

VALUE ADDED COURSE SYLLABUS 2023-2024

PG & RESEARCH DEPARTMENT OF ECONOMICS ECONOMICS OF INSURANCE

Objectives

1. To Make the Students to understand about the Functions, Types and Importance of Insurance.
2. To learn the students the Advantages Fundamental principles of life Insurance.

UNIT-1: INTRODUCTION TO INSURANCE

Meaning and Definition of Insurance-Features of Insurance-Functions of Insurance- Types of Insurance-Fundamental Principles of Insurance-Importance of Insurance-General Insurance-Insurance and Economic Development.

UNIT-II :Life insurance and health Insurance

Meaning and Definition of life insurance and health insurance-Types of Health insurance policies-Health insurance schemes in India-Features of Life Insurance – Advantages of Life insurance-Fundamental principles of life Insurance

Unit- III; Introduction to Risk Management

Definition of Risk- Selection or Risk or Underwriting of Risk-Classification of Risk-Tools of the Risk-Risk Management Process-Determinations of Objectives.

Unit-IV: Legal Dimensions of Insurance and Growth of Insurance Business in India

Introduction-The Insurance Act,1938-Life insurance, corporation Act,1956-General Insurance Business(Nationalisation)Act,1972-Consumer Protection Act,1986-Insurance Regulation and Development Authority(IRDA).

Unit-V: Insurance Marketing

Introduction-Concept of Insurance Market-Marketing strategies of Insurance companies of Insurance Companies Benefits of Bank Assurance -steps in personal selling of Selling Process.

Text Books

1. Periyasamy,P.(2005) principles and practices OF Insurance, ,Himalaya publications House, Mumbai
2. Boda , B.S.Garg M.Garg.M.C AND Singh K.R.(2004).Insurance Fundamentals, Environment Procedures, Deep and Deep publications Pvt Limited, New Delhi.
3. Muthy, A(2006),Elements of Insurance,Margham Publications, Chennai.

References

- 1.Jyotsna sethi and Nishwan Bhatia,(2008),Elements of Banking and Insurance ,PHI Learning pvt Limited, New Delhi
- 2.Kanika MISHRA (2010),Fundamental of life insurance theories and Applications PHI Learning PVT Limited ,New Delhi
3. Emmett j.Vaughan and Therese Vaughan,(2007),Fundamental of RISK AND Insurance. Pasupati printers

DEPARTMENT OF HISTORY

VALUE ADDED COURSE – ODD SEMESTER – 2023 -2024

Semester-V /VI((MULTIDISPLI NARY) ValueAddedCours e	INTRODUCTION TO CIVIL SERVICES	CourseCode:VAH 1 /VAH2((MULTID ISPLINARY)
InstructionHours: 30	Credits: 2	ExamHours:3
InternalMarks -25	ExternalMarks-75	TotalMarks:100

Course Objectives:

- To Understand the Role of Bureaucracy.
- To Study the origin and growth of Civil Service in India.
- To know the Recruitment Process in Civil Service.
- To familiar with Examination Pattern for Civil Service Examination.
- To acquire knowledge on Role of Ethics in Civil Service.

Unit I	Indian Civil Service: Definition-Evaluation of Civil Service under British-Bureaucracy-Categories of Bureaucracy through the ages.	6Hrs
Unit II	Recruitment under British: Indian Civil Services-classification of services and Posts -Provincial civil services- Selection of mode.	6Hrs
Unit III	All India Services and Recruitment: IAS, IPS, IFS, IRS- the Features- Union Public Service Commission-Scheme and Subject for the Preliminary and Main Examination- Interview-In service training for IAS.	6Hrs
Unit V	Tamil Nadu State Services: TNPSC-Syllabus-Scheme and Examination-Interview.	6Hrs
Unit IV	Role of Ethics in Civil Service: Self Discipline - Communications skills -Moral responsibilities- Implementation of rule of Law.	6Hrs

ReferenceBooks:

1. *Dr.B.L.Fadia&Dr.KuldeepFadia,ElementsofPublicAdministration,SahiyaBhavan Publications,Agra,2005.*
2. *Dr.B.L.Fadia,AdministrationTheory,SahiyaBhavanPublications,Agra,2005.*
3. *VishnuBhagavan, VidhyaBhushan,IndianAdministration,S.Chand&co,Ltd,NewDelhi,Ivetd, 2005.*

e-Resources:

1. <http://www.allindiaservices/gov.in>
2. <http://www.india.positionclass.in>
- 3.

CourseOutcomes:

Oncompletionofthecoursethe learnerwillbeable to

CO 1:	The Students will be able to attend the Civil Service Examination.
CO 2:	Gain Knowledge on Classification of Services
CO 3:	Acquire Knowledge on All India Services.
CO 4:	Earn knowledge on State Services.
CO 5:	Develop Communication skills.

POST GRADUATE & RESEARCH DEPARTMENT OF MATHEMATICS
VALUE ADDED COURSE SYLLABUS
2023-2024

S.No	SEMESTER	STUDENTS STRENGTH	TYPE OF COURSE
1.	V	43	INTERDISCIPLINARY

PROGRAMMING IN R – LANGUAGE
SYLLABUS

INTERNAL: 40

SEMESTER: V

EXTERNAL: 60

EXAM HOURS: 3

CREDIT: 2

UNIT I

R language Essentials: Expressions and objects. Assignments, creating vectors, vectorized arithmetic, creating matrices, operations on matrices, lists.

UNIT II:

R language Essentials: data frames - creation, indexing, sorting and conditional selection; examples.

UNIT III:

R Programming: conditional statements if and if else; loops - for, while, do - while; functions - built - in and user defined;

UNIT IV:

R Programming: Data entry - reading from text file, data editor, examples.

UNIT V:

Descriptive Statistics and Graphics: Obtaining summary statistics; generating tables; Bar plots. Pie charts, Box plots, Histogram; exercises.

Books for Study:

1. Michael J.Crawley (2007), The R Book, John Wiley and Sons Ltd.
2. Peter Dalgaard (2008), Introductory Statistics with R, 2nd edition, Springer.

Lab Exercises:

1. Operations on vectors and matrices
2. Creating and manipulating data frames.
3. Writing user defined functions for finding arithmetic mean
4. Writing user defined functions for finding median
5. Writing user defined functions for finding factorial.
6. Writing user defined functions for finding matrix addition
7. Writing user defined functions for finding matrix multiplication.
8. Bar charts.
9. Pie charts.
10. Box plots for single and multiple groups.

**PG & RESEARCH DEPARTMENT OF COMMERCE
VALUE ADDED COURSE 2023 - 2024**

Academic Year	Name of the Short-Term Course conducted	No. of Students	Instruction Hours
2023 - 2024	Disaster Management	Aided - 66	30

DISASTER MANAGEMENT

Maximum: 100 Marks

Instruction Hour:30

Exam. Hours : 3

Objective: To impart knowledge on various types of disasters and its efficient management

UNIT I - Introduction

Disaster Management -Disaster- Meaning-importance of managing disasters- Plan for
Disaster Management –Managing relief measures- Types of disaster.

6 Hrs.

UNIT II - Natural Disasters:

Natural Disasters – Types –Windstorms- Floods-Earthquakes- Avalanches –
Tsunamis
–Volcanic Eruptions-Global Warming–Forest fires – Insect swarms- Asteroid
Impacts
–Extreme Temperature

6 Hrs.

UNIT III -Man-made Disasters:

Accidental Disasters – Technological Hazards -Industrial hazards, structural
collapse,
power outage - fire– Hazardous Materials- Radiation – Social Disasters, Hijacking,
Riots,Crowed Rushes -Political Disasters -Bombings, Shooting and hostages-
Terrorism

6 Hrs.

UNIT IV- Managing the Disaster

Disaster Management - Disaster Management at local level – Government’s role in
Disaster Management – Role of Remote sensing-Components of disaster
management-Key actors – Co- operation and Co-ordination- Managing disaster in

Coastal areas

6 Hrs.

UNIT V- Impact of Disasters and Relief and Rehabilitation:

Psychological Impact of Disasters – Principles of Psychological intervention following

disasters –Specific intervention techniques –Stress reduction techniques - Relief and

Rehabilitation – Poverty reduction and Disaster Management – Effects of disasters in

specific groups

6 Hrs.

Books for reference:

1. Mukesh Dhunna., Disaster Management, Vayu Education of India, 2/25, Ansari Road, Daryaganj, New Delhi-2
2. Dr.K.Kumarasamy, Environmental Studies. Jazym Publications,1- Post Office Street, Kajamalai,Tiruchirapalli -23

PG AND RESEARCH DEPARTMENT OF COMMERCE
EXTRA CREDIT COURSE
Professional English for Commerce and Management I & II

Semester-I Extra Credit Course I	Professional English for Commerce and Management I & II	Course Code: ECPEB
Instruction Hours: 6	Credits: 2	Exam Hours: 3
Internal Marks - 25	External Marks-75	Total Marks: 100
Course Objectives	<p>The Course aims</p> <ul style="list-style-type: none"> ● To develop the language skills of students by offering adequate practice in professional contexts. ● To focus on developing students' knowledge of domain specific registers and the required language skills. ● To develop strategic competence that will help in efficient communication. ● To develop their competence in the use of English with particular reference to the workplace situation. ● To enhance the creativity of the students, which will enable them to think of innovative ways to solve issues in the workplace. 	
Unit	Content	No. of Hours
Unit I	<ul style="list-style-type: none"> ● Listening to instructions ● Question Tag ● Prefixes and Suffixes ● Writing sentence / Description of Picture / Natural calamities and their impact on people/ Cultures and cultural practices 	18 Hours
Unit II	<ul style="list-style-type: none"> ● Collocations –Phrasal verbs ● Reading a written speech by eminent personalities in the relevant field /Short poems / Short biography. ● Letter Writing (Formal / Informal) ● Dialogue writing 	18 Hours
Unit III	<ul style="list-style-type: none"> ● Single word substitution ● Writing Recommendations Interpreting visuals - charts / tables/flow diagrams/charts ● Motivational stories on Professional Competence, Professional Ethics and Life Skills ● Hints development 	18 Hours
Unit IV	<ul style="list-style-type: none"> ● Brainstorming ● Two subject-based reading texts followed by comprehension activities/exercises Writing: Summary writing based on the reading passages.Comprehension 	18 Hours

Unit V	<ul style="list-style-type: none"> ● Punctuation(period, question mark, exclamation point, comma, semicolon, colon, dash, hyphen, parentheses, brackets, braces, apostrophe, quotation marks, and ellipsis) Capitalization (use of upper case) ● Essay Writing 	18 Hours
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Text Books:

Professional English for Commerce and Management I & II, Tamil Nadu State Council for Higher Education (TANSCHE)

Course Outcomes:

On completion of the course the learner will be able to

- Recognise their own ability to improve their own competence in using the language
- Use language for speaking with confidence in an intelligible and acceptable manner understand the importance of writing in academic life.
- Write simple sentences without committing error of spelling or grammar.
- Adapt easily into the workplace context, having become communicatively

PROFESSIONAL COMMUNICATION II COURSE FOR ARTS AND SCIENCE AND COLLEGES

Hours: 60

Objectives:

The Professional Communication Skills Course is intended to help Learners in Arts

and Science colleges,

- Develop their competence in the use of English with particular reference to the workplace situation.
- Enhance the creativity of the students, which will enable them to think of innovative ways to solve issues in the workplace.
- Develop their competence and competitiveness and thereby improve their employability skills.
- Help students with a research bent of mind develop their skills in writing reports and research proposals.

Unit 1- Communicative Competence

- Listening – Listening to two talks/lectures by specialists on selected subject specific topics -(TED Talks) and answering comprehension exercises (inferential questions).
- Speaking: Small group discussions (the discussions could be based on the listening and reading passages- open ended questions.
- Reading: Two subject-based reading texts followed by comprehension activities/exercises.
- Writing: Summary writing based on the reading passages.

Grammar and vocabulary exercises/tasks to be designed based on the discourse patterns of the listening and reading texts in the book. This is applicable for all the units.

Unit 2 - Persuasive Communication

- Listening: listening to a product launch- sensitizing learners to the nuances of persuasive communication.
- Speaking: debates – Just-A Minute Activities.
- Reading: reading texts on advertisements (on products relevant to the subject areas) and answering inferential questions.
- Writing: dialogue writing- writing an argumentative /persuasive essay.

Unit 3- Digital Competence

- Listening to interviews (subject related) .
- Speaking: Interviews with subject specialists (using video conferencing skills) Creating Vlogs (How to become a vlogger and use vlogging to nurture interests –subject related)
- Reading: Selected sample of Web Page (subject area)

- Writing: Creating Web Pages
- Reading Comprehension: Essay on Digital Competence for Academic and Professional Life.

The essay will address all aspects of digital competence in relation to MS Office and how they can be utilized in relation to work in the subject area

Unit 4 - Creativity and Imagination

- Listening to short (2 to 5 minutes) academic videos (prepared by EMRC/ other MOOC videos on Indian academic sites – E.g. <https://www.youtube.com/watch?v=tpvicScuDy0>)
- Speaking: Making oral presentations through short films – subject based.
- Reading: Essay on Creativity and Imagination (subject based).
- Writing – Basic Script Writing for short films (subject based).- Creating WebPages, blogs, flyers and brochures (subject based) - Poster making – writing slogans/captions(subject based) .

Unit 5- Workplace Communication& Basics of Academic Writing

- Speaking: Short academic presentation using PowerPoint.
- Reading & Writing: Product Profiles, Circulars, Minutes of Meeting. Writing an introduction, paraphrasing

Outcomes of the Course

At the end of the course, learners will be able to,

- Attend interviews with boldness and confidence.
- Adapt easily into the workplace context, having become communicatively competent.
- Apply to the Research &Development organisations/ sections in companies and offices with winning proposals.

PG & RESEARCH DEPARTMENT OF CHEMISTRY

VALUE ADDED COURSE - BUSINESS SKILL FOR CHEMISTRY (ODD SEMESTER)

SYLLABUS

UNIT - I :

Business Basics Key business concepts: Business plans, market need, project management and routes to market.

UNIT - II:

Chemistry in Industry Current challenges and opportunities for the chemistry-using industries in India and global economies.

UNIT- III:

Chemistry in Industry Current challenges and opportunities for the chemistry-role of chemistry in India and global economies.

UNIT - IV:

Making money Financial aspects of business with case studies Intellectual property Concept of intellectual property, patents.

UNIT - V:

Preparation and uses : Hair dye, hair spray, shampoo, suntan lotions, face powder, lipsticks, talcum powder, nail enamel, creams (cold, vanishing and shaving creams), antiperspirants and artificial flavours.

**DEPARTMENT OF TAMIL
VALUE ADDED COURSE
சிந்தனையியல்**

அ. து. ம மகளிர் கல்லூரி (தன்னாட்சி)
நாகப்பட்டினம்

தமிழ்த்துறை

சிந்தனையியல்:

(Value added course-interdisciplinary for III BA Tamil)

Semester- v	சிந்தனையியல்	Course Code -
Instruction Hours -2	Credits -2	Exam Hours -3
Internal Marks -25	External Marks -75	Total Marks -100

பாட நோக்கம்:

1. மேலை மற்றும் தமிழ்நாட்டு சிந்தனையாளர்களின் சிந்தனைகளை கற்பித்தல்.
2. காந்தியடிகளின் சிந்தனைகளை அறியச் செய்தல்.
3. காரல் மார்க்சின் சிந்தனைகளை பயிற்றுவித்தல்.
4. அம்பேத்காரின் சிந்தனைகளை உணரச் செய்தல்.
5. பெரியார் மற்றும் அண்ணாவின் சிந்தனைகளை செயல்பாடுகளை மேற்கொள்ள ஊக்குவித்தல்.

அலகு 1

சிந்தனையில் விளக்கம்- மேலைநாட்டு சிந்தனையாளர்கள் -சாக்ரடீஸ்-
.அரிஸ்டாட்டில்-பிளாட்டோ தமிழில் சிந்தனையில் வளர்ந்த வரலாறு-
திருவள்ளூர் சிந்தனைகள் -சித்தர்களின் சமூக சிந்தனைகள்- வள்ளலார்
சிந்தனைகள். (6 மணிகள்)

அலகு 2

காந்தியடிகள் சிந்தனைகள்- அகிம்சை- சமயக் கோட்பாடு- பெண்கள் சமுதாய ஒற்றுமை- அரசியல் பொருளாதார விடுதலை. (6 மணிகள்)

அலகு 3

காரல்மார்க்ஸ் சிந்தனைகள்- மார்க்சிய கோட்பாடுகள் அவற்றின் வழி சமூக பொருளாதார மாற்றங்கள். (6 மணிகள்)

அலகு 4

அம்பேத்கரின் சிந்தனைகள் அம்பேத்காரின் அனுபவங்களும் இவற்றின் வழி உருவான சிந்தனைகளும் மதம் ஜாதி பற்றிய சிந்தனைகள் அரசியல் அமைப்புச் சட்டம் இயற்றல் இவரின் பங்கு. (6 மணிகள்)

அலகு 5

பெரியார் மற்றும் அண்ணா சிந்தனைகள்- மதம், கடவுள், மொழி, சாதி, பெண்ணடிமை, சமுதாய ஏற்றத்தாழ்வு பற்றிய சிந்தனைகளும் செயல்பாடுகளும் (6 மணிகள்)

பாடநூல்

சிந்தனையில் தமிழ்த்துறை குந்தவைவை நாச்சியார் கல்லூரி ,தஞ்சாவூர் இயல்பதிப்பகம் 2017 .

பார்வை நூல்

1. காரல்மார்க்ஸ் வேசாமிநாத சர்மா.
2. வள்ளலார் கண்ட ஒருமைப்பாடு ம.பொ.சி.
3. பெரியாரின் சிந்தனைகள் மூன்று தொகுதிகள்வே. ஆனைமுத்து.
4. அறிஞர் அண்ணாவின் வாழ்வும் வாக்கும்சி.எம் ஏ பரிமளம்.

5 சத்திய சோதனைகாந்தியடிகள்,

இணைய முகவரி
கற்றல் விளைவுகள்

<https://tamil.wikipedia.org>

- 1 சிந்தனையாளர்களின் சிந்தனைகளை வாழ்வில் மேற்கொள்வர்.
- 2 காந்தியடிகளின் சிந்தனைகளை பின்பற்றி வாழ்வர்..
- 3 காரல்மார்க்ஸ் சிந்தனைகளை அறிந்து அதன்படி நடப்பர்.
- 4 அம்பேத்காரின் சிந்தனைகளை சட்டங்களை அறிவர்.
- 5 பெரியார் மற்றும் அண்ணாவின் சிந்தனைகளை மேற்கொண்டு பேச்சாளர் கவிஞர் எழுத்தாளராக ஆவர்..

DEPARTMENT OF ENGLISH
SCHEME OF THE VALUE ADDED COURSE

Year	Semester	Course Code	Course Title	Instruction Hours	Credits	Exam Hours	Total Marks
III	V	VAN1	Objective English for Competitive Examinations	03	02	03	100

Unit I	Synonyms Antonyms	6 hours
Unit II	Error and how to avoid them Phrasal Verbs	6 hours
Unit III	Reconstructing Passages Vocabulary- Words often confused and misused	6 hours
Unit IV	Sentence Completion Precis Writing	6 hours
Unit V	Essay Writing Dialogue Writing	6 hours

Reference Books:

English for Competitive Examination – R. R. Bhatnagar and Rajul Bhatnagava, Macmilan Publishers, New Delhi, 2011

e- Resources: <http://books-library.net/files/books-library. Online- 12261331HK2E2.pdf>

DEPARTMENT OF PHYSICS

VALUE ADDED CERTIFICATE COURSE SYLLABUS 2024-2025

Semester- VI / Value Added (Multidisciplinary)	Solar Energy and Basic Fabrications	Course Code:
Instruction Hours: 2 Theory : 60 Practical:40 Total Marks:100	Credits: 2	Exam Hours: 3

Course Objectives:

- To make the students to understand the present day crisis of need for conserving energy and alternatives are provided.
- Know percentages and have understanding for magnitudes of energy and resources used
- Understand the special engineering challenges of using each of these sources of energy efficiently and environmentally effectively.
- Understand the economics behind the costs of the uses and applications of each of these forms of energy
- Understand the energy conversion systems for nuclear power plants, the advantages/disadvantages (including overall environmental effects) of each type of present plants.

Unit I	<p>Energy Resources and their Utilization: Conservation and forms of Energy – Electric energy from Convention Sources –Thermal Plants (Coal Fueled) Energy Reserves of India – Oil – Natural Gas –National Grid for Gas Distribution – Gas Conservation. (Content- 4 Hrs, Assessment -2 Hrs) (6 Hrs)</p>
Unit II	<p>Environmental Awareness: Global Environmental Awareness – Kyoto Protcol- Impact of Renewable of Renewable energy generation on environment – Solar energy – Light intensity – Temperature – Humidity – Carbon Dioxide – Solar Photovoltaic System- Standalone PV System(Solar Street Light) (Content- 4 Hrs, Assessment -2 Hrs) (6 Hrs)</p>

Unit III	<p>Solar Thermal Energy Conversation Systems and Application of Solar: Solar Water Heating – Solar Distillation – Liquid bath Wax Melter –Solar Wax Melter – Solar Green Houses –Solar Furnace and Applications- Major components of a solar furnace)-Solar Power Plant using A Satellite – Plastic Solar Cells with Nanotechnology – Solar Photovoltaic in India. (Content- 4 Hrs, Assessment -2 Hrs) (6 Hrs)</p>
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Text Book:

1.D.P. Kothari, K.C. Singal & Rakesh Ranjan, *Renewable energy sources and emerging Technologies*, Prentice Hall of India Pvt. Ltd., New Delhi (2008).

Reference Books:

1. S.A. Abbasi and Nasema Abbasi, *Renewable Energy sources and their environmental impact*, PHI Learning Pvt. Ltd., New Delhi (2008).

E- Resources:

1. <http://www.lanl.gov/external>
2. <http://fnalpubs.fnal.gov>

Course Outcomes:

On completion of the course the learner will be able

CO 1:	Understand the sources of energy and their contributions to the energy and power needs of the nation and the world.
CO 2:	Be able to effectively use Solar PV Analyzer.
CO 3:	Understand the differences between large quantities of fuel and waste
CO 4:	Fully appreciate the aspect of capital cost amortization and allocation to unit of energy produced.
CO 5:	Be able to analyze comparisons of capital cost allocation, operating cost, including fuel costs. Special attention is given to the renewables for which there is zero or negligible fuel cost

Solar Energy and Basic Fabrications –Practical (Any four)

Solar PV Experiments

- 1) Solar Panel Orientation and Tilt Angle Experiment
- 2) Solar Irradiance Measurement
- 3) Shadow Analysis
- 4) System Sizing
- 5) Battery Storage and Charge Controllers
- 6) Inverter Functionality
- 7) Grid-Tied vs. Off-Grid Systems
- 8) Monitoring and Data Logging

PG & RESEARCH DEPARTMENT OF ZOOLOGY

Professional English for Life Science

Semester-I / Self Learning Course	ECC I - ENDOCRINOLOGY	Course Code: ECPEC1
Instruction Hours: 6	Credits: 3*	Exam Hours: 3
Internal Marks -25	External Marks-75	Total Marks: 100

Cognitive Level	K1 -Recalling K2 -Understanding K3 -Applying K4 - Analyzing K5 - Evaluating K6 - Creating
Course Objectives	<ul style="list-style-type: none">• To highlight the role of hormones and their classification.
	<ul style="list-style-type: none">• To provide a thorough knowledge of endocrine glands and their neurosecretion
	<ul style="list-style-type: none">• To provide the chemical structure of peptide and steroid hormones.
	<ul style="list-style-type: none">• To understand hormonal action and its regulation
	<ul style="list-style-type: none">• To enrich knowledge and applications of hormones in therapy

UNITS	CONTENT	HOURS
I	INTRODUCTION TO ENDOCRINOLOGY: Scope of endocrinology - objectives -hormones as chemical messengers – classification – mechanism of hormone actions – feedback mechanism – hypothalamus – neuroendocrine system in Insects and Crustaceans. Hormonal control of reproduction –metamorphosis and moulting–pheromones	18

<p style="text-align: center;">II</p>	<p>ENDOCRINE ORGANS:</p> <p>Structural organization – biosynthesis of hormones -targeted organs – functions – abnormalities of thyroid -parathyroid -pancreas -adrenal -testis -ovary -placenta. Role of hormones in sexual cycle – menopause – pregnancy - parturition – lactation – role of prostaglandins</p>	<p style="text-align: center;">18</p>
<p style="text-align: center;">III</p>	<p>Structure of protein and steroid hormones:</p> <p>Purification and characterization of hormones – structure – functional relationship. Phylogenic analysis of hormonal structure and function. Biosynthesis of hormones - storage -secretion of hormones – molecular mechanisms of regulation - transcriptional and post transcriptional mechanisms of hormone biosynthesis and secretion. Regulation of biosynthesis and secretion – inhibitors.</p>	
<p style="text-align: center;">IV</p>	<p>HORMONAL EFFECTS AND ACTIONS:</p> <p>Discovery of receptors in target tissues - mechanisms of hormone action and signal attenuation – signal discrimination – signal transduction and amplification. Hormone – receptor interactions - receptor antagonists and their applications. Metabolism of hormones by target and non-target tissues – hormones and behaviour</p>	<p style="text-align: center;">18</p>
<p style="text-align: center;">V</p>	<p>HORMONES AS THERAPEUTIC AGENTS:</p> <p>Current developments in design and production of hormonal contraceptives – recombinant protein hormones – production - applications in regulation of fertility in farm animals and humans – Hormones Replacement Therapy (HRT) -genetic engineering for commercial production of insulin. Hormone Assays- Follicle Stimulating Hormone (FSH)- Thyroid stimulating Hormone (TSH).</p>	<p style="text-align: center;">18</p>

Semester-II	ORNAMENTAL FISH CULTURE	Course Code :
Instruction Hours: 2	Credits: 2	Exam Hours: 2
Internal Marks -25	External Marks-75	Total Marks: 100

Cognitive Level	K1 -Recalling K2 -Understanding K3 -Applying K4 - Analyzing K5 - Evaluating K6 - Creating
Course Objectives	<ul style="list-style-type: none"> To imply the current status of ornamental fish farming in India
	<ul style="list-style-type: none"> To impart knowledge about the ornamental fish trade in the national and international scenario
	<ul style="list-style-type: none"> To provide practical knowledge on culturing live feed for ornamental fishes.
	<ul style="list-style-type: none"> To familiarize concepts and scopes on aquascaping
	<ul style="list-style-type: none"> To effectively familiarize on the ornamental fish diseases and its management

UNITS	CONTENT	HOURS
I	INTRODUCTION TO ORNAMENTAL FISHES: Basics of fish keeping -definition and current scope-state - national - international scenario of ornamental fishery. Different types of aquarium-types of ornamental fishes.	6
II	IMPORT AND EXPORT OF ORNAMENTAL FISHES: World trade of ornamental fishes and export potential -role of MPEDA in ornamental fishes. Import and export of ornamental fishes in India. Varieties of indigenous species -exotic species. Current status of ornamental fish exporters in Tamil Nadu.	6
III	VARIETIES OF ORNAMENTAL FISHES AND LIVE FEED CULTURE: Ornamental fishes of fresh water - brackish water - marine water. Live	6

	bearers – egg laying fishes – breeding and rearing. Ornamental shrimp - clown fish. Live feed culture - Artemia – Daphnia - Infusoria (Protozoa and other microorganisms) – bloodworms and micro worms. Formulated and commercial feed-preparation and importance	
IV	AQUASCAPING AND WATER QUALITY PARAMETERS: Basics of Aquascaping - aquascaping soil - aquarium plants - propagation methods – aquascaping tools - lighting and aeration. Aquarium accessories and decorative – economically aquascaping using river sand. Water quality management - water filtration system – biological - mechanical -chemical. Types of filters – advantages and uses	6
V	DISEASE MANAGEMENT: Biosecurity of ornamental fish -identification of ornamental fish diseases and prophylactic measures - parasites of fish - viral diseases - bacterial diseases - fungal diseases - specific syndrome and disease - fish treatment. Physical examination of diseased fish – diagnostic techniques.	6
	Total	30

DEPARTMENT OF BIOCHEMISTRY

SYLLABUS 2023-2024

Course Objectives:

- To enable the students can get knowledge about laboratory safety and Rules.
- Identify their hazardous chemical's
- Learn about the Chemicals causing health hazards
- Learn about the proper procedure for responding to spill
- Understand the chemical inventory

UNIT	CONTENT	HOURS
Unit I	Identification of hazard, Categorization methods for elimination of hazard and classify a hazardous chemical.	(6 Hrs)
Unit II	Chemical hazards: laboratory safety, bulk handling of chemicals, Fire and explosion hazards, Fire detection, Prevention, control, and extinguishments, Industrial layout, Industrial waste management.	(6 Hrs)
Unit III	Chemicals causing health hazards: irritants, asphyxiates, anaesthetics, systemic poisons and carcinogens, Chronic and acute exposure, Routes of entry, types of airborne contaminants.	(6 Hrs)
Unit IV	Re-label any new transfer bottles. Implement the proper procedures for responding to spills, emergencies or injuries.	(6 Hrs)
Unit V	Development and Maintenance of a chemical inventory.	(6 Hrs)

Text Book:

1. Laboratory Safety Manual, Case Western Reserve University, July 31, 1991.
2. Laboratory Safety Manual, Environmental Health and Safety Department University of Washington, December 2021 Edition.

Reference Books:

1. Safety A personal Focus David L Bever
2. Hand book of Hazardous Air pollutions, Dennis P Nolan P.E
3. Fire Technology, R.S. Gupta
4. Remediation and Treatment Technologies. Dennis P Nolan P.E
5. Fire service Manual (4 volumes)

e- Resources:

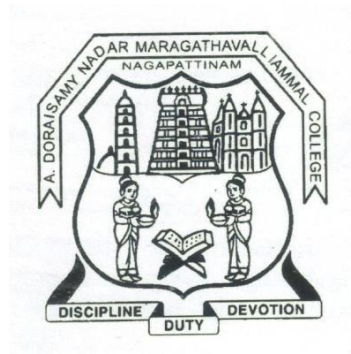
1. <https://www.labsafety.org/lab-safety-books>
2. <https://www.labsafety.org/product/lab-safety-guidelines-expanded-e-book>

A.D.M COLLEGE FOR WOMEN (AUTONOMOUS),

NAGAPATTINAM-611 001

(Nationally Re-accredited with 'A' Grade by NAAC- 4rd Cycle)

PG DEPARTMENT OF COMPUTER SCIENCE



VALUE ADDED COURSE

2023-2024

A.D.M.COLLEGE FOR WOMEN (AUTONOMOUS), NAGAPATTINAM

PGDEPARTMENT OF COMPTUER SCIENCE

CERTIFICATE COURSE

MULTIMEDIA TECHNOLOGY - I

(for the candidates admitted from the academic year 2023-2024)

Course Objective:

- To give technical skills of audio and video editing to the students so that they may edit and compose sounds and videos as per their need.

List of Practicals

1. Matrix effect using time remapping
2. Swinging text effect.
3. Type animation.
4. Cinematic title animation.
5. Text animation.

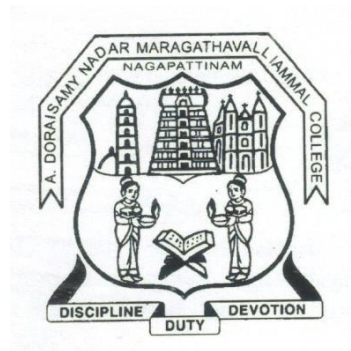
Course Outcome:

- Students learn to record, edit and publish audio for animation.
- They also learn the techniques of video editing with various tools.

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(for the candidates admitted from the academic year 2021-2024)



EXTRA CREDIT COURSE
ODD SEMESTER
(2023-2024)

A.D.M.COLLEGE FOR WOMEN (AUTONOMOUS), NAGAPATTINAM
PGDEPARTMENT OF COMPTUER SCIENCE
EXTRA ADDED COURSE
SEMESTER I
SYLLABUS
PROFESSIONAL ENGLISH FOR ARTS & SOCIAL SCIENCES I

OBJECTIVES:

- To develop the language skills of students by offering adequate practice in professional contexts.
- To enhance the lexical, grammatical and socio-linguistic and communicative competence of first year physical sciences students
- To focus on developing students' knowledge of domain specific registers and the required language skills.
- To develop strategic competence that will help in efficient communication
- To sharpen students' critical thinking skills and make students culturally aware of the target situation.

UNIT 1: COMMUNICATION

Listening: Listening to audio text and answering questions- Listening to Instructions

Speaking: Pair work and small group work.

Reading: Comprehension passages –Differentiate between facts and opinion

Writing: Developing a story with pictures.

Vocabulary: Register specific - Incorporated into the LSRW tasks

UNIT 2: DESCRIPTION

Listening: Listening to process description.-Drawing a flow chart.

Speaking: Role play (formal context)

Reading: Skimming/Scanning-Reading passages on products, equipment and gadgets.

Writing: Process Description –Compare and Contrast Paragraph-Sentence Definition and Extended definition-Free Writing.

Vocabulary: Register specific -Incorporated into the LSRW tasks.

UNIT 3: NEGOTIATION STRATEGIES

Listening: Listening to interviews of specialists / Inventors in fields(Subject specific)

Speaking: Brainstorming. (Mind mapping).Small group discussions (Subject- Specific)

Reading: Longer Reading text.

Writing: Essay Writing (250 words)

Vocabulary: Register specific - Incorporated into the LSRW tasks

UNIT 4: PRESENTATION SKILLS

Listening: Listening to lectures.

Speaking: Short talks.

Reading: Reading Comprehension passages

Writing: Writing Recommendations-Interpreting Visuals inputs

Vocabulary: Register specific - Incorporated into the LSRW tasks

UNIT 5: CRITICAL THINKING SKILLS

Listening: Listening comprehension- Listening for information.

Speaking: Making presentations (with PPT- practice).

Reading : Comprehension passages –Note making.

Comprehension: Motivational article on Professional Competence,Professional Ethics and Life Skills)

Writing: Problem and Solution essay– Creative writing –Summary writing

Vocabulary: Register specific - Incorporated into the LSRW tasks

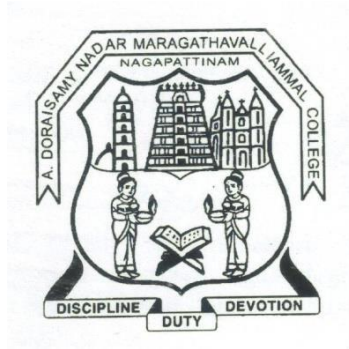
LEARNING OUTCOMES:

- Recognise their own ability to improve their own competence in using the language**
- Use language for speaking with confidence in an intelligible and acceptable manner**
- Understand the importance of reading for life**
- Read independently unfamiliar texts with comprehension**
- Understand the importance of writing in academic life**

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PG DEPARTMENT OF COMPUTER SCIENCE

(for the candidates admitted from the academic year 2021-2024)



EXTRA CREDIT COURSE
EVEN SEMESTER
(2023-2024)

A.D.M.COLLEGE FOR WOMEN (AUTONOMOUS), NAGAPATTINAM
PGDEPARTMENT OF COMPTUER SCIENCE
EXTRA ADDED COURSE
SEMESTER II
SYLLABUS
PROFESSIONAL ENGLISH FOR ARTS & SOCIAL SCIENCES II

Objectives:

- **Develop their competence in the use of English with particular reference to the workplace situation.**
- **Enhance the creativity of the students, which will enable them to think of innovative ways.**
- **Develop their skills to solve issues in the workplace.**
- **Develop their competence and competitiveness and thereby improve their employability skills.**
- **Help students with a research bent of mind develop their skills in writing reports and research proposals.**

Unit 1- Communicative Competence

Listening – Listening to two talks/lectures by specialists on selected subject specific topics -(TED Talks) and answering comprehension exercises (inferential questions)

Speaking: Small group discussions (the discussions could be based on the listening and reading passages- open ended questions)

Reading: Two subject-based reading texts followed by comprehension activities/exercises

Writing: Summary writing based on the reading passages.

Grammar and vocabulary exercises/tasks to be designed based on the discourse patterns of the listening and reading texts in the book. This is applicable for all the units.

Unit 2 - Persuasive Communication

Listening: listening to a product launch- sensitizing learners to the nuances of persuasive communication

Speaking: debates – Just-A Minute Activities

Reading: reading texts on advertisements (on products relevant to the subject areas) and answering inferential questions

Writing: dialogue writing- writing an argumentative /persuasive essay.

Unit 3- Digital Competence

Listening to interviews (subject related)

Speaking: Interviews with subject specialists (using video conferencing skills)

Creating Vlogs (How to become a vlogger and use vlogging to nurture interests –subject related)

Reading: Selected sample of Web Page (subject area)

Writing: Creating Web Pages

Reading Comprehension: Essay on Digital Competence for Academic and Professional Life.

The essay will address all aspects of digital competence in relation to MS Office and how they can be utilized in relation to work in the subject area

Unit 4 - Creativity and Imagination

Listening to short (2 to 5 minutes) academic videos (prepared by EMRC/ otherMOOC videos on Indian academic sites – E.g.<https://www.youtube.com/watch?v=tpvicScuDy0>)

Speaking: Making oral presentations through short films – subject based

Reading: Essay on Creativity and Imagination (subject based)

Writing – Basic Script Writing for short films (subject based)- Creating webpages, blogs, flyers and brochures (subject based)- Poster making – writing slogans/captions(subject based)

Unit 5- Workplace Communication& Basics of Academic Writing

Speaking: Short academic presentation using PowerPoint

Reading & Writing: Product Profiles, Circulars, Minutes of Meeting.

Writing an introduction, paraphrasing, Punctuation(period, question mark, exclamation point, comma, semicolon, colon, dash, hyphen,parentheses, brackets, braces, apostrophe, quotation marks, and ellipsis)Capitalization (use of upper case)

Outcomes of the Course

- **Attend interviews with boldness and confidence.**
- **Adapt easily into the workplace context, having become**
- **Adapt to communicativelycompetent.**
- **Apply to the Research**
- **Apply to Development organisations/ sections in companiesand offices with winning proposals.**

**DEPARTMENT OF GEOLOGY
VALUE ADDED COURSE**

VAC TOPIC : FIELD GEOLOGY

Semester-V / VAC I	FIELD GEOLOGY	Course Code: ECGVA5
Instruction Hours: 2	Credits: 2	Exam Hours: 3
Internal Marks: 0	External Marks:100	Total Marks: 100

Cognitive Level	K1 -Recalling K2 -Understanding K3 -Applying K4 - Analyzing K5 - Evaluating K6 - Creating	
Course Objectives	<p>To understand the field essentials like understanding a map, the basic equipments, traversing and field markings.</p> <p>To understand the basic field equipments</p> <p>To learn about the compass uses in clinometers and bearing and reading directions.</p> <p>To learn about the different component of maps.</p> <p>To know about the field procedures and sampling techniques.</p>	
UNIT		HOURS
UNIT I	Previous Literature and Maps, Destruction of Rocks, Physiography, Topographic Expressions and Relief, Inliers and Outliers, Soils and Vegetation, Requirements for the Field, Some Field Suggestions and Precautions.	12
UNIT II	Basic equipment, Additional requirements, Supplementary supplies, Special requirements, Optional, For mapping on aerial	12

	Photographs. Geological Hammers, Pocket and Hand Lenses, Hydrochloric Acid, Streak Plate, Pocket Knife, Measuring Tapes and Scales, Haversack or Rucksack, Mohs scale of Hardness, Cold Chisel, Protractors, Pocket Calculator, Cameras, Care and Upkeep of Instruments.	
UNIT III	The Compass and Its Uses, Dip of the Compass Needle, Magnetic Declination, Clinometer, Bearing and Reading Directions, Measuring Attitudes, Handling of the Compass, Finding Direction without a Compass.	12
UNIT IV	Base Maps, Scale of Maps, Direction of Relief, Latitudes and Longitudes, Map Grids Measurement of the Map Areas, Mounding and Folding of Field Maps, Marking on Maps.	12
UNIT V	The Notebook, Notes, Checklist for Notes, Writing Materials, Field Sketches and Drawings, Field Photographs. Trimming of Hand Specimens, Fossil Specimens, Mineral Specimens, Samples and Samplings, Numbering and Labelling of Specimens, Packing and Storage.	12

Text Books:

Davis, G.R. 1984, Structural Geology of Rocks and Region, John Wiley 24

H.W. Fairborn, 1949, Structural petrology of deformed rocks, John Wiley and sons

John Suppe 1985, Principles of Structural Geology, prentice Hall publications.

Reference Books:

Price N.J., and Cosgrove, J.W. 1990. Analysis of Geological structures, Cambridge Univ. Press.

Ramsay, J.G. and Huber, M.I., 1987, Modern structural Geology Vol. I and II Academic press.

Robert R. Compton, 1962, Manual of field geology, John Wiley and sons