC, its organization, and incentives of NCC for their career prospects.
- Inculcate spirit of duty and conduct in NCC cadets.
- Provide understanding about different NCC camps and their conducts.
- Provide understanding about the concept of national integration and its importance.
- Provide understanding about the concept of self-awareness and emotional intelligence.
- Provide understanding about the concept of critical & creative thinking.
- Provide understanding about the process of decision making & problem solving.
- Provide understanding about the concept of team and its functioning.
- Provide understanding about the concept and importance of Social service.

Learning outcomes

The Learning Outcomes of this course are as follows:

- Critically think and analyse.
- Understand the basic concept of NCC.
- Respect the diversity of different Indian culture.
- Practice togetherness, teamwork and empathy in all walks of their life.
- Do their own self-analysis and will work out to overcome their weakness for Better performance in all aspects of life.

SYLLABUS OF NATIONAL CADET CORPS-I

UNIT – I NCC General**(4 Weeks)**

- Aims, Objectives and Organization of NCC
- Incentives for NCC Cadets
- Duties of NCC Cadets
- NCC Camps: Types and Conduct

UNIT – II National Integration**(4 Weeks)**

- National Integration: Importance and Necessity
- Factors affecting National Integration
- Unity in Diversity
- Threats to National Security

UNIT – III Personality Development**(5 Weeks)**

- Factors
- Self-Awareness
- Empathy
- Critical and Creative Thinking
- Decision Making and Problem Solving

UNIT – IV Social Service and Community Development**(2 Weeks)**

- Basics of Social Service
- Rural Development Programmes
- NGO's
- Contribution of Youth

Practical component (if any) -**(15 Weeks)**

- Drill
- Field Craft & Battle Craft
- Map Reading
- Weapon Training
- Social Service & Community Development
- Any other Practical/Practice as decided from time to time

Suggested readings

- DGNCC Cadet's Hand Book - Common Subjects -All Wings (in English)
- DGNCC Cadet's Hand Book - Common Subjects -All Wings (in Hindi)
- DGNCC Cadet's Hand Book – Specialised Subjects –Army, Navy and Air Wing

Examination scheme and mode: Subject to directions from the Examination Branch/University of Delhi from time to time.

VAC 1: THE ART OF BEING HAPPY

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
The Art of Being Happy	02	1	0	1	Pass in Class 12 th	NIL

Learning Objectives

- To synthesize the insights developed by Human Development experts, Psychologists, Anthropologists on one hand, and the intellectual traditions of Vedantic Philosophy and Indology on the other towards the experience of happiness.
- To illustrate various factors that determine the subjective experience of happiness in a cross cultural context.

Learning outcomes

- The students shall be able to evaluate the factors contributing to the phenomenon of happiness in the personal, familial and community life of an individual in different cultures in the Indian context.
- They will be able to develop healthy interpersonal relationships and wellbeing cherishing the values of Indian culture and philosophy.
- They will be able to relate to the global phenomenon of sustainable development and become sensitive to the needs of the planet.
- They will be able to apply the experience of *Aananda* at a personal level.

SYLLABUS OF THE ART OF BEING HAPPY

UNIT – I Human Ecology and Happiness Lectures

(3 Weeks)

- Definitions/Factors of Happiness: Environmental and Social

- Physical, emotional and psychological well-being for happiness
- Physiological and hormonal basis of happiness
- Coping with Stress: A life saving skill

UNIT – II Indological Theories of Happiness

(4 Weeks)

- *Panch Kosh* Theory & Idea of Well-Being
- Idea of Self and other
- Hierarchy and stages of happiness

UNIT – III Happiness: Cross-cultural Contexts

(4 Weeks)

- Culture and Happiness
- Interpersonal Relationship: Comparative Perspective
- Towards Self-Actualization

UNIT – IV Local and Global Perspective of Happiness

(4 Weeks)

- Measuring happiness: Key indicators
- Happiness Index
- India in Global Happiness Indices

Practical component (if any) –

(15 Weeks)

The course will be based on students' identification and operationalization of the concept of happiness and well-being. Students will explore the indicators and actualization of these concepts in everyday life.

- Community surveys on the facilities promoting positive mental health practices such as Yoga and Meditation Centres, Recreation clubs, and Parks for youth and senior citizens shall be carried out by the students.
- Extending help and social service by visiting old age homes/ hospitals/slum areas or any other disadvantaged groups.
- Students can undertake a field work / project independently or work as an Intern with NGOs working in the area of happiness and well-being.
- Critical appreciation of a documentary/ film based on Happiness and Well-being can be undertaken by the students.
- Workshops/ Sessions for the actualization of innate creative potential- (Music, Drawing, Calligraphy, Dramatics)

VAC 1: SCIENCE AND SOCIETY

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Science and Society	02	1	0	1	Pass in Class 12 th	NIL

Learning Objectives

The Learning Objectives of this course are:

- The primary objective of this course is to instil in students an appreciation for science and a scientific outlook and temper.
- The course further aims to increase awareness about fundamental scientific concepts that play an important role in our daily life using various examples and case studies.
- Pedagogy in this course should largely rely on learning by enquiry, observations, experimentation and group discussions using case studies/examples.
- Efforts should be made to instil an interest in students for science. Students should be encouraged to understand and appreciate scientific concepts and their applications rather than solely memorizing factual information.

Learning outcomes

The Learning Outcomes of this course are:

- This paper is interdisciplinary in nature and would provide students with basic exposure to scientific methods, technologies and developments that have played a significant role in the evolution of human society from ancient to modern times.
- 2. Students would also be made aware of the scientific rationale of technological developments that would enable them to make informed decisions about their potential impact on society.

SYLLABUS OF SCIENCE AND SOCIETY

UNIT – I Science and Technology – from Ancient to Modern Times (10 Weeks)

In this section, students should also be made aware about the contributions of Indian scientists since ancient times and the contributions of women in science.

Subtopics

- Philosophy of science, the scientific method, importance of observation, questions and experimental design, rational thinking, myths vs. Facts
- Science, Technology and Traditional Practices: Suggestive areas include: Water harvesting structures and Practices; Construction, architecture and design – use of natural environment-friendly designs and materials; Agriculture including domestication of plants and animals.

In this section, students should also be made aware about the contributions of Indian scientists since ancient times and the contributions of women in science.

- Science and Technology in Modern Times: Suggestive areas include: Public Health: Nutrition, Hygiene, Physical and Mental Health, Vaccines and Antibiotics, Anti-microbial resistance; Food Security: Green Revolution, White Revolution; IT Revolution, E-Governance; Clean Energy, Renewable Energy; Space Science and Exploration; Evolution, Ecology and Environment

UNIT II: Scientific Principles, and Concepts in Daily Life (5 Weeks)

Unit Description:

This section aims to encourage appreciation of the scientific method through observation, experimentation, analysis and discussions. Students are required to participate in activities and experiments. A suggestive list is given below:

Subtopics:

Suggested Activities:

- Observing and documenting flora and fauna of College campus/city.
- Visits to science laboratories in the College or neighbouring College/Institute.
- Visits to science museums, planetarium.
- Visits to biodiversity parks and nature walks.
- Participation in a citizen science project/initiative.

Suggested Experiments (minimum any four):

- Measuring the height of the college building using a stick.
- Measuring the curvature of earth, using distance and shadow length.
- Isolation of DNA (DNA Spooling)
- Observing transpiration and photosynthesis in plants
- The blood typing game (online)
- Are fruit juices, soap, carbonated drinks acidic or alkaline? (using pH strips or developing your own Litmus Test)
- Do plants learn and remember?
- Experiments on how migratory birds find their way. (Online)
- How can a mosquito sit on a water surface or a blade float on water?
- How does a submarine dip or rise in the ocean?
- How and why does the path of the sun in the sky change with the seasons?
- Identification of celestial objects with the naked eye
- Types of clouds
- Science of musical sounds
- Science of splitting of colours from white light: rainbow, CD-rom, prism, oil films.
- Lenses, mirrors and the human eye

Practical/ Practice Component : Please Refer to Unit II.

Essential/recommended readings

- Basu and Khan (2001). Marching Ahead with Science. National Book Trust
- Gopalakrishnan (2006). Inventors who Revolutionised our Lives. National Book Trust
- Yash Pal and Rahul Pal (2013) Random Curiosity. National Book Trust
- Hakob Barseghyan, Nicholas Overgaard, and Gregory Rupik (****) Introduction to History and Philosophy of Science
- John Avery (2005). Science and Society, 2nd Edition, H.C. Ørsted Institute, Copenhagen.
- Dharampal (2000). Indian Science and Technology in the Eighteenth Century, OIP.

Suggested Readings:

Section 1. Science and Technology – from Ancient to Modern Times:

Philosophy of science:

<https://blogs.scientificamerican.com/doing-good-science/what-is-philosophy-of-scienceand-should-scientists-care/>

http://abyss.uoregon.edu/~js/21st_century_science/lectures/lec01.html

https://wps.ablongman.com/wps/media/objects/1449/1483820/18_2.pdf

Myths vs. facts:

<https://www.sciencelearn.org.nz/resources/415-myths-of-the-nature-of-science>

History of technology:

<https://www.visualcapitalist.com/history-of-technology-earliest-tools-modernage/>

Water harvesting:

<https://worldwaterreserve.com/introduction-to-rainwater-harvesting/>

Public Health :

[https://www.ajpmonline.org/article/S0749-3797\(11\)00514-9/fulltext](https://www.ajpmonline.org/article/S0749-3797(11)00514-9/fulltext)

<https://study.com/academy/lesson/public-health-vs-medicinedifferences-similarities.html>

<https://www.deepc.org.in/video-tutorials/public-health>

Food Security:

<https://www.concern.net/news/what-food-security>

Energy:

<https://www.nrdc.org/stories/renewable-energy-clean-facts>

Space Science:

<https://www.isro.gov.in/spacecraft/space-science-exploration>

<https://www.isro.gov.in/pslv-c11-chandrayaan-1>

<https://www.isro.gov.in/chandrayaan2-home-0>

<https://www.britannica.com/science/space-exploration>

Contribution of Indian Scientists & Women Scientists:

<https://www.tifr.res.in/~outreach/biographies/scientists.pdf>

<https://indiabioscience.org/media/articles/ISTI.pdf>

<https://www.thebetterindia.com/63119/ancient-india-science-technology/>

<https://ncsm.gov.in/indian-women-in-science-technology/>

Evolution:

<https://www.livescience.com/474-controversy-evolution-works.html>

<https://www.ibiology.org/evolution/origin-of-life/>

Climate change and global warming

<https://letstalkscience.ca/educational-resources/backgrounders/introductionclimate-change>

Biodiversity

<https://india.mongabay.com/2020/09/nature-in-peril-as-biodiversity-losses-mount-alarmingly-states-the-living-planet-report/>

Genomics and Modern Medicine

<https://www.nationalgeographic.com/science/article/partner-contentgenomics-health-care>
<https://www.mja.com.au/journal/2014/201/1/impact-genomics-future-medicine-and-health>
<https://www.nature.com/scitable/topicpage/pharmacogenomics-and-personalized-medicine-643/>

Genetically modified engineered crops

<https://www.nature.com/scitable/topicpage/genetically-modified-organismsgm-transgenic-crops-and-732/>
<https://factly.in/explainer-what-is-the-status-of-gm-crops-in-india/>
<https://www.fda.gov/food/agricultural-biotechnology/how-gmo-crops-impact-our-world>

Artificial Intelligence and Robotics

<https://www.ohio.edu/mechanical-faculty/williams/html/PDF/IntroRob.pdf>
<https://nptel.ac.in/content/storage2/courses/106105078/pdf/Lesson%2001.pdf>

Big Data Analytics

https://www.researchgate.net/publication/328783489_Big_Data_and_Big_Data_Analytics_Concepts_Types_and_Technologies

Section 2. Scientific Principles, and Concepts in Daily Life Measuring buildings, earth curvature:

<https://www.youtube.com/watch?v=hrwL3u2Z4Kg>
<https://www.youtube.com/watch?v=khRMzxONpLg>
<https://www.youtube.com/watch?v=YaPa4esJJx4>

Isolation of DNA

https://melscience.com/US-en/articles/home-dnaextraction/?irclickid=2hh2pqRY8xyLTbawUx0Mo3ENUkBwlX3pGQDJSc0&utm_source=impact&irpid=2201352&irmpname=Science%20Journal%20for%20Kids&irgwc=1

Transpiration & Photosynthesis

<https://www.youtube.com/watch?v=JQvdXX7hGqI>
<https://www.youtube.com/watch?v=U4rzLhz4HHk>
<https://www.youtube.com/watch?v=pFaBpVoQD4E>

Online game on blood typing

<https://educationalgames.nobelprize.org/educational/medicine/bloodtypinggame/gamev3/1.html>

Determination of pH

https://www.youtube.com/watch?v=BEz6t_e6gpc

Plant behaviour

<https://youtu.be/KyoeCFTIXKk>
<https://youtu.be/gBGt5OeAQFk>

Migratory Birds

<https://www.scienceabc.com/nature/how-migrating-birds-geese-navigate-long-distance-earthmagnetic-field.html>

UNIVERSITY OF DELHI

CNC-II/093/1(22)/2022-23/198

Dated: 06.09.2022
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NOTIFICATION

Sub: Amendment to Ordinance V

[E.C Resolution No. 18-1-21 dated 18.08.2022]

Following addition be made to Appendix-II-A to the Ordinance V (2-A) of the Ordinances of the University;

Add the following:

**SKILL ENHANCEMENT COURSES (SECS)
UNDER
UGCF-2022
LISTED UNDER APPENDIX-II-A TO THE ORDINANCE V (2-A) OF THE
ORDINANCES OF THE UNIVERSITY
(With effect from Academic Year 2022-23)**

The NEP 2020 envisages imparting life skills as well as technical and professional skills as part of holistic education. University of Delhi has prepared various Skill Enhancement Courses in different domains to provide kinds of skills to the students, such as Communication Skills, Computer related skills, Coding skills, financial management skills, etc. with higher degree of hands on learning so as to equip them with the skills of their choice suitable to the academic path they choose.

A student who pursues any undergraduate programme in the University and its Colleges is offered a pool of Skill Enhancement Courses, from which he has to choose one to study in the first Semester. A list of such courses as passed by the Executive Council in its meeting dated 18.08.2022 is as below:

SL.NO.	COURSE TITLE	TOTAL CREDITS: 2
✓1	Advanced Spreadsheets Tools	✓
2	Analytics/ Computing With Python	
3	APP Development using Flutter	
4	Back-End Web Development	
5	Basic IT Tools	

- 6 Big Data Analytics
- 7 Beginners Course to Calligraphy
- 8 Business Communication
- 9 Business Intelligence and Data Visualisation
- 10 CAD for Fashion
- ✓ 11 Communication in Everyday Life
- ✓ 12 Communication in Professional Life
- 13 Creative Writing
- 14 Cyber Sphere and Security : Global Concern
- 15 Developing sustainability plans for a business
- 16 Digital Film Production
- 17 Digital Marketing
- 18 Essentials of Python
- 19 E-Tourism
- 20 Finance for Everyone
- 21 Financial Database and Analysis Software
- 22 Front End Web Design and Development
- 23 Graphics Design & Animation
- 24 Harmonium
- 25 Introduction to Arabic Calligraphy
- 26 Introduction to Blockchain
- 27 Introduction to Cloud Computing (AWS)
- 28 Negotiations and Leadership
- 29 Personal Financial Planning
- 30 Personality Development and Communication
- 31 Political Leadership and Communication
- 32 Programing with Python
- 33 Prospecting E-Waste for Sustainability –
- 34 Public Speaking in English Language and Leadership
- ✓ 35 Statistical Software Package
- 36 Statistics with 'R'
- 37 Sustainable Ecotourism and Entrepreneurship
- 38 Visual Communication and Photography
- 39 पटकथा लेखन
- 40 रंगमंच
- ✓ 41 रचनात्मक लेखन

ADVANCED SPREADSHEETS TOOLS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Advanced Spreadsheets Tools	2	0	0	2	12 th Pass	NIL

Learning Objectives

The Learning Objectives of this course are as follows:

- To enable the students to use Excel for advanced data analysis
- To equip the students to with automation skills on excel
- To enable the students to use excel for informed decision making.

Learning outcomes

The Learning Outcomes of this course are as follows:

- By studying this course, students will be able to make meaningful representations of data in the form of charts and pivot tables.
- By studying this course, students will be able to draw analysis on data using spreadsheets and use interpretation to make decisions.
- By studying this course, students will be able to generate word documents with appropriate formatting, layout, proofing.
- By studying this course, students will be able to manage data for generating queries, forms and reports in a database.

SYLLABUS

Unit 1: Excel Advanced Techniques

(3 Weeks)

Templates, Efficiency, and Risk (Standard Deviation, Variance, and Coefficient of Variation), Data Validation; *Functions and Power functions, Array Formulae (Frequency Distribution, mode.mult, mode.sngl), Tables, Advanced Range Names, What-if-analysis: Goal-seek, Data tables, and Scenario Manager; Data analysis ToolPak: Descriptive Statistics, Moving averages, Histogram, Covariance, correlation, and Regression analysis (only for projection); solver add-

in. Problem Solving using Solver (optimal product mix, workforce scheduling, transportation, capital budgeting, financial planning), Integrating excel with other tools: MS word, outlook, PowerPoint, Access, Power BI.

Unit 2: Excel Interactivity and Automation

(4 Weeks)

Index and Match, Offset, Dynamic Charting, Database functions, Text functions, and Error functions: IfError, IsError, Aggregate, Circular Reference, Formula Auditing, Floating-Point Errors, Form Controls (Button, Combo, Check box, Spinner, List, Option), Visual Basic (only basic). Recording Macros, Absolute and relative macros, editing macros, Use of spinner buttons and command buttons; Sub Procedure, Function Procedure (creating New Functions); Working with Loops: Do_while loop, For_Next loop; Creating User Forms: Message Box, Input Box; If_Then_Else.

Unit 3: Introduction to VBA

(4 Weeks)

Conditional Formatting, Charts that Inspire (Waterfall, Column, Line, Combo, Thermometer, Scatter, Histogram) Slicers, Sparklines, Graphics Tricks and Techniques, Worksheet Automation using Macros: Absolute and relative macros, editing macros, Creating new functions using macros, Use of spinner buttons and command buttons.

Unit 4: Data Analysis and Decision-Making

(4 Weeks)

Working with External Data, Advanced Uses of PivotTables, PowerPivot, Reporting with PowerPivot, Power query, Dashboard, Creating a spreadsheet in the area of: Loan and Lease statement; Ratio Analysis; Payroll Accounting; Capital Budgeting (NPV & IRR), Portfolio Management, Breakeven analysis, and Sensitivity analysis; Operations Management: Constraint, Forecasting & Trend Analysis optimization, Assignment Problems; Depreciation Accounting (Single Method); Graphical representation of data; Frequency distribution and its statistical parameters; Correlation and Regression Analysis

Essential/recommended readings

- Excel 2016 Power Programming with VBA, Michael Alexander, Dick Kusleika, Wiley.
- Financial Analysis and Modelling Using Excel and VBA, Chandan Sengupta, Second Edition, Wiley Student Edition.
- MS Excel 2016, Data Analysis & Business Modelling, Wayne Winston, PHI.

Suggestive readings

- Microsoft Excel 2016 - Data Analysis and Business Modelling Paperback – 1 May 2017 Wayne L. Winston, Microsoft Press.
- Microsoft Excel Practical Formulae: From Basic Data Analysis to Advanced Formulae
- Manipulation Diane Griffiths.

Examination scheme and mode:

Total Marks: 100

Internal Assessment: 25 Marks

Practical Exam (Internal): 25 Marks

End Semester University Exam: 50 Marks

The Internal Assessment for the course may include Class participation, Assignments, Class tests, Projects, Field Work, Presentations, amongst others as decided by the faculty.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.



Communication in Everyday Life

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Communication in Everyday Life	2	0	0	2	12 th Pass	Nil.

Learning Objectives

The Learning Objectives of this course are as follows:

- To lay down a basic foundation for basic communication that is a part of a student's everyday life.
- To inculcate the fundamentals of communication with the aim to enhance listening, speaking and writing skills.
- To hone practical skills that can be used in day-to-day affairs.

Learning outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to improve mediation skills.
- After studying this course, students will be able to building human relationships.
- After studying this course, students will be able to foster societal understanding & develop an independent perspective.
- After studying this course, students will be able to enhance social communicationskills of students.

SYLLABUS

UNIT 1

Theory of Communication

(2 Weeks)

- Meaning, Features, Uses, Cycle, Feedback, Advantages
- Barriers
- 7 C's of Communication

UNIT 2

Listening Skills

(3 Weeks)

- Netiquettes
- Audio-book Listening & Discussions
- Note-taking

UNIT 3

Speaking Skills

(4 Weeks)

- Oral Presentation- Audio-Visual aids, Audience & Feedback, Delivery of Presentation, Handling Questions
- Group Discussion- Culture & History, Current Affairs, Society-related
- Public Speaking- Public Speech, Extempore
- Interview- Personal, Conversational, Public

UNIT 4

(2 Weeks)

Reading Skills

- Close Reading
- Skimming
- Scanning

UNIT 5

(4 Weeks)

Writing Skills

- Summarising
- Paraphrasing
- Note-making
- Essays- Expository Essay, Descriptive Essay, Narrative Essay
- Letter Writing- Formal Letter, Informal Letter
- Reports- Incidence, Newspaper, Organisational Report
- Analysis & Interpretation- Textual
- Intra & Inter-personal Skills - Monologue, Dialogue

Suggested Readings

- Chaudhary, Shoma. "Understanding Interviews, Billy Elliot is my Story, Only LessHappy". Tehelka: The People's Paper, 18 February 2006.
- Kumar, Dinesh. "Understanding Values, Our Muddled Generation". The Hindu, 26 March 2006.
- Learning to Write I, "Free Writing". In Fluency in English II, ed. Varma, Pramodini and Mukti Sanyal, pp. 1-5, Oxford, New Delhi, 2015.
- Learning to Write II, "Editing". In Fluency in English II, ed. Varma, Pramodini and Mukti Sanyal, pp. 25-27, Oxford, New Delhi, 2015.
- Learning to Write III, "What makes Good Writing Good". In Fluency in English II, ed. Varma, Pramodini and Mukti Sanyal, pp. 48-51, Oxford, New Delhi, 2015.

Examination scheme and mode:

Total Marks: 100

Internal Assessment: 25 marks

Practical Exam (Internal): 25 marks

End Semester University Exam: 50 marks

The Internal Assessment for the course may include Class participation, Assignments, Class tests, Projects, Field Work, Presentations, amongst others as decided by the faculty.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Communication in Professional Life	2	0	0	2	12th Pass	NIL

Learning Objectives

The Learning Objectives of this course are as follows:

- To prepare the students for their upcoming professional fields.
- To inculcate the fundamentals of professional and business communication.
- To learn aspects of global communication.
- To enhance employability skills of the learners by enabling them to write effective resumes and face interviews with confidence

Learning outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to improve presentation skills to be learnt by effective use of verbal and non-verbal communication for the professional field.
- After studying this course, students will be able to acquire practical employability skills to be disseminated through focused sessions on practical employable knowledge.
- After studying this course, students will be able to enhance professional communication.
- After studying this course, students will be able to improve persuasion and negotiation skills which will be useful for the professional field.

SYLLABUS

UNIT 1

(2 Weeks)

- Theory of Business Communication
- Introduction
- What is Business Communication?
- Language of Business Communication
- Cultural Components – Cross-Cultural Communication, Cultural Shock, Stereotyping, Ethnocentrism
- Miscommunication & Effective Communication

UNIT 2

(3 Weeks)

Listening Skills

- Netiquettes
- Audio-book Listening & Discussions
- Note-taking

UNIT 3

(5 Weeks)


Speaking Skills

- Presentation Skills- Oral Presentation, Ppt. Preparation, Ppt. Presentation
- Group Discussion
- Talks- Domain-specific, Ted-Talks, Business Meets, Motivational Talks
- Telephonic Skills
- Persuasion Skills
- Meeting & Negotiation
- Interview- Promotion Interview, Job Interview, Business Interview
- Functions and activities of PR

UNIT 4

(5 Weeks)

Writing Skills

- Summarising & Paraphrasing
 - Job-Oriented Skills- CV, Resume & Bio- Data, Job Application Letter
 - Documentation
 - Advertisements & Invitation
 - Letter Writing- Applications, Business Letters
 - Report- Analytical Report, Project Report
 - Digital Communication in Social Space- Social Media Posts (Twitter, Facebook), Blog Writing, Review Writing
 - Advertisement/Invitation/Poster Designing- Canva/MS Word/Coral
 - Memo, Office Order, Minutes
 - Making Online Academic/Work Profile- LinkedIn
- 

Suggested Readings

- Kaushik, J.C. and K.K. Sinha eds., English for Students of Commerce, Oxford University Press, New Delhi.
- Sethi, Anjana & Bhavana Adhikari, Business Communication, Tata McGraw Hill.
- Anjana Neira Dev, et.al, eds. Business English, Department of English, University of Delhi, 2011, Pearson Publications, New Delhi.

Examination scheme and mode:

Total Marks: 100

Internal Assessment: 25 marks

Practical Exam (Internal): 25 marks

End Semester University Exam: 50 marks

The Internal Assessment for the course may include Class participation, Assignments, Class tests, Projects, Field Work, Presentations, amongst others as decided by the faculty.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.



Common Pool of Generic Electives (GE) Courses offered by the Department of English

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course	Department offering the course
		Lecture	Tutorial	Practical/ Practice			
GE-1 Language and Culture	4	3	1	0	Passed Class XII	NIL	English

Learning Objectives

The Learning Objectives of this course are as follows:

- To familiarize students with the basic approaches to the study of language.
- To impart a socio- cultural perspective to the study of English in the Indian context.

Learning outcomes

The Learning Outcomes of this course are as follows:

- By studying this course, students will be able to analyze both the socio-cultural and formal aspects of language in general and English in particular.
- Students will be able to understand the shifting and evolving dynamics of the link between language and culture in India.

SYLLABUS OF GE-1

UNIT – I (20 Hours)

UNIT I-Language

1. Connor-Linton, Jeffrey, and Fasold, Ralph. 'Introduction', *An Introduction to Language and Linguistics*. United States: Cambridge University Press, 2006.
2. Fromkin, Victoria, Robert Rodman, and Nina Hyams. 'Part 1', *An Introduction to the Study of Language*. Boston, MA: Cengage, 2017.
3. Wardaugh, Ronald. Chapters 2 and 3, *An Introduction to Sociolinguistics*. Malden, MA: Blackwell, 2006.

4. Rodriques, M V. Chapters 2 and 6, *Perspectives of Communication and Communicative Competence*. India: Concept Pub, 2000.

UNIT – II (20 Hours)

UNIT II- English Language in India and Multilingualism

1. Jayendran, Nishevita, et al. Chapters 3, 5 and 6, *Language Education: Teaching English in India*. India: Taylor & Francis, 2021.
2. Mukherjee, Joybrato. 'The development of the English language in India', *The Routledge Handbook of World Englishes*. ed. A. Kirkpatrick, London and New York: Routledge, Taylor & Francis Group, 2000. pp 167-180
3. Bhatia, Tej K. 'The Multilingual Mind, Optimization Theory and Hinglish', *Chutnefying English: The Phenomenon of Hinglish. India*. ed. Rita Kothari & Rupert Snell, Penguin Books, 2011.

UNIT – III (20 Hours)

UNIT III: Language and Society

1. Wardaugh, Ronald. 'Gender', *An Introduction to Sociolinguistics*. Malden, MA: Blackwell, 2006.
2. Soden, Satori, et al. Chapter 5, 6, 8, 9, *Language, Society and Power: An Introduction*. Taylor & Francis, 2010.
3. Wilson, James C. and Cynthia Lewiecki-Wilson. 'Disability, Rhetoric, and the Body': *Embodied Rhetorics: Disability in Language and Culture*. United States: Southern Illinois University Press, 2001.

Practical component (if any) - NIL

Essential/recommended readings- as listed in the units

Suggestive readings:

1. Fowler, Roger. *The Linguistics of Literature*. London: Routledge and Kegan Paul Ltd, 1971.
2. Bailey, R. W. and J. L. Robinson, ed. *Varieties of present-day English*. New York: Macmillan, 1973.
3. Fishman, J.A. *Sociolinguistics: A Brief Introduction*. Mass: Newbury House Rowley, 1971.
4. Gupta R. S. and K. S. Agarwal, *Studies in Indian Sociolinguistics*. New Delhi: Creative Books, 1996.
5. 'Notes on the History of the Study of the Indian Society and Culture', *Structure and Change in Indian Society*, ed. Milton Singer and Bernard S Cohn. Chicago: Aldine Press, 1968.
6. 'Towards a Definition of Culture', *India and World Culture*. New Delhi: Sahitya Academy, 1986.

7. 'Culture and Ideology', *Culture, Ideology and Hegemony: Intellectual and Social Consciousness in Colonial India*. London and New York: Longman, 1995.
8. Crystal, David. *The Stories of English*. UK: Penguin Books Limited, 2005.
9. Krishnaswamy, N., and Krishnaswamy, Lalitha. *The Story of English in India*. India: Foundation Books, 2006.
10. Crystal, David. *The Cambridge Encyclopedia of the English Language*. Cambridge: Cambridge University Press, 1995.
11. Mesthrie, Rajend, and Bhatt, Rakesh M. *World Englishes: The Study of New Linguistic Varieties*. United Kingdom: Cambridge University Press, 2008.
12. Marckwardt, Albert H. "English as a Second Language and English as a Foreign Language." *PMLA*, vol. 78, no. 2, 1963, pp 25–28.
13. Kramschin, Claire. *The Routledge Handbook of Language and Culture*. United Kingdom, Taylor & Francis, 2014.

				Practice		
FUNDAMENTALS OF HUMAN NUTRITION	4	3	0	1	12th Pass	NIL

Learning Objectives

1. To understand the relationship between food, nutrition and health.
2. To classify foods into various food groups and explain the concept of a balanced diet.
3. To describe the importance of various nutrients as well as list their food sources.
4. To be able to plan and prepare nutritious meals for an adult.

Course Outcomes

1. Relate how food affects health.
2. Classify foods into various food groups and explain the concept of a balanced diet.
3. Understand the importance of various nutrients and how these can be obtained from the diet.
4. Describe the considerations for planning and preparing balanced and nutritious meals for adults.

THEORY (Credits 3; Periods 45)

Units	No. of Hours
Unit I: Basic Concepts in Nutrition Unit Description: Understanding basic terminology used in nutritional sciences and the importance of nutrition Subtopics: <ul style="list-style-type: none"> • Basic terms used in nutrition • Understanding relationship between food, nutrition and health • Functions of food-Physiological, psychological and social • Basic food groups and concept of balanced diet 	10 Hours
Unit II: Nutrients Unit Description: Functions, dietary sources, requirements, effects of deficiency and/ or excess consumption of the various nutrients. Subtopics: <ul style="list-style-type: none"> • Energy- Concept of energy balance • Carbohydrates and dietary fibre • Lipids • Proteins • Fat soluble vitamins • Water soluble vitamins • Minerals 	20 Hours

Unit III: Healthy Eating	15 Hours
Unit Description: Nutritional concerns and dietary guidelines for healthy eating for adults.	
Subtopics: <ul style="list-style-type: none"> • Factors influencing food choices • Planning balanced meals and diets • Nutritional concerns for adults • Dietary guidelines for prevention of diet related lifestyle disorders • Importance of physical activity and other lifestyle factors 	

Essential Readings

1. Chadha R and Mathur P eds. (2015). Nutrition: A Lifecycle Approach. Hyderabad: Orient BlackSwan.
2. Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (2013). Textbook of Nutrition and Dietetics. Delhi: Phoenix Publishing House Pvt. Ltd.
3. Longvah T, Ananthan R, Bhaskarachary K and Venkaiah K (2017). Indian Food
4. Composition Tables. National Institute of Nutrition, Indian Council of Medical Research, Department of Health Research, Ministry of Health and Family Welfare, Government of India, Hyderabad.
5. NIN (2011). Dietary Guidelines for Indians- A Manual. Second edition. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
6. Seth V, Singh K, Mathur P (2018). Diet Planning Through the Lifecycle Part I: Normal Nutrition- A Practical Manual. 6th Edition. Delhi: Elite Publishing House.

Suggested Readings

1. Byrd-Bredbenner C, Moe G, Beshgetoor D, Berning J (2013). Wardlaw's Perspectives in Nutrition, International Edition, 9th edition. New York: McGraw- Hill.
2. ICMR (2020). Nutrient Requirements for Indians-Recommended Dietary Allowances and Estimated Average Requirements. Published by National Institute of Nutrition, Hyderabad.
3. Sethi P, Lakra P. Aahar Vigyan, Poshan evam Suraksha (Hindi); First Ed; 2015; Delhi: Elite Publishing House (P) Ltd.
4. Siddhu, A, Bhatia, N, Singh, K, Gupta, S (2017). Compilation of Food Exchange List, Technical Series 6, Lady Irwin College, University of Delhi. Delhi: Global Books Organisation.
5. Suri S and Malhotra A (2014). Food Science, Nutrition and Safety. Dorling Kindersley (India) Pvt. Ltd, India

PRACTICAL

(Credit 1; Periods 30)

Practical	No. of Lectures
1. Making the right food choices <ul style="list-style-type: none">a. Nutrient rich sources from different food groupsb. Concept of high fat, salt, sugar (HFSS) foodsc. Reading food labels	10
2. Planning a nutritious meal for adults <ul style="list-style-type: none">a. Concept of food exchangesb. Calculating nutritional quality of dietsc. Balancing meals according to nutrient requirementsd. Healthy snacking options	20

GENERIC ELECTIVE-2
CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITE OF THE COURSE

Course Title & Code	Total Credits	Credit distribution of the course			Eligibility Criteria/ Prerequisite	Pre-requisite of the course, if any
		Lecture	Tutorial	Practical		
Understanding Psychology	4	3	0	1	Class XII Passed	Nil

Course Learning Outcomes

- To develop an understanding of self and others' by using the knowledge gained through the course about the different approaches in understanding behavior
- Demonstrate comprehension of the theoretical concepts of psychology and the related empirical findings in areas such as perception, memory, motivation, emotions, learning, Intelligence, personality, cognition etc.

Unit 1: Introduction to Psychology: Nature and Scope, Historical Development (structuralism, functionalism, psychoanalytic, cognitive, behavioural, humanistic- existential, gestalt), Psychology in India (15 Hours)

Unit 2: Intelligence and Personality: Nature (Intelligence and Personality) Theories of

personality: Psychoanalytic and Socio Cognitive Theory; Theories of intelligence: Sternberg's Triarchic Theory and Gardner's theory of Multiple Intelligence; Emotional intelligence; Assessment of intelligence and personality. Intelligence and personality in Indian Context
(15 Hours)

Unit 3: Learning and Memory : Nature (Learning and Memory), Conditioning (Classical and Instrumental), Observation learning. Memory- Models (Information Processing Model, Levels of Processing Model, Improving memory. Memory in Indian Context
(15 Hours)

PRACTICAL: Total of TWO Experiments- One each from Unit 2 and 3 based on course GE02: Understanding Psychology. Each practical group will consist of 10-12 students.

30 Hours

References:

- Abhedananda, S. (2008). True Psychology. Ram Krishna Vedanta Math. Kolkata
- Atkinson, R. L., Atkinson, R. C., Smith, E. E., Bem, D. J., & Hilgard, E. R. (2013). Introduction to Psychology. New York: H. B. J. Inc.
- Baron, R. A., & Misra, G. (2014). Psychology. New Delhi: Pearson Education.
- Ciccarelli, S. K., Meyer, G. E. & Misra, G. (2013). Psychology: South Asian Edition. New Delhi: Pearson Education.
- ICSSR Research Surveys and Explorations: Psychology, Vols 1-5
- Nolen-Hoeksema, S., Fredrickson, B., Loftus, G. R., & Lutz, C. (2014). Atkinson & Hilgards: Introduction to Psychology. Andover: Cengage Learning.
- Paranjpe, C. A. (2002). Self and Identity in Modern Psychology and Indian Thought. Kluwer Academic Publishers
- Passer, M. W., & Smith, R. E. (2013). Psychology: The Science of Mind and Behavior. New Delhi: Tata McGraw- Hill
- Sinha, D., Misra, G., & Dalal, K. A. (2015). Psychology for India. Sage Publications.
- Zimbardo, G. P. (2013). Psychology and Life. Pearson

Common Pool of Generic Electives (GE) Courses
Offered by Department of Environmental Studies

Category - IV

GENERIC ELECTIVES (GE-1)

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
✓ ENVIRONMENT AND SOCIETY	4	2	0	2	12 th Pass	NIL

Learning Objectives

- Examine the relationship between the environment and society
- Enable students to understand and appreciate the role played by environment, society, and, their interface in shaping environmental decisions
- Think critically on environmental issues and different solutions
- Learning outcomes

Learning outcomes

The Learning Outcomes of this course are as follows:

SYLLABUS OF GE-1

UNIT – I Introduction (4 hours)

Social and cultural construction of 'environment'; environmental thought from historical and contemporary perspective in light of the concepts of Gross Net Happiness and Aldo Leopold's Land Ethic

UNIT – II Issues in Environmentalism (4 hours)

Significant global environmental issues such as acid rain, climate change, and resource depletion; historical developments in cultural, social and economic issues related to land, forest, and water management in a global context; interface between environment and society.

UNIT – III Development -Environment Conflict (4 hours)

Developmental issues and related impacts such as ecological degradation; environmental pollution; development-induced displacement, resettlement, and rehabilitation: problems, concerns, and compensative mechanisms; discussion on Project Affected People (PAPs).

UNIT- IV Urbanization and environment (4 hours)

Production and consumption oriented approaches to environmental issues in Indian as well as global context; impact of industry and technology on environment; urban sprawl, traffic congestion and social-economic problems; conflict between economic and environmental interests.

UNIT – V Environment and Social Inequalities (4 hours)

Inequalities of race, class, gender, region, and nation-state in access to healthy and safe environments; history and politics surrounding environmental, ecological and social justice; environmental ethics, issues and possible solutions.

UNIT – VI Regulatory Framework (4 hours)

Brief account of Forest Conservation Act 1980 1988; Forest Dwellers Act 2008; Land Acquisition Act 1894, 2007, 2011, 2012; Land Acquisition Rehabilitation and Resettlement Act 2013

UNIT- VII Community participation (6 hours)

State, corporate, civil society, community, and individual-level initiatives to ensure sustainable development; case studies of environmental movements (Appiko Movement, Chipko Movement, Narmada Bachao Andolan); corporate responsibility movement; appropriate technology movement; environmental groups and movements, citizen groups; role played by NGOs; environmental education and awareness.

Practical component (if any) - (60 hours)

1. Analyse the cultural construction of the environment in a country of your choice
2. Compare and contrast the perception of the environment in countries with varying levels of environmental quality
3. Critically evaluate the developmental status and type of environmental issues across societies from region within a country and different countries.
4. Determine the socio-demographic and industrial characteristics of a region and correlate them with the environmental issues of that region?
5. Identify the relationship between societies varying in cultures and environment and analyse the role of economic factors in changing the relationship over time
6. Show any relationship between natural resource use and changing population dynamics of the community
7. Evaluate the pattern of natural resource use by people and their likelihood of participating in the conservation of natural resources
8. Demonstrate any pattern between the resources use and population dynamics, industrial activities, and employment generation in a given region
9. Analyse attitudes, knowledge, and values towards an environmental resource of a population or stakeholder and what trade-off is the public willing to make for conservation of the resource.
10. Determine access to resources across members of a society and suggest measures for equitable sharing of resources or associated benefits, if required.
11. Select an environmental policy/regulation and identify its impact on society over time.

Suggestive readings

1. Cárdenas, J.C., 2009. Experiments in environment and development. *Annual Review of Resource Economics*, 1(1), pp.157-82.
2. Chokkan, K.B., Pandya, H. & Raghunathan, H. (eds). 2004. *Understanding Environment*. Sagar Publication India Pvt. Ltd., New Delhi.
3. Elliot, D. 2003. *Energy, Society and Environment, Technology for a Sustainable Future*. 30 Routledge Press.
4. Ioris, A.A.R. ed., 2021. *Environment and Development: Challenges, Policies and Practices*. Springer Nature.
5. Leopold, A. 1949. *The Land Ethic*. pp. 201-214. Chicago, USA.

6. National Research Council (NRC). 1996. Linking Science and Technology to Society's Environmental Goals. National Academy Press.
7. Stanton, C.Y., 2014. Experiments in Environment and Development. Stanford University.