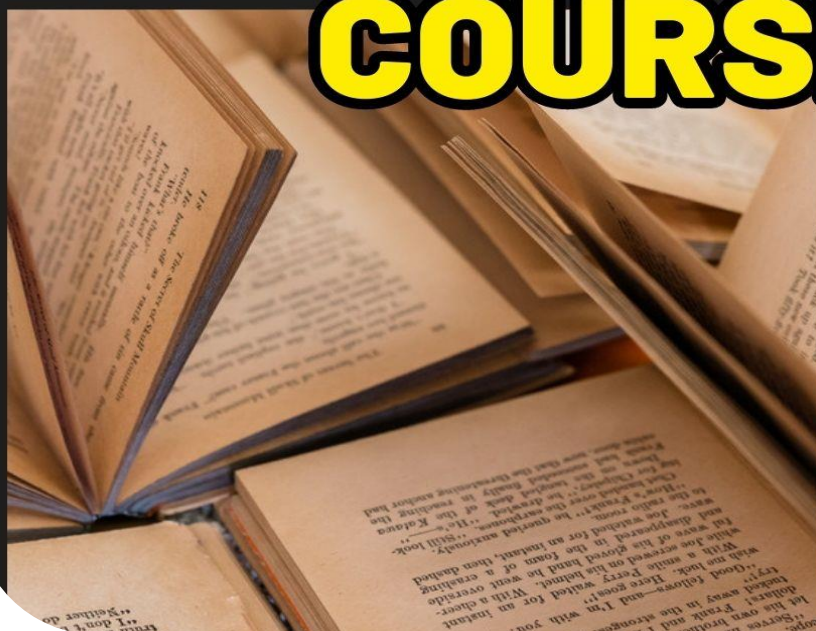




SHRI GURU RAM RAI UNIVERSITY DEHRADUN



VALUE ADDED COURSES



SGRRU



SGRR UNIVERSITY

Brochure of Value-Added Courses



ABOUT THE UNIVERSITY

Shri Guru Ram Rai University was established by a religious and philanthropic leader, Shri Mahant Devendra Dass Ji Maharaj in the year 2017. It is situated in the heart of city, Uttarakhand. We are extremely privileged to extend the values and ethos of the Shri Guru Ram Rai Education mission through SGRR University to impart quality education and in successfully placing more than 80% students in various companies across the globe. SGRR University has humongous campus spread over 80 acres of land. Its state-of-art facilities give opportunities to develop leadership skills and to achieve professional excellence. It has 9000+ students from different countries, 29 states and Union Territories and providing cultural melange and global exposure to our students. One of the biggest boosts from University is its unmatched experience of 65 years of in delivering quality education that helps to develop confidence and will give you more knowledge, industry exposure, building good networking and high self-esteem. This will change your overall personality and develop you into a complete professional to face any challenge.

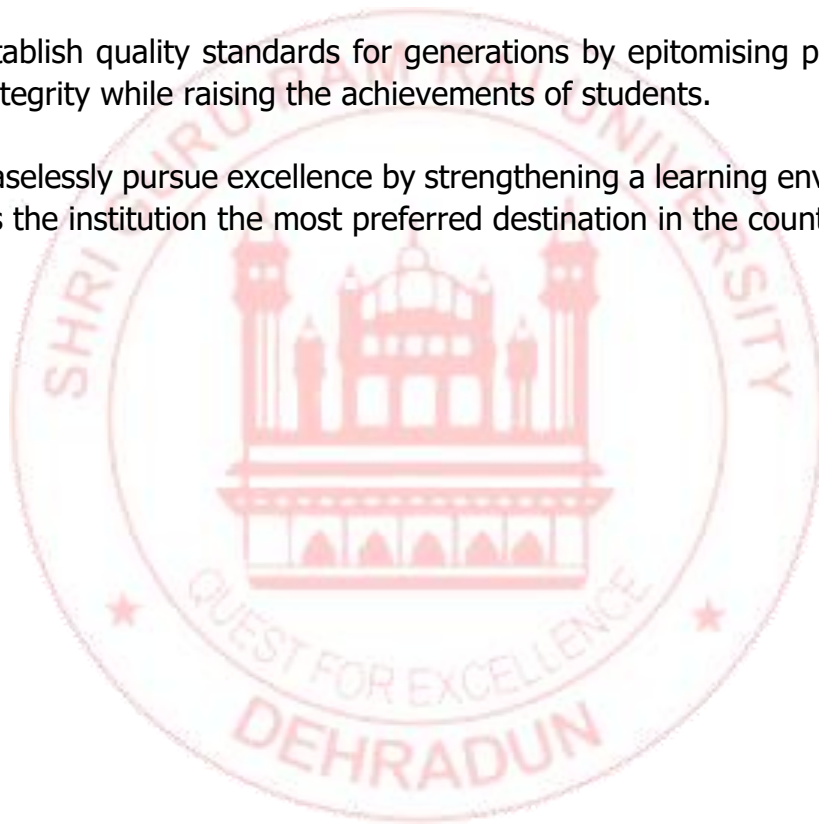
Vision

“To establish Sri Guru Ram Rai University to be a Center of Excellence in higher education, innovation and social transformation by nurturing inquisitive and creative minds and by enabling the stakeholders to become committed professionals and educators of national and global relevance.”

Mission

- ❖ To provide a comprehensive and sustainable educational experience that fosters the spirit of enquiry, scientific thinking and professional competence along with ethical and spiritual values
- ❖ To deliver a classic, well rounded learning experience that is distinctive and impactful on the young generation preparing them for a successful career
- ❖ To engage, inspire and challenge the stakeholders to become leaders with ethics and positive contributors to their chosen field and humane citizens
- ❖ To attract, train and retrain qualified staff to work efficiently to bring forth the maximum resource potential

- ❖ To develop committed and responsible professionals who work for the welfare of the society by providing innovative and efficient solutions and creating long term relationship with the stakeholders
- ❖ To create a sustainable career, by collaborating with stakeholders and participating in community partnership for life and livelihood in the local society in a responsive and dynamic way
- ❖ To make our students globally competent by introducing specialized training leading to professional capabilities and developing diverse skills in them for competitive advantage.
- ❖ To establish quality standards for generations by epitomising professionalism and integrity while raising the achievements of students.
- ❖ To ceaselessly pursue excellence by strengthening a learning environment that makes the institution the most preferred destination in the country.



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INTRODUCTION

The ever-changing global scenario makes the world more modest and needs high levels of lateral thinking and the spirit of entrepreneurship to cope up with the emergent challenges. Many a times, the defined skill sets that are being imparted to students today with Programme Specific Objectives in educational institutions become redundant sooner or later due to rapid technological advancements. No university curriculum can adequately cover all areas of importance or relevance. It is important for higher education institutions to supplement the curriculum to make students better prepared to meet industry demands as well as develop their own interests and aptitudes.

Objectives The main objectives of the Value-Added Course are:

- ✓ To provide students an understanding of the expectations of industry.
- ✓ To improve employability skills of students.
- ✓ To bridge the skill gaps and make students industry ready.
- ✓ To provide an opportunity to students to develop inter-disciplinary skills.
- ✓ To mould students as job providers rather than job seekers.

Course Designing The department interested in designing a Value Added Course should undertake Training Need Analysis, discuss with the generic employers, alumni and industrial experts to identify the gaps and emerging trends before designing the syllabus.

Conduction of value added courses :

Value Added Course is not mandatory to qualify for any programme and the credits earned through the Value-Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. It is a teacher assisted learning course open to all students without any additional fee.

Classes for a VAC are conducted during the RESERVED Time Slot in a week or beyond the regular class hours The value-added courses may be also conducted during weekends / vacation period. A student will be permitted to register only one Value Added Course in a Semester.

student will be encouraged to opt for the VAC offered by his/her parent Department/Faculty. Industry Experts / Eminent Academicians from other Institutes are eligible to offer the value-added course. The course can be offered only if there are at least 5 students opting for it. The students may be allowed to take value added courses offered by other departments after obtaining permission from Dean offering the course. The duration of value added course is 30 hours with a combination 18 hours (60%) of theory and 12 hours (40%) of practical. However, the combination of theory and practical shall be decided by the course teacher with the approval of the Dean

GUIDELINES FOR CONDUCTING VALUE ADDED COURSES

- ❖ Value Added Course is not mandatory to qualify for any program.
- ❖ It is an instructor supported learning course open to all students without any added fee.
- ❖ Classes for VAC will be conducted during the **RESERVED** Time Slot in a week or beyond the regular class hours.
- ❖ The value-added courses may be also conducted during weekends / vacation period.
- ❖ A student will be permitted to register only one Value Added Course in a Semester.
- ❖ Students may be permitted to enrol in value-added courses offered by other departments/ Schools after obtaining permission from the Department's Head offering the course.

DURATION AND VENUE

- ❖ The duration of value-added course should not be less than 30 hours.
- ❖ The Dean of the respective School shall provide class room/s based on the number of students/batches.
- ❖ VAC shall be conducted in the respective School itself.

REGISTRATION PROCEDURE

The list of Value-Added Courses, along with the syllabus, will be available on the University Website. A student must register for a Value-Added Course offered during the semester by completing and submitting the registration form. The Department Head shall segregate according to the option chosen and send it to the Dean of the school offering the specific Value-Added Courses.

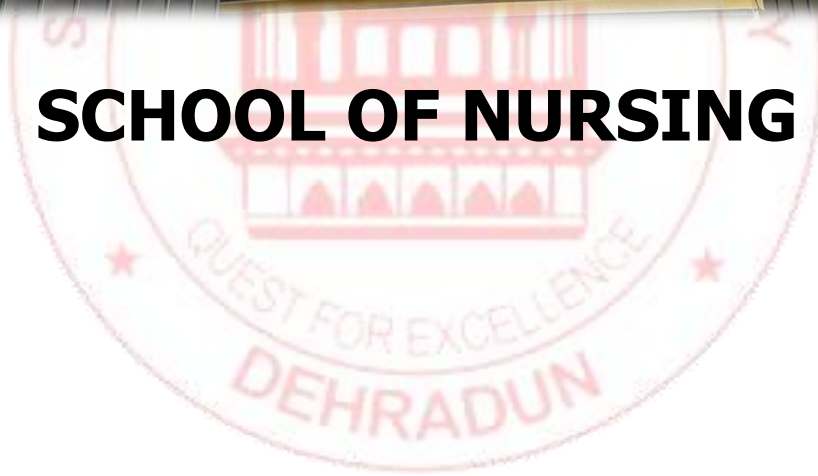
- ❖ Each faculty member in charge of a course is responsible for maintaining Attendance and Assessment Records for candidates who have registered for the course.
- ❖ The Record must include information about the students' attendance and Assignments, seminars, and other activities that were carried out.
- ❖ The record shall be signed by the Course Instructor and the Head of the Department at the end of the semester and kept in safe custody for future verification.
- ❖ Each student must have a minimum of 75% attendance in all courses for the semester in order to be eligible to take certificate.

- ❖ Attendance requirements may be relaxed by up to 10% for valid reasons such as illness, representing the University in extracurricular activities, and participation in NCC.
- ❖ The students who have successfully completed the Value Added Course shall be issued with a Certificate duly signed by the Authorized signatories.





SCHOOL OF NURSING



Gerontological Nursing

Course Code : VCSN001

Course Objectives

1. To provide a broad based, multi-disciplinary academic program for students interested in careers in the field of aging.
2. To prepare students for the realities of the job market by providing experiential learning through practicum and the creation of job forums and career placement counselling.
3. To train persons employed in service-oriented programs for the elderly.
4. To recruit and train students for careers in gerontology, with an emphasis on minority students and those interested in working with the elderly in rural areas.
5. To maintain a link between training and research that focuses on assisting rural and minority elderly.

Course Outcomes:

1. Evaluate the physical aspects of aging throughout the lifespan
2. Evaluate the social aspects of aging throughout the lifespan
3. Evaluate the psychological aspects of aging throughout the lifespan
4. Evaluate the spiritual aspects of aging throughout the lifespan
5. Exhibit ethical and legal practices consistent with the gerontology profession
6. Distinguish the role of the gerontology professional in the coordination of service delivery
7. Cultivate an age friendly community

Module I: Gerontology

Introduction of Gerontology
Definition of Gerontology
Scope of Gerontological Nursing
Gerontological Care attracts Nurses

Module II: Gerontology and Geriatrics

Difference between Gerontology and Geriatrics
A geriatric nursing specialty group was formed

Module III:

Types of Gerontology

- Primary Aging
- Secondary Aging

- Tertiary Aging
Other types
- Social Gerontology and Biogerontology

Module IV: Main areas of gerontology study

Role of Gerontologist
Research gerontologist
Applied gerontologists
Administrative gerontologists

Module V: Pursuing a career as an adult-Gerontology Nurse practitioner (AGNP)

- Clinical
- Communication
- Coordinating care
- Understanding the aging process
- Providing support and education
- Developing chronic illness treatment plans

Module VI: Entering the field of elder care

- Evidence based practice in Nursing
- Adult Gerontology acute care diagnosis and management
- Health care policy
- Professional role development
- Each of these imparts essential skills for future AGNP.

Reference Books:-

1. An Introduction To Gerontology | Exotic India Art
2. Foundation Of Gerontology | Exotic India Art
Gerontological Nursing - 1st Edition - Elsevier
3. Gerontologic Nursing - E-Book - Sue E. Meiner, Jennifer J. Yeager ...
https://books.google.com/books/about/Gerontologic_Nursing_E_Book.html?...
4. Gerontological Nursing - Charlotte Eliopoulos - Google Books
https://books.google.com/books/about/Gerontological_Nursing.html?id=...

Patient Safety

Course Code : VCSN002

Course Objectives:

1. Explain the overview of patient safety and emerging challenge of patient safety
2. Identify the types of error in health care system
3. Describe the patient safety and invasive procedures
4. Discuss the Infection control and activities of prevention of infection control
5. Explain the effective communication in patient safety and role of health care team members in patient safety.

Course outcomes:

1. Describe the of patient safety and emerging challenge of patient safety
2. Demonstrate advance skills/competence in managing patient safety and preventing medical error in hospital.
3. Appreciate team work & coordinate activities related to patient safety, safety practice in infection control measures, & take appropriate measures to resolve the problems
4. Identify the effective communication in patient safety and role of health care team members in patient safety.

Module I: Overview of Patient Safety and Emerging Challenge Of Patient Safety

- Introduction of patient safety
- Emerging challenge of patient safety

Module II: The Types of Medical Error in Patient Safety Error Impact

- Types of medical errors
- Categories of medical errors
- Types and Causes of Medical Errors
- Contributing factors
- Most common patient safety issues (included in medical “errors”) in the United States
- Most common misdiagnosed conditions
- Medical Error Prevention
- Patient safety tips for hospitals
- Specific types of errors and strategies for prevention
- A Culture of Safety in Health Care

Module III: Patient Safety and Invasive Procedures

- Safety
- Patient safety
- Patient safety goal
- Principles of patient safety goal

Module IV: The Infection Control and Activities of Prevention of Infection Control

- Infection control
- Health care associated infection
- Preventing infection requires in health care

Module V: Effective Communication in Patient Safety and Role of Health Care Team Members in Patient Safety.

- Communication
- Effective communication
- Adverse incident report
- Peer review
- Barriers to implementation sources
- Patient of patient safety
- Types of improving patient safety
- Support of hospital administration

Reference Books:

1. WHO. (n.d.). Patient safety. Retrieved November 2, 2021, from <https://www.who.int/news-room/fact-sheets/detail/patient-safety>
2. Global Patient Safety Action Plan 2021–2030. (2021). Towards eliminating avoidable harm in health care. Retrieved December 14, 2021, from <https://www.who.int/teams/integrated-health-services/patient-safety/policy/global-patient-safety-action-plan>

Ecology in Health Care and Nursing

Course Code : VCSN003

Course Objectives:

1. Identify ecology and its introduction
2. Explain importance of ecology in health care
3. Utilize nursing practice in a safe ecological environment.

Course Outcomes:

1. To learn about ecology and its application in health care
2. To learn about ecological environment
3. To recognise various components of ecology.
4. To understand about ecosystem

Module I: Introduction About Ecology, Introduction, Review of ecology, Definition concepts, Importance, types, branches, Aspects, Human ecology, Ecological factors, Purposes.

Module II: Ecology and health care- Ecology and human health, Ecology in public health, Relation between ecology and health care, Need of ecology in health care, Ecological environment in health care, Ecology based health care, Creation of ecological working environment.

Module III: Ecology And Nursing Practice- Ecology based nursing care, Supportive ecological environment in nursing, Application of ecology in nursing, Government initiatives for ecological nursing, Ecological issues in nursing, Ecological control in nursing, Nurses' role to improve ecological nursing.

Reference Books:

1. Agarwal.S.K "Fundamentals Of Ecology"2008
2. Matilda Van Den Bosch, "Text Book Of Nature And Public Health".2018
3. Shradha Sinha, "Text Book Of Environment And Ecology".2018

Basic epidemiology

Course Code : VCSN004

Course Objectives :

1. To identify factors related to the occurrence of disease.
2. Identification of these factors both causal (causation) and risk factors, and
3. Enable developing a rational basis for prevention (epidemiology, prevention)

Course Outcomes:

1. Understand the basic epidemiological methods and study designs.
2. Understand and discuss population based perspective to examine disease and health-related events.
3. Discuss the ethical issues in epidemiological research.
4. Learn the basic concepts of screening and outbreak investigations.
5. Disease surveillance
6. Critically review published epidemiological studies.
7. Applied epidemiology.

Module I : Introduction of Epidemiology

- Definition

Module II Scope of Epidemiology

- Epidemiology and public health · Causation of disease · Natural history of disease · Health status of populations · Evaluating interventions

Module III : Achievements in epidemiology and public health

- Smallpox · Methyl mercury poisoning
- Rheumatic fever and rheumatic heart disease
- Iodine deficiency diseases
- Tobacco use, asbestos and lung cancer
- Hip fractures
- HIV/AIDS ·
- SARS

References

- Beaglehole R, Bonita R. Public health at the crossroads: achievements and prospects. Cambridge, Cambridge University Press, 2004.
- Johansen PV, Brody H, Rachman S, Rip M. Cholera, Cholorform, and the Science of Medicine: a life of John Snow. Oxford, Oxford University Press, 2003
- Snow J. On the mode of communication of cholera. London, Churchill, 1855. (Reprinted in: Snow on cholera: a reprint of two papers. New York, Hafner Publishing Company, 1965).
- Doll R, Hill A. Mortality in relation to smoking: ten years' observations on British doctors. BMJ 1964;1:1399-410.



COMMUNICATION SKILLS

Course Code : VCSN005

Course Objectives:

1. Exchange of information
2. Achievement of Organizational Goals
3. Directing the Subordinates
4. Motivating the Employees
5. Improve Job satisfaction
6. Educate and Train Employees
7. Developing a Better Image

Course Outcomes:

1. Develop knowledge, skills, and judgment around human communication that facilitate their ability to work collaboratively with others.
2. Understand and practice different techniques of communication.
3. Practice and adhere to the 7Cs of Communication.
4. Familiarize with different types of Communication
5. Understand and practice Interview Etiquettes.

Module I :

- Introduction of Communication Skills
- Definition
- Examples of Communication Skills

Module II: Methods of Communication Skills

- Active listening
- Adapting your communication style to your audience
- Friendliness -Confidence -Giving and receiving feedback
- Volume and clarity -Empathy, Respect -Understanding nonverbal cues -
- Responsiveness
- Lecture Discussion -Seminar

Module III: How to improve your communication skills

- Ask a close friend or colleague for constructive criticism -Practice improving communication habits
- Attend communication skills workshops classes -Seek opportunities to communicate · Communicating Effectively in the Workplace
- Be clear and concise
- Practice empathy
- Assert yourself -Be calm and consistent
- Use and read body language

Module IV : How to Highlight Communication Skills

- Communication skills for resume
- Communication skills for cover letter
- Communication skills for job interviews

References:

1. <https://in.indeed.com/career-advice/resumes-cover-letters/communication-skills>.
2. <https://novoresume.com/career-blog/communication-skills>.
3. <https://www.skillsyouneed.com/ips/communication-skills.html>.
4. <https://haiilo.com/blog/top-5-communication-skills-and-how-to-improve-them>



SCHOOL OF PARAMEDICAL SCIENCES

Basic Knowledge About Sports Care

Course Code : VCSPMS 001

Course Objectives:

1. Defining about sports medicine and learning about its need, concept and importance
2. Learning about athletic injuries and exercise rehabilitation
3. Understanding the concept of aerobic and anaerobic training for athletes and methods and equipment's required for training
4. To have a knowledge about various systemic evaluation and emergencies related to respiratory, cardiac and orthopedic conditions
5. To gain the knowledge about Nutritional basics and their role and requirement of various nutrients in diet of athlete

Course Outcomes:

1. To define sports medicine and its concept, need, importance and rehabilitation of various athletic injuries.
2. Understanding the basic concept of aerobic and anaerobic training and different methods and equipment's for the same.
3. Implementing various nutritional and diet requirements and their role in athletic performance
4. Summarizing different environmental factors and illnesses and first aid techniques for them.
5. Assessing about various on-field emergencies and their potential causes; and applying the emergency protocol for the athlete.
6. Learning about injury prevention and various techniques and methods for treating the athlete.

Module I: Introduction to Sports Medicine and Rehabilitation

- Definition, need and importance and Concept of sports medicine
- Role of sports physician and athletic trainer in sports medicine
- Categories of athletic injuries: traumatic and overuse, sign and symptoms of inflammation and stages of healing
- Introduction to athletic rehab: role of therapeutic exercise in rehabilitation of athletic injuries

Module II: Concept of Aerobic and Anaerobic Training

A: Meaning and methods of warming up and cooling down

B: Aerobic and Anaerobic training

C: Different methods of aerobic and anaerobic training

D: Facilities and equipment required for both training

Module III: Nutritional Considerations

A: Nutritional basics and energy sources

B: Roles and requirements for macronutrients

1. Carbohydrate
2. Protein
3. Lipids
4. Water

C: Roles and requirements for micronutrients

1. Vitamins
2. Minerals

D: Eating and drinking practices for exercise and athletic performance

E: Body composition and weight control

1. Techniques to assess body composition
2. Caloric balance
3. Disordered eating behaviours
4. Safe techniques for weight management

Module IV: Environmental Considerations

A: Hyperthermia and heat illnesses

1. Risk factors and prevention techniques
2. Sign and symptoms
3. First aid techniques

B: Hypothermia and cold illnesses

1. Risk factors and prevention techniques
2. Sign and symptoms
3. First aid techniques

C: Exercising at altitude

D: Overexposure to the sun

Module V: On Field Emergency And Management

A: Onsite management of collapsed athlete triage

1. Primary ABCD survey: airway, breathing, circulation, defibrillation
2. Glasgow coma scale (GCS)

B: Potential causes of on field emergencies- System evaluation

1. Head and neck: brain injury, intracranial haemorrhage, cervical spine fracture/dislocations, laryngeal fracture
2. Cardiac emergencies
3. Respiratory emergencies
4. Orthopedic conditions: Posterior Sternoclavicular dislocation, Fat embolism, Hip Dislocation, Knee dislocation

C: Emergency protocols

1. Emergency communication, Emergency equipment and supplies, Transportation

Module VI: PHYSIOTHERAPY TECHNIQUES

A: Principles of Injury prevention: Warm up, Cool down, Stretching, Types and principles of stretching.

B: PRICE technique: Immobilization and Early mobilisation

C: Splinting – Handling & Transfer

D: Cryotherapy: Methods of application (Ice packs, Icetowel, Ice Immersion, Ice cube massage, Excitatory cold, Vapocoolant spray, cryokinetics&Cold whirlpool)

E: Taping and Bracing: Principles, Types and Methods

F: Soft tissue Massage: Principle, Types and Methods

G: Bandage: types of bandage, application for major joints and body parts

Reference Books:

- 1.Sports injury management by Anderson Mk ,Wolters Kluwer.
- 2.Therapeutic exercise for sports injuries by Dr.Fatehmeh Karami

Ergonomics Importance for Students

Course Code : VCSPMS 002

Course Objectives:

1. Understanding about structure of various joints and how they are impacted by cumulative trauma
2. Learning about principles of workplace biomechanics
3. Integrating about body size and differences in workplace designs
4. To have a knowledge about various ergonomic tools and equipment's
5. To gain the knowledge about workplace design solutions for reducing risk of musculoskeletal disorder.

Course outcomes:

1. To describe ergonomic risk factors, select the appropriate assessment tool, and conduct a detailed ergonomic risk assessment.
2. To identify and analyze the biomechanical aspects of a manual material handling task and develop design recommendations to reduce the risk of injury.
3. To illustrate the applicability of various standardized ergonomic assessment tools.
4. To analyse work-rest schedule and develop recommendations based on the physical demands of the task, worker characteristics and environmental conditions.
5. Evaluate office work area for ergonomic concerns and provide design recommendations to improve performance and reduce injury risk.

Module I: Structure of the back, hand/wrist, shoulder, and neck, and how these joints are impacted by cumulative trauma. Principles of workplace biomechanics

Module II: Integrating employee body size and individual differences in workplace designs

Module III: The use of state-of-the-art ergonomics assessment tools including OWAS, RULA, REBA, and the Strain Index

Module IV: Workplace design solutions for reducing musculoskeletal disorders and improving productivity

Module V: How psychosocial and work organization factors impact employee health

Module VI: New technologies for improving workplace health. The use of state-of-the-art ergonomics assessment tools. Workplace design solutions for reducing musculoskeletal disorders and improving productivity. Setting up and maintaining an effective ergonomics process

Reference Books:

1. Kreighbaum E., Barthels K: Biomechanics _ A Qualitative approach for studying human motion, 2nd edn. 1985, Macmillan.
2. Rasch& Burk: kinesiology and Applied Anatomy, Lee & Fabiger
3. White and Punjabi – Biomechanics of Spine – Lippincott.
4. Norkin&Levangie: Joint Structure and function - A Comprehensive Analysis – F.A. Davis



Basics of Laboratory Practice

Course Code : VCSPMS 003

Course Objective:

1. Significance of Laboratory Safety practices, General and legal aspects.
2. Emphasis on Sample preparation and Processing.
3. Documentation of specimen and identification.

Module I: General aspects of laboratory safety

Ethics of laboratory practice. Laboratory safety – Common lab accidents their prevention and their first aid. Bio-Medical Waste Management - Legal Aspects and Environment Concern.

Module II: Sample preparation and processing

Clinical sample- collection, transport and processing, Examine and analyze body fluids, tissues and cells. Examination of urine, pus, blood, stool and CSF. Culture media preparation. Various methods of blood collection - Venipuncture and collection of blood samples, Preparation of blood films, staining of blood smears, Manual count of blood cells. Blood components separation – serum and plasma. Functions of RBC, WBC and platelets.

Module III: Sample Documentation

Preparation of container and swabs for collections of specimens for microbial examinations.

Portal regulation and transport of specimen. Flowchart of lab diagnostic procedures. Documentation of specimen in laboratory. Preservation of Micro-organisms.

References:

- Text Book of Pathology Harsh Mohan VIII Edition Bloom Taxonomy
- Text Book of Pathology by Dr. A K Mandal.
- Text Book of Microbiology by Dr. C P Baveja VIII Edition.
- Text Book of Microbiology by Apurba S Sastry & Sandhya Bhat.

Basics of Sanitation, Safety And Hygiene

Course Code : VCSPMS 004

Course Objective:

1. Introduction the causes and prevention of food poisoning and introduce the requirement of safety in the workplace
2. To study the control, elimination and eradication of disease and focus on screening and diagnostic test for pathogens.
3. Present the rules of personal hygiene and the importance of adhering to safety rules and regulation.

Module I: The concept of food safety

The concept of food safety in the business environment. Modes of transmission and natural history of a disease. The definition of "micro-organism". Factors that influence the growth of micro-organism. The definition of food borne illness.

Module II: Concepts of Disease Occurrence.

Natural History and Spectrum of Disease. Infection agents (pathogens). Mode of transmission of infection. Chain of Infection. Epidemic Disease Occurrence. Need and uses of screening tests. Accuracy and clinical value of diagnostic and screening tests (sensitivity, specificity, & predictive values).

Module III : Principles of personal hygiene.

The linkage between personal hygiene and food safety. Characteristics of food contamination.

References :

1. Centers for disease Control and Prevention, Hepatitis A outbreak associated with green onions at a restaurant- Monaca, Pennsylvania, 2003. MMWR 2003.
2. Cobb S, Miller M, Wald N. On the estimation of the incubation period in malignant disease, J Chron Dis 1959;9:385-93. Last JM, editor. Dictionary of epidemiology, 4th ed. New York: Oxford University Press.
3. Principles of Food Sanitation (Food Science Text Series), 5th Edition 2006, Marriott & R B Gravanni, published by Springer
4. Food Poisoning and Food Hygiene. London: Arnold, 1998. Hobbs, Betty C. and Roberts, Diane



SCHOOL OF PHARMACEUTICAL SCIENCES

Health Education and First Aid

Course Code : VACSPS001

Course Objectives:

1. To understand the importance of health, wellness and nutrition in daily life.
2. To understand about the cause and prevention of certain diseases.

Course Outcomes:

1. Know about models of health and types of abuses.
2. Describe the behavioural, environmental & genetic risk factors for chronic diseases.
3. Explain the role of Nutrition in body fitness.
4. Learn about first aid in burning & other emergency conditions.

Module I: Introduction to health, wellness, models of health and types of abuses.

Module II: Basic introduction to types of diseases, their causes and possible recoveries.

Module III: Basics of Nutrition and Fitness, food pyramids, nutrients and fitness.

Module IV: First Aid For burning, and other emergency conditions.

Module V: Demonstration of CPR.

Reference Books:

1. Ewles L and SimmetI, Promoting Health: A Practical Guide To Health Education.
2. Haralambos& Holborn Sociology: Themes and Perspectives by Karen Glanz, Barbara K. Rimer, and K. Viswanath: Health behavior and health education : theory, research, and practice.
3. Dr Sunder Lal ,Dr Adarsh and Dr Pankaj :Textbook of Community Medicine.
4. K. Park, Park's Textbook of preventive and social medicine
5. Latha Ganti Stead and S. Matthew Stead: Basic Nursing and First Aid. 1. " First Aid Radiology for the Wards (First Aid Series)"
6. Alton L Thygerson.: First Aid and CPR. 1. "First Aid, CPR and AED Standard: Meets the Most Current and ECC Guidelines".

Pharmaceutical Marketing and Sales

Course Code : VACSPS002

Course Objectives:

1. To impart significant knowledge about the fast-changing market demands in pharmaceutical field.
2. To explore various opportunities in the pharma marketing field along with imparting knowledge of the growth charts of various companies.

Course Outcomes:

1. Describe the concept of pharmaceutical marketing.
2. Discuss the emerging concepts of marketing
3. Explain the different pharmaceutical marketing channels.
4. Discuss the various components of promotion of pharmaceutical products.
5. Discuss about pharma branding and advertisement management.

Module I: Marketing: Definition, general concepts, marketing Environment, Demand and supply, Sales charts.

Module II: Top pharmaceutical companies, their growth charts, generic drugs, patents and government policies, emerging concepts in marketing.

Module III: Pharmaceutical Marketing Channels, Professional Sales Representative (PSR), importance of public relations.

Module IV: Product life cycle, portfolio analysis, Product management and promotion strategies. determinants and issues in pricing management.

Module V: Pharma branding and advertisement management.

Reference Books:

1. L.M.Prasad, Principles of management, 7th edition, Sultan Chand & Sons, 2008
2. P.N. Reddy, Principles of Business organisation and Management, S Chand & Co Ltd, 2010

2. Philip Kotler - Marketing management, 2009 2. Ashok Ranchhod, - Marketing Strategies : A Contemporary Approach, Pearson 2011
3. Ree Hedley, "Supply Chain Management - Delivering Patient Value for Pharmaceuticals and Biologics, (2012), John Wiley & Sons, Inc., USA
4. Douglas J. Dalrymple, William L. Cron, Thomas E. DeCarlo. (2004), "Sales Management", John Wiley & Sons, New Jersey, USA.
5. Ralph W. Jackson, Robert D. Hisrich (1996), "Sales and Sales Management", Prentice Hall, New Jersey, U



Interpersonal Skills

Course Code : VACSPS003

Course Objectives:

1. To enhance the personality of students.
2. To bridge the gap between knowledge and communications skills.
3. To prepare students to face the outside world.
4. To improve communication as well as presentation skills of students.

Module I: Introduction to personality development: significance, theories, success vs failure concepts.

Module II: Attitude and motivation: Development of Positive attitude and concepts of motivation.

Module III: Communication Skills: Introduction, types and presentations

Module IV: Personal competence and maturity: Developing Rapport, criticism and Leadership Qualities.

Module V: Self- Management and Employability Quotient

Reference Books:

1. Basic communication skills for Technology, Andreja. J. Ruther Ford, 2nd Edition, Pearson Education, 2011.
2. Communication skills, Sanjay Kumar, Pushpalata, 1st Edition, Oxford Press, 2011.
3. Brilliant- Communication skills, Gill Hasson, 1st Edition, Pearson Life, 2011.
4. The Ace of Soft Skills: Attitude, Communication and Etiquette for success, Gopala Swamy Ramesh, 5th Edition, Pearson, 2013.
5. Communication skills for professionals, Konar nira, 2nd Edition, New arrivals –PHI, 2011

Social health and nutrition

Course Code: VACSPS004

COURSE OBJECTIVES:

1. To appreciate the importance of balanced diet.
2. To understand the food and nutritional requirements of adults.
3. To understand the role of nutrition in weight management, diabetes and cardiovascular disease.
4. Knowledge about nutrients in food and their functions.
5. Understand the consequences of deficiency of taking nutrients.
6. Comprehensive knowledge on the role of nutrients in different stages of human life.
7. Knowledge about the different methods of nutritional assessment.

Course Outcomes:

1. Utilize knowledge from the physical and biological sciences as a basis for understanding the role of food and nutrients in health.
2. Students will be able to understand the information to food science and nutrition.
3. Apply food science knowledge to describe functions of ingredients in food.
4. Gain knowledge about food pyramid, vegetarian diet, menu planning and nutritional needs during infancy to adolescents.

Module I: Introduction to food, health and nutrition:

Explanation of terms- Definition, concept and meaning of health and factors affecting health, Nutrient requirement, Dietary standards, Balanced diet, Food Groups, Functions of food, Food Guides-Food pyramid and Myplate, Food in relation to health. Food a prerequisite to health,

Module II: Nutritional Needs:

Nutrition during infancy, childhood, adolescence and adult, Nutrition during pregnancy & lactation, Nutrition in later maturity period, Nutritional requirements and RDA, Nutrition and infection, Nutrition and immunity, nutrition & stress.

Module III: Food Composition and its Classification

Food as a source of nutrients: classification of nutrients; functions, recommended dietary allowances, BMR, SDA. Vitamins: (A, B complex, C, D, E & K) & all major and minor mineral elements with their role in body, importance of Roughages in the diet, Water & electrolytes balance. Food composition and nutritive values of different foods, Functions of foods, Balanced Diet.

Module IV: Community Nutrition

Macronutrients and micronutrients – Carbohydrates, protein, fats, vitamins (A, D, E, K, C and B complex) and minerals (Calcium, phosphorous, sodium, Iron, zinc, Iodine and fluorine)

Methods of Assessment: Direct and Indirect methods of Nutritional assessment of human groups, Techniques for assessment of age and use of reference standards for the assessment of nutritional status. Government Nutrition Programmes- ICDS and Mid-Day Meal Programme (MDMP).

REFERENCE BOOKS:

- Swaminathan M (2007): Essentials of Food and Nutrition (Vol. I & II), 2nd Ed. Bappco.
- Meyer LH (2004): Food Chemistry, CBS Publishers & Distributors.
- Mann J and Truswell S (2017): Essentials of Human Nutrition, 5th Ed. Oxford University Press.
- Pandya R (2010): Community Health Education, Rawat Publications.
- Bamji, M.S., Rao, N.P & Reddy, V. (1996). Textbook of Human Nutrition. Oxford & IBH Publishing Co. (P). Ltd. Delhi.
- Gopalan, G. Rama Shastri B.V & Balasubramanian, S.C. (2000). Nutritive Value of Indian Foods. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad 500-007, India.
- Sri Lakshmi, B. (2000). Nutrition Science. New Age International (P) Ltd. Pub. New Delhi
- Swaminathan, M. (2009). Textbook of Food and Nutrition. Bappco Publishers, Bangalore.

RESEARCH PAPER WRITING

Course Code: VACSPS005

Course Objectives :

1. To understand how to introduce the research problem.
2. To understand how to develop the literature review.
3. To understand what to include in the research plan.
4. To understand what to include in the Method section of a research paper (participants, materials, procedure)
5. To achieve and explore academic and research goals.
6. Identify and recommend appropriate sources of scientific research information (e.g peer-reviewed journals)
7. To be able to clearly and simply state the hypothesis and/or research goal(s) and specific objectives of their project.
8. To assemble results of experiments, compose figures and/or tables, organize manuscript in standard scientific format, and provide interpretations in the context of existing knowledge.

Course Outcomes:

Course Outcomes:

1. Understand that how to improve your writing skills and level of readability.
2. Learn about what to write in each section.
3. Understand the skills needed when writing a good quality of paper at very first-time submission.
4. Understand how to critically analyze data from research; incorporate it into assigned writing clearly, concisely, and logically; and attribute the source with proper citation.
5. Understand the current resources (such as search engines and databases) for locating secondary information, and also understand the strategies of effective primary data gathering.

Module I: Research paper writing:

Types of research paper, Structure of research paper, Research paper format, Abstract writing, Methodology, Results and discussion, different format of referencing, ways of communicating a research paper.

Module II: Thesis writing:

Structure of thesis, Scope of work, Literature review, Experimental/Computational details, primarily studies, Results and discussion, Figures and Tables preparation, conclusion and future works, Bibliography, Appendices.

Module III: Crediting Sources

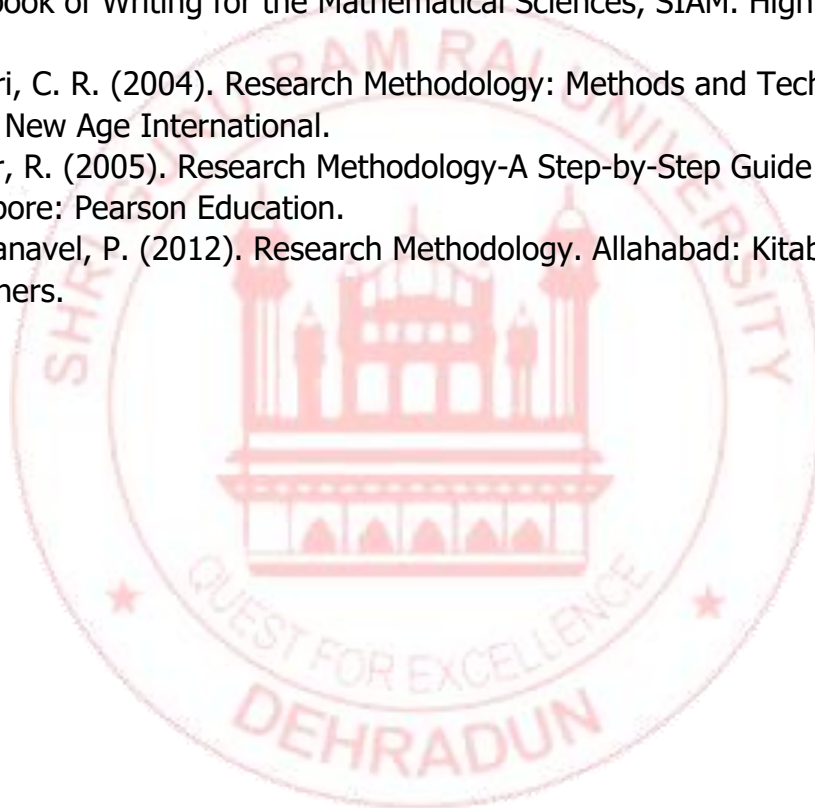
Paraphrasing, Quotations, Permission to quote, Reprint, or adapt, Referencing.

Module IV: Tools and Techniques:

Various word processors e.g., MS Word, LibreOffice, LaTeX etc., Making effective presentation using Power point and Beamer, Uses of plagiarism detection tools.

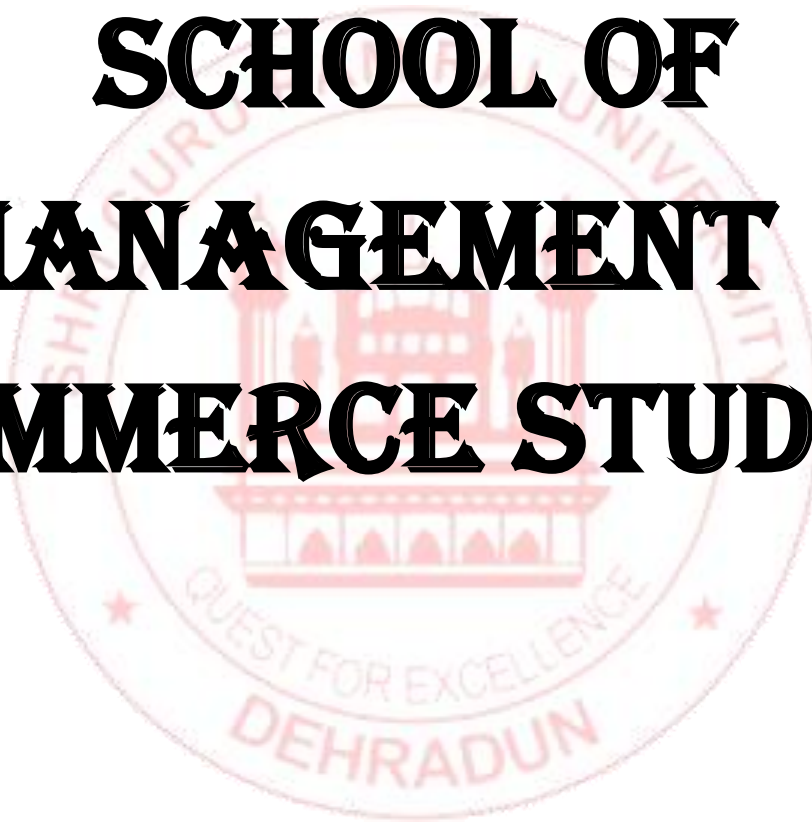
References :

- Adrian Wall work, English for Writing Research Papers, Springer New York Dordrecht Heidelberg London, 2011
- Handbook of Writing for the Mathematical Sciences, SIAM. Highman's ok 1998.
- Kothari, C. R. (2004). Research Methodology: Methods and Techniques. New Delhi: New Age International.
- Kumar, R. (2005). Research Methodology-A Step-by-Step Guide for. Singapore: Pearson Education.
- Saravanel, P. (2012). Research Methodology. Allahabad: Kitab Mahal Publishers.





SCHOOL OF MANAGEMENT & COMMERCE STUDIES



Introduction to Investing

Course Code VCSMCS 001

Course Objective:

The objective of this course is to make the student investment ready in real life.

Course Outcomes:

1. Outlining the investment procedure in India.
2. Deconstructing the capital market of India and the trading procedure.
3. Appraising the technical charts and market conditions for interpreting capital markets.
4. Assessing the tools to design an optimum portfolio.
5. Implementing the various tools to create, evaluate and revise a diversified portfolio in India.

Module I:

Introduction of Investment-Meaning and Objective of Investment, Investment Decision Process, Categories of Investment, Steps of Security Analysis, Investment Avenues, Speculation and Gambling.

Module II:

Introduction of Capital Market- Meaning and Nature of Capital Market, Types, Functions and limitations of Capital Market, Trading of Securities, (Including BOLT), SEBI guidelines IPO, Book Building and Qualified Institutional Placement. Capital Market of India, Money Market of India, Important intermediaries in the financial markets

Module III:

Portfolio Analysis and Revision-Basic principles of creating an efficient portfolio, Introduction to fundamental and technical analysis. Portfolio Analysis and Selection, Risk and Return Analysis, Beta, Markowitz and Sharpe Model, Capital Asset Pricing Model, Arbitrage Pricing Theory. Portfolio Revision and Portfolio Evaluation, Constant Rupee Value Plan, Constant Ratio Plan, Sharpe and Treynor Measures, Mutual Fund Industry.

Reference Books

1. Kevin, S. Portfolio Management, Prentice Hall India, New Delhi Edition.
2. Avadhani, V.A, Investment and Security Market in India, Himalaya Publishing House, 3rd ed.
3. Pandey, I.M. Financial Management, Vikas Publications, New Delhi ed., 2012

Fire Safety & Training

Course Code : VCSMCS 002

Course Objectives:

1. To educate a set of practices & procedures to minimize the destruction caused by fire hazards.
2. To equip learners to , combat fire in any unanticipated fire breakout.
3. To enable the students to recognize the workplace fire hazards prior and ensure adequate control measures are in place.

Course Outcomes:

1. To understand preventive measures that will eliminate or minimize causes of fire or fire hazards in the workplace
2. To apply the basic concepts Fire & safety training.
3. To demonstrate proper emergency and evacuation procedures at the event of fire.
4. To describe the Chemistry of Fire.
5. To Identify Fire Hazards in the work place.

Module I : Fire Safety Awareness :

- Fire Safety Legislation.
- Causes & Costs of fires.
- Physics & Chemistry of fire.
- Development and spread of fire.
- Action in the event of fire & upon hearing the Fire Alarm.
- Raising the alarm and summoning the Fire Brigade.
- Fighting a fire.
- Choosing the correct extinguisher.
- Correct use of the extinguisher.
- Evacuation procedures.

Module II : Fire Warden

- Fire Safety Legislation.
- Theory of Fire & Fire Extinction.
- Chemistry of Fire
- Demonstration of Fire Hazards
- Spread of Fire and Smoke behavior.
- Ignition sources.
- Portable Fire Extinguishers & their uses.
- Fire prevention & Evacuation Procedures.
- Duties of the Fire Warden.

Module III: Fire Extinguisher Training

- Fire Triangle & Chemistry of Fire.
- Dangers and consequences of fire.
- Basic precautions and good housekeeping.
- Portable Fire Extinguishers and their uses.
- Practical " Hands On " extinguisher training. (Gas Controlled)
- Fire handling drill

Module IV: Manual Handling

- Manual Handling Legislation – as it applies to the employer and employee.
- Dangers and harm caused by careless /unskilled methods of manual handling.
- Principles of levers and laws of motion.
- Anatomy of the spine and muscular system.
- Risk Assessment
- How to handle loads safely.
- Practice in safe handling of loads.

Reference Books:

- 1.Prakash, Sesha N. 2017. Manual of Fire safety , 1st edition, CBS.
- 2.Kumar, Das Akhil. 2020. Principles of Fire & Safety Engineering , 2nd edition, PHI Learning Pvt Ltd.
- 3.Rao , Sunil S. 1997. Electrical & Safety , Fire safety Engineering & Safety Management, 2nd edition, Khanna Publishers

Financial Planning and Literacy

Course Code : VCSMCS 003

Course Objective:

The course aims to offer an integrated approach to understand the concepts and applications of financial planning.

Course Outcomes:

1. Describe the importance of financial literacy and list out the institutions providing financial services
2. To learn and Prepare financial plan
3. To prepare budgets and manage personal finances
4. To understand how to open, avail, and manage/operate services offered by bank
5. To have an understanding of various types of loans offered by banks

Module I: Introduction Meaning, importance and scope of financial literacy; Prerequisites of Financial Literacy – level of education, numerical and communication ability; Various financial institutions – banks, insurance companies, Post Offices; Mobile App based services. Need of availing of financial services from banks, insurance companies and postal services.

Module II: Financial Planning and Budgeting Concept of economic wants and means for satisfying these needs; Balancing between economic wants and resources; Meaning, importance and need for financial planning; Personal Budget, Family Budget, Business Budget and National Budget; Procedure for financial planning and preparing budget; Budget surplus and Budget deficit, avenues for savings from surplus, sources for meeting deficit.

Module III: Banking Services Types of banks; Banking products and services – Various services offered by banks; Types of bank deposit accounts – Savings Bank Account, Term Deposit, Current Account, Recurring Deposit, PPF, NSC etc.; Formalities to open various types of bank accounts, PAN Card, Address proof, KYC norm; Various types of loans – short term, medium term, long term, micro finance, agricultural etc. and related interest rates offered by various nationalized banks and post office; Cashless banking, e-banking, Check Counterfeit Currency; CIBIL, ATM, Debit and Credit Card, and APP based Payment system; Banking complaints and Ombudsman.

Reference Books:

1. Kothari, R. (2010). Financial Services in India-Concept and Application. New Delhi: Sage Publications India Pvt. Ltd.
2. Milling, B. E. (2003). The Basics of Finance: Financial Tools for Non-Financial Managers. Indiana: Universe Company.
3. Mitra, S., Rai, S. K., Sahu, A. P., & Starn, H. J. (2015). Financial Planning. New Delhi: Sage Publications India Pvt. Ltd.



SPECIAL ASPECTS OF EVENT MANAGEMENT

Course Code-VCSMCS004

Course Objectives:

1. To Discuss the fundamentals of event management.
2. To Draft an event proposal.
3. To Explain the various aspects of executing an event

Course Outcomes:

1. To analyze the role of events in image building
2. To explain all the steps of planning and organizing an event
3. To Plan and organize events

Module I

Media in event management

- Writing Press Releases and Reports
- Media Relations and Press Releases
- Communicating with the customers

Module II

Managing special events

- Staging an event
- Wedding and party coordination
- Fashion show as an event
- Exhibition

Module III

- Selecting contracting and managing performers
- Corporate sponsorship for promotional events and programs
- How to avoid mistakes

Module IV

Uses of information technology for events

- Areas of event planning and control that can benefit from IT
- Possible limitations of IT for events
- Use of information software
- Implementation of a computer system for an event
- Evaluation and control procedures for the IT
- Considerations in implementation of a computer system for an event

ESSENTIAL READINGS:

Dr. Bhiwandiwalla: Research Module on Event Marketing and Special aspects of Event Management, National Institute of Event Management.

REFERENCES:

- Kalai Selvan N: Event Management and Marketing, ICFAI.
- Barry Avrich : Event and Entertainment Marketing: A Must Guide for Corporate Event
- Sponsors and Entertainment Entrepreneurs, Probus Professional Publication.
- Gibson G. Vedmani: Event Management – Functional principles & Practices; Jaico publishing house.
- Chetan Bajaj, Rajnish Tuli, Nidhi V. Srivastava; Event Management, Oxford university press.
- Swapna Pradhan : Event Management, Tata McGraw Hill
- Barry Berman, Joel R Evans: Event Management – A strategic approach; Pearson

Telemedicine in healthcare

Course Code: VCSMCS 005

Course Objective: The course aims to offer an integrated approach to understand the concepts of Telemedicine in Healthcare Sector.

Course Outcomes:

1. Importance of Telemedicine, It's aims and objectives.
2. Advantages and disadvantages, concept and barriers.
3. Future aspects ,Tele-specialization.

Module 1:

Foundation of Telemedicine: Definition of Telemedicine, Origin of Telemedicine, Role of Telemedicine in Healthcare, ,Aims and objectives of Telemedicine, Video-Conferencing, monitoring patients, security in data, Storage of information. Types of Telemedicine. Layout and Staffing.

Module II: Advantages and Disadvantages:

Hospital economy, Patient care management Disaster management, Education and research, A leap in HealthCare, Barriers in Tele-health, Technical constraints, Advantages and Disadvantages of Telemedicine

Module III: Future aspects:

Tele specialization, Disease surveillance, Rural areas resources, Rehabilitation services. Tele-support, Government support, SEHAT. Role of Janaushadhi. Role of Telemedicine at Global level. Role of Artificial Intelligence in Telemedicine

Reference Books

1. Telemedicine :technology and applications, R.SKhandpur, PHI Publications
2. Introduction to Telemedicine Richard Wootton, John Craig, CRC publication

Time Management

Course Code: VCSMCS 006

Course Objective:

The current study sought to ascertain the relationship between students' time management abilities and academic achievement. Time management is critical, and it can have an impact on an individual's overall performance and achievements. All of these, however, are linked by how people manage their time to fit their daily lives or to make it flow steadily with their routines. Aside from having good lectures given by their teachers, conducive settings and environments will undoubtedly promote positive outcomes for the students. Nonetheless, students' time management is one of the factors that can influence a student to be a good student. For students to shine, good time management is essential.

Course Outcomes:

1. Set smart, long-term professional goals.
2. Prioritize their workload.
3. Plan their working day efficiently.
4. Tackle procrastination and stay motivated.
5. Organize their workspace and documents.
6. Delegate work to subordinates.

Module I: Aspects of Time Management:

- Planning & Goal Setting
- Managing Yourself
- Dealing with other people
- Your time
- Getting Results
-

Module II: Fundamentals of Time Management:

- Analysis of goals and objectives
- Systemization of processes
- Pre-analysis of performance
- Focus is on time and resources
-

Module III: Productive Work:

- Busy vs. Productive
- Indecision & Delay
- Overwork
- Urgency v's importance

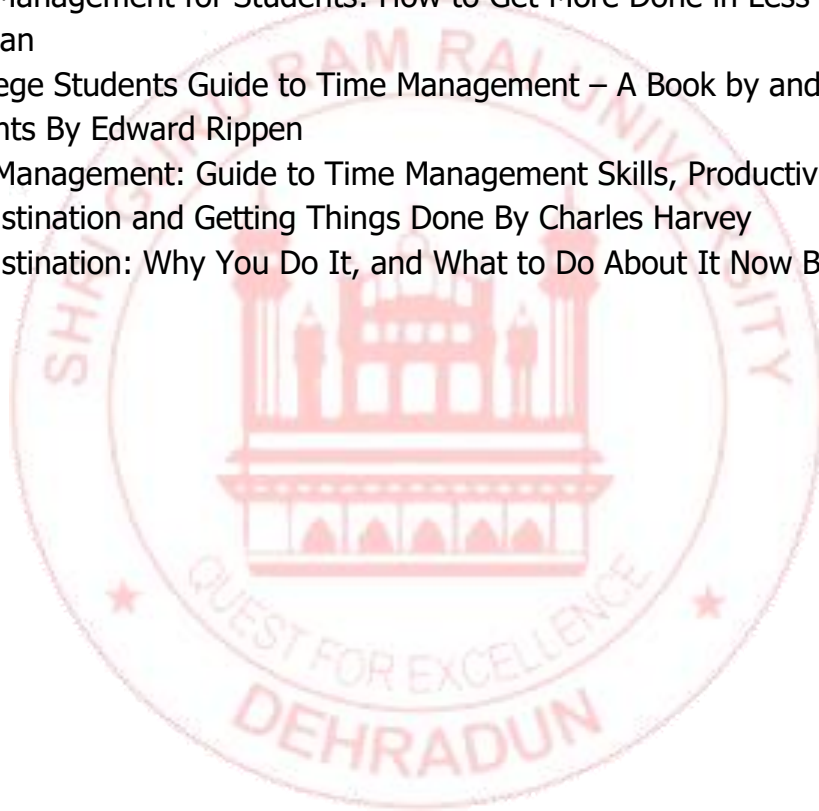
- Prioritization

Module IV: Time Management System:

- Functional
- Portable
- Intelligible

References:

- Time Management: A Holistic Approach to Productivity, Stress Reduction, and Effectiveness By Michael Jibrael
- Time Management for Students: How to Get More Done in Less Time By Dale Hartman
- A College Students Guide to Time Management – A Book by and for College Students By Edward Rippen
- Time Management: Guide to Time Management Skills, Productivity, Procrastination and Getting Things Done By Charles Harvey
- Procrastination: Why You Do It, and What to Do About It Now By Jane B. Burka



Stress Management

Course Code : VCSMCS 007

Course objectives:

1. Comprehend the psychological and physiological effects of stress;
2. Comprehend the concepts related to individual and cultural differences in stress reactions across the lifespan;
3. Evaluate individual stress risk factors (behavioral, emotional, physical, and spiritual);
4. Understand and learn how to use various techniques and determine the most appropriate method to aid in stress management;
5. Develop the ability to tap personal strengths for stress prevention and achievement of meaningful goals;
6. Accept responsibility for managing your own levels.

Course Outcomes:

1. Learn the fundamentals of stress management.
2. Recognize your stressors and how to deal with them.
3. Create proactive reactions to stressful situations.
4. Use coping strategies for stress management both on and off the job. Learn how to manage stress through diet, sleep, and other lifestyle factors.
5. Create a long-term action plan to reduce and better manage stress.

Course Content

Module I: Understanding the Nature of Stress:

- The Meaning of Stress
- The Body's Reactions to Stress
- Sources of Stress Across the Lifespan
- Adaptive and Maladaptive Behavior
- Individual and Cultural Differences

Module II: Strategies of Stress Management and Prevention:

- Problem Solving and Time Management
- Psychological and Spiritual Relaxation Methods
- Physical Stress Reduction Methods
- Preparing for the Future: College and Occupational Stress
- Self-Care: Nutrition and Other Lifestyle Issues

- Relationship Stress and Conflict

Module III: Strategies of Synthesis and Prevention:

- Stress Resilience
- Optimal Functions
- Making Changes Stick

Reference Books:

- Baron .L & Feist.J (2000) Health Psychology 4th edition, USA Brooks/Cole
- Barlow, Rapee, and Perini(2014), 10 Steps to Mastering Stress: A Lifestyle Approach, USA
- Clayton,M (2011).Brilliant stress management How to manage stress in any situation's 1st edition, Greart Britain Pearson Education
- Cooper, C,& Palmer,S, (2000)Conquer Your Stress, London: Institute of personal development Universities Press
- Dutta, P,K, (2010) Stress management Himalaya, Himalaya Publishing House
- Lee, K. (2014). Reset: Make the Most of Your Stress: Your 24-7 Plan for Well-being. Universe Publishing.
- Ogden. J (2000) Health Psychology 2nd edition Philadelphia, Open university press
- Olpin, M. & Hesson, M. (2015). Stress Management for Life: A Research-Based Experiential Approach. 4th edition. Wadsworth Publishing. Rice. P. L.(1992) Stress and Health,2nd edition, California, Brooks/Cole
- Roy, S (2012) Managing stress, Sterling Publication
- Taylor S.E (1998) Health Psychology 3rd edition, New York. Mc Graw Hill

Research Ethics

Course Code : VCSMCS 008

Course objectives:

1. To make the students aware of the emerging ethical issues in modern research.
2. To enable the students to understand the role and responsibilities of Research Ethics Committees
3. To make students aware of the necessity of honesty & integrity while doing research.

Course Outcomes:

1. To detect research misconduct and fraudulent publications.
2. Will understand ethics, research integrity, and publication ethics.
3. To understand indexing and citation databases, open access publications, and research metrics (citations, h-index, Impact Factor, etc.).
4. To comprehend the use of plagiarism detection software.

Course Content

Module I: Philosophy and ethics

Philosophical definition, nature and scope, concept, and branches - Ethics: definition, moral philosophy, moral judgements and reactions.

Module II: Science and research ethics

Intellectual honesty and research integrity - Scientific misconducts: falsification, fabrication, and plagiarism (FFP) - Duplicate and overlapping publications, as well as salami slicing - Selective reporting and data misrepresentation

Module III: Publication Ethics

Definition, introduction, and significance of publication ethics - Initiatives and guidelines for best practices and standards setting: COPE, WAME, etc. - Conflicts of interest - Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types of publication misconduct - Breach of publishing ethics, authorship, and contributor ship - Detection of publication malpractice, complaints, and appeals - Publishers and journals that are predatory.

Module IV: Publication misconduct

Subject-specific ethical issues, FFP, authorship b) Conflicts of interest c) Complaints and appeals: examples and fraud from India and abroad

Module V : Plagiarism software

Use of plagiarism software such as Turnitin, Urkund, and other open source software tools.

References :

- Nicholas H. Steneck. Introduction to the Responsible Conduct of Research. Office of Research Integrity. 2007. Available at: <https://ori.hhs.gov/sites/default/files/rcrintro.pdf>
- The Student's Guide to Research Ethics By Paul Oliver Open University Press, 2003
- Responsible Conduct of Research By Adil E. Shamoo; David B. Resnik Oxford University Press, 2003
- Ethics in Science Education, Research and Governance Edited by Kambadur Muralidhar,
- Amit Ghosh Ashok Kumar Singhvi. Indian National Science Academy, 2019. ISBN : 978-81-939482-1-7.
- Anderson B.H., Dursaton, and Poole M.: Thesis and assignment writing, Wiley Eastern 1997.
- Bjorn Gustavii: How to write and illustrate scientific papers? Cambridge University Press.
- Bordens K.S. and Abbott, B.b.: Research Design and Methods, Mc Graw Hill, 2008.
- Graziano, A., M., and Raulin, M.,L.: Research Methods – A Process of Inquiry, Sixth Edition, Pearson, 2007.



SCHOOL OF COMPUTER APPLICATION & INFORMATION TECHNOLOGY

Web Application Development in Java

Course Code: VACCAIT001

Course Objectives

1. To bridge the gap between academics and technology prevailing in the industry.
2. To give exposure to students about latest and emerging trends in IT industry.
3. To bring close the industry experts and students.
4. To learn how to develop software projects as per standards of IT industry

Course Outcomes

1. Student will be able to understand, analyse build and test software as per new prevailing technologies in IT industry.
2. It will increase the confidence in student to face interview and answer question based on project development
3. Students are benefited for better employability and help in placements of students

Module I: Introduction of Web Application, 3-Tier Architecture, Advantages, Disadvantages, Scope & Examples of Web Application.

Module II: Overview of Client Side and Server Side Technologies that is (HTMLI, CSS, Javascript, JQuery, Ajax, Xml, Java, Servlets, Jsp, Tomcat server and Database. Getting Account Information of Different User Without Loading Page Using Ajax Request.

Module III: Installation/Configuration of Java & Tomcat Server, Start Making First Web Application. Html Form Elements Overview with Practical Demonstration. Implicit Variables. Send SMS, Email from Web Application. Uploading / Retrieving of Image/File.

Module IV: Introduction of Javascript and its Practical Implementation in Client Side Validation. Database Basics, SQLQueries Implementation in MySQL.

Module V: Servlets Overview, Servlets Life Cycle, Servlet Context, Servlet Config. XML Mapping, Servlet Coding for Login Page with Database Connectivity to Demonstrate Authentication. Introduction to JSP, Session Management. JSP Scripting Elements, Page Directives, Implicit Dynamic JSP Age, Connectivity of Data Base In JSP Page, Listing Of all Account Users With All Details.

Reference Books:

1. Lynn Beighley, Head First SQL, 1st edition O'Reilly Media Publications.
2. Sarika Agarwal ,Vivek Gupta , Java for Web Development BPB Publications.
3. Prem Kumar, Web Design with HTML & CSS, 1st edition Notion Press.



Certificate Course in Ethical Hacking

Course Code: VACCAIT002

Course Objectives:

1. To bridge the gap between academics and technology prevailing in the industry.
2. To give exposure to students about latest and emerging trends in IT industry.
3. To bring close the industry experts and students.
4. To learn how to develop software projects as per standards of IT industry

Course Outcomes:

1. Student will be able to understand, analyse build and test software as per new prevailing technologies in IT industry.
2. It will increase the confidence in student to face interview and answer question based on project development
3. Students are benefited for better employability and help in placements of students

Module I Introduction of hacking and its scope, networking basic, networking advance.

Module II Installation of kali Linux and basic commands. What is IP and MAC address how to change it, gaining access server-side attack. gaining access client-side attack.

Module III social engineering attack, spoofing emails with smtp server. Introduction to beef framework with attack.

Module IV Website hacking info gathering/SQL injection, website hacking cross site scripting. Brute force attack with examples, DoS attack with explanation

Reference Books:

1. Introduction to Cyber Security: Guide to the World of Cyber Security by Anand Shinde Paperback
2. Cybersecurity for Beginners: Learn the Fundamentals of Cybersecurity in an Easy, Step-by-Step Guide by Kevin Clark

Digital Image Processing

Course Code : VACCAIT003

Course Outcomes:

1. Understand the principles of digital image processing and its applications.
2. Analyze and enhance images using various image processing techniques.
3. Apply mathematical and statistical techniques to analyze images.
4. Design and implement image processing algorithms using programming languages.
5. Evaluate the performance of image processing algorithms and compare their effectiveness.
6. Use image processing tools and libraries for various applications.

Module I : Introduction to Digital Image Processing

Overview of Digital Image Processing, Components of an Image Processing System, Applications of Digital Image Processing.

Module II : Digital Image Fundamentals

Elements of Visual Perception, Sampling and Quantization, Pixel Relationships, Color Models

Module III : Image Enhancement in the Spatial Domain

Gray Level Transformations, Histogram Processing, Point Processing, Spatial Filtering

Module IV: Image Enhancement in the Frequency Domain

Fourier Transform, Discrete Fourier Transform, Filtering in the Frequency Domain, Image Smoothing and Sharpening

Module V: Image Restoration

Image Degradation Model, Noise Models, Restoration in the Presence of Noise, Linear Filters for Restoration

Module VI : Color Image Processing

Color Models and Color Image Processing, Color Transformations, Color Image Enhancement, Color Image Segmentation

Module VII : Image Compression

Fundamentals of Image Compression, Lossless Compression Techniques, Lossy Compression Techniques, Image Compression Standards

Module VIII : Image Segmentation

Thresholding Techniques, Edge-Based Segmentation, Region-Based Segmentation, Clustering-Based Segmentation

Module IX : Object Recognition

Recognition Based on Decision-Theoretic Methods, Structural Methods, Template Matching, Neural Networks

Module X : Image Processing Applications

Medical Imaging, Multimedia, Computer Vision

Course Textbook:

Digital Image Processing (4th Edition), Rafael C. Gonzalez and Richard E. Woods, Pearson Education.

References:

- Digital Image Processing: An Algorithmic Introduction Using Java, Wilhelm Burger and Mark J. Burge, Springer.
- Fundamentals of Digital Image Processing: A Practical Approach with Examples in Matlab, Chris Solomon and Toby Breckon, Wiley-Blackwell.
- Handbook of Image Processing and Computer Vision, AI Bovik, Academic Press.

Search Engine Optimization (SEO)

Course Code : VACCAIT004

Course Outcomes:

1. Understand the principles and importance of SEO
2. Conduct keyword research and identify relevant keywords for a website
3. Optimize website content for search engines
4. Analyze website performance using SEO tools
5. Understand the role of link building in SEO
6. Measure the effectiveness of SEO campaigns
7. Develop a comprehensive SEO strategy for a website

Module I : Introduction to SEO

What is SEO?, Why is SEO important?, Types of SEO

Module II : Keyword Research

Understanding search intent, Keyword research tools, Analyzing keyword competition

Module III: On-page Optimization

Title tags, meta descriptions, and header tags, Content optimization, Image optimization URL optimization, Internal linking

Module IV: Technical SEO

Site structure and navigation, Page speed optimization, Mobile optimization, Schema markup

Module V : Off-page Optimization

Link building, Social media optimization, Local SEO

Module VI : Measuring SEO Performance

Google Analytics, Google Search Console, SEO reporting

Module VII : Developing an SEO Strategy

Setting goals and objectives, Conducting a website audit, Competitive analysis. Creating an SEO roadmap

Textbook:

- "Search Engine Optimization For Dummies" by Peter Kent
- "The Art of SEO" by Eric Enge, Stephan Spencer, and Jessie Stricchiola

- "Search Engine Optimization All-in-One For Dummies" by Bruce Clay
- "Content Marketing Strategies For Dummies" by Stephanie Diamond
- "Social Media Marketing All-in-One For Dummies" by Jan Zimmerman and Deborah Ng





SCHOOL OF BASIC & APPLIED SCIENCES

Competitive MATHS

Course Code: VCSBAS001

Course Objectives:

1. Students will recognize problem solving techniques appropriate to a given situation.
2. Student will acquire new skills and abilities, the identification of assumptions.

Course Outcomes:

1. Remembering the meaning of Non Verbal and Verbal reasoning.
2. Understanding the concept of series completion on simple problems.
3. Applying the concept of time and work on real life problems.
4. Analysing the problem on blood relation with solved examples.

Module I: Non-verbal Reasoning Tests, Completion of series, Classification, Non-verbal analogy.

Module II: Verbal Reasoning tests, Series completion, Verbal classification, Verbal analogy.

Module III: Simplification, Problems on ages, Time and work.

Module IV: Coding and decoding, Blood relationship.

Reference Books:

1. Aggarwal, R. S., Quantitative Aptitude, S. Chand & Company Ltd, Ram Nagar, New Delhi, 2013.
2. Thorpe, Edgar., Test of Reasoning for competitive examinations, IV Ed. Tata McGrawHill Publishing Company Ltd, New Delhi.

Disaster Management

Course Code: VCSBAS002

Course Objectives:

1. To provide students an exposure to disasters, their significance & types
2. To ensure that students begin to understand the relationship between vulnerability disasters, disasters prevention & risk reduction
3. To enhance awareness of institutional processes in the country.
4. To develop rudimentary ability to respond to their surroundings with potential disasters response in areas where they live with due sensitivity

Course Outcomes:

Module I: Introduction to Disasters. Definition, Disaster, Hazard, vulnerability, Resilience, Risks-Disasters. Types of Disasters: Earthquakes, Landslides, Flood, Drought, Fire, Etc. Classification, causes, impacts, including social, economic, political, environmental, health, psychosocial etc. Differential impacts in terms of caste, class, gender, age location, disability Global trends in disasters: urban disasters, Pandemics, complex emergencies, climate changes. Do's and Don'ts during various types of Disasters

Module II: Approaches to Disaster Risk Reduction, Disaster Cycle, Phases Culture of safety Prevention, mitigation & preparedness community based DRR. Structural, nonstructural measures Roles & responsibilities of community. Panchayati Raj Institutional Processes & framework of state & central level. State Disasters Management authority (SDMA) Early warning system. Advisories from appropriate agencies.

Module III: Inter-Relationship between Disasters and Development Factors affecting vulnerabilities, Differential, Impact of Development projects such as dams, embankments, changes in land use etc. climate change Adaption IPCC scenario & scenarios in the context of India Relevance of indigenous knowledge, appropriate technology & local resources.

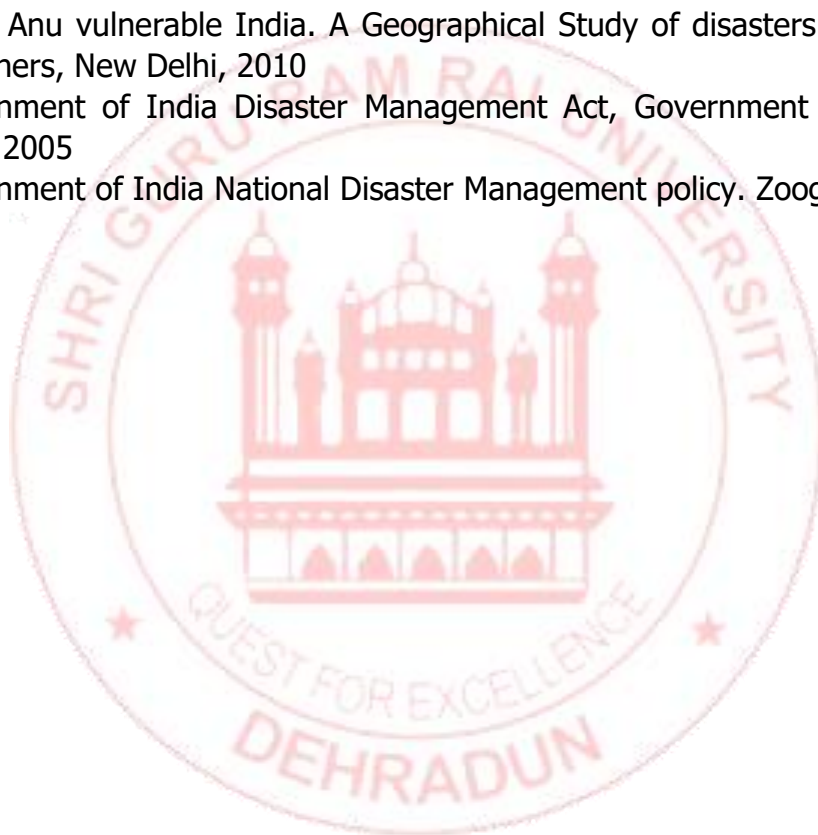
Module IV: Disasters Management in India Hazard & Vulnerability profile of India, components of disasters relief water, food, sanitation, shelter, of health, waste management institutional arrangements. Mitigation, response & Preparedness, disaster management act & policy, other related Policies Plans, Programmes & legislation – Role of GIS & information technology components in preparedness, risk assessment, response & recovery Phases of disaster, Disaster Damage Assessment.

Module V: Disasters Management: Applications, case studies & field work Landslides hazard zonation, case studies: earthquakes vulnerability assessment of Buildings

infrastructure. Case Studies: Drought Assessment. Case studies: coastal flooding pluvial flooding case studies, forest fire case studies manmade disasters case studies, space based inputs for disasters mitigation & management & field works related to disaster management.

Reference Books:

1. Singhal J.P Disaster Management, Laxmi Publication, zolo ISBN- 10 9380386427 ISBN-13 978- 938038623
2. Tushar Bhattacharya, "Disaster Science & Management". McGraw All India Education Pvt. Ltd. 2012 ISBN-10 1259007367 ISBN-13 978-1259007361
3. Gupta Anil K Sreeja S. Nair Environmental knowledge for disaster risk Management, NIDM, New Delhi 2011
4. Kapur Anu vulnerable India. A Geographical Study of disasters IIAS & Sagar Publishers, New Delhi, 2010
5. Government of India Disaster Management Act, Government of India New Delhi, 2005
6. Government of India National Disaster Management policy. Zoog.



Sustainable Ecotourism

Course Code: VCSBAS003

Course Objectives:

1. To give the students a way to evaluate and understand ecotourism in their context.
2. To increase the benefits and to reduce the negative impacts caused by tourism for destinations. This can be achieved by: Protecting natural environments, wildlife and natural resources when developing and managing tourism.

Course Outcomes:

1. Know about diverse nature of tourism, including culture and place, global/local perspectives, and experience design and provision.
2. Understand the contextualize tourism within broader cultural, environmental, political and economic dimensions of society.
3. Apply marketing strategies for tourism destinations and organizations
4. Propose and conduct a research project to inform tourism practice
5. Work collaboratively in groups, both as a leader and a team member, in diverse environments, learning from and contributing to the learning of others.

Module I Introduction to Ecotourism

History and scope of ecotourism; Components of ecotourism; Principles and characteristics of ecotourism; Ecotourism planning: Site diagnostics, Target groups; Ecotourism industry and its stake holders; Resources and products of ecotourism; Commercialization of ecotourism.

Module II: Types of Ecotourism

Tourism vs. Ecotourism; Types: Agro-ecotourism, Geo- ecotourism, Cultural-ecotourism – tangible and intangible heritages and tourism, Sensitive areas of ecotourism; Ecotourism management plans.

Module III: Ecotourism resources in India and Uttarakhand

Eco-regions; Vegetation types; Protected areas; Endemism and biodiversity hotspots; Historical monuments and historical sites; Adventure ecotourism destinations; Ecotourism potential of Uttarakhand

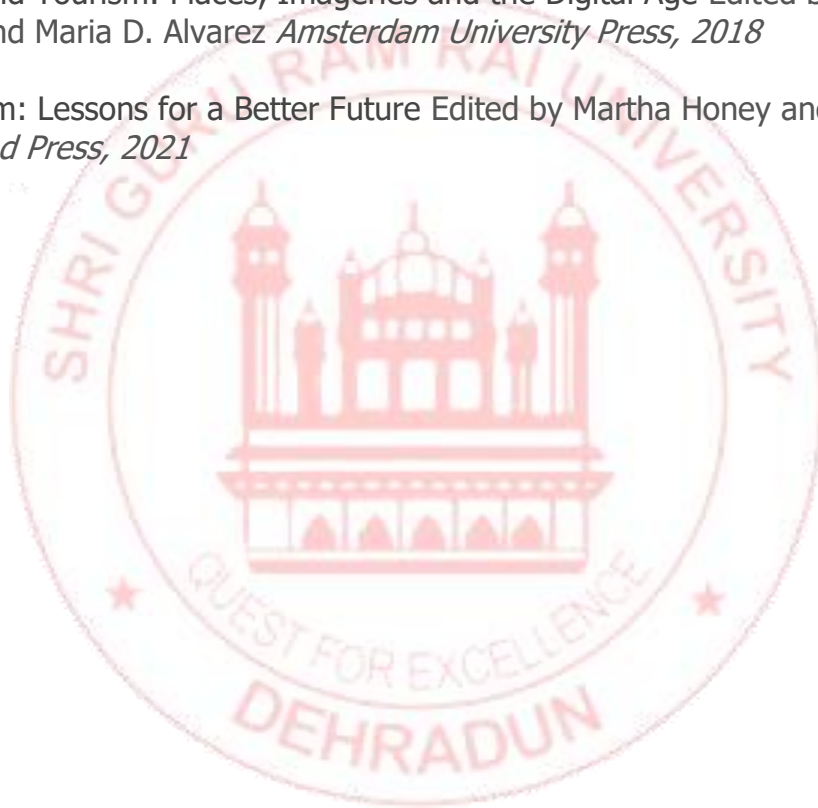
Module IV Community participation in ecotourism

Present scenario, Future prospects (year-round ecotourism); Sustainability of ecotourism; Ecotourism in developed countries; Community based ecotourism: case

studies; Joint forest management, Role of NGOs ;Ethical and legal aspects; Eco-travel and environmental awareness; Impacts of ecotourism, Green report card, Eco-labelling; Environmental sustainability practices.

References:

1. Ecotourism and Sustainable Development: Who Owns Paradise? Martha Honey Island Press, 999
2. Governing the Wild: Ecotours of Power Stephanie Rutherford *University of Minnesota Press*, 2011
3. Heritage and Tourism: Places, Imageries and the Digital Age Edited by Linde Egberts and Maria D. Alvarez *Amsterdam University Press*, 2018
4. Overtourism: Lessons for a Better Future Edited by Martha Honey and Kelsey Frenkel *Island Press*, 2021



Bio-fertilizer Production Technology

Course Code: VCSBAS004

Course Objective :

1. To demonstrate the low-cost media preparation and impart training of eco-friendly agricultural inputs in biofertilizer production.

Course outcomes :

1. Understand the role of microorganism in improving the fertility of soil and also in control the pest and other pathogens.
2. Will know the techniques involved in mass production, quality control and application of Bioinoculants in organic farming.
3. Students will have an opportunity to work in research laboratory, biofertilizer industry and can also be an bio-entrepreneur.
4. Ability to distinguish the types of biofertilizers and methods of application in farmers field. Development of integrated management for best results using nitrogenous and phosphate biofertilizers.

Module -I: Introduction, History and concept of Bio fertilizers, status scope and importance of Bio fertilizers, Classification of Bio fertilizers. Nitrogen fixation.

Module II : Structure and characteristic features of bacterial Bio fertilizers- Azospirillum, Azotobacter, Bacillus, Pseudomonas, Rhizobium and Frankia; Cyanobacterial biofertilizers- Anabaena, Nostoc, Haplodiplontic and fungal biofertilizers- AM mycorrhiza and ectomycorrhiza.

Module III: Production technology: Strain selection, sterilization, growth and fermentation, equipment, mass production of carrier based and liquid bio fertilizers. FCO specifications and quality control of bio fertilizers.


Module IV : Application technology for seeds, seedlings, tubers, sets etc. Biofertilizers -Storage, shelf life, quality control and marketing. Factors influencing the efficacy of bio fertilizers.

References:

- B. Giri et al. (eds.), Biofertilizers for Sustainable Agriculture and Environment, Soil Biology 55.
- Dinesh Biofertilizers (Skill Enhancement Course) For B.Sc. Botany Classes, by Dr. Anil K. Thakur, Dr. Susheel K.

- Spaink HP, Kondorosi A, Hooykaas PJJ (eds) (1998) The Rhizobiaceae. Kluwer Academic Publishers, Dordrecht
- Biofertilizers and Biopesticides, by Krishnendu Acharya,
- Handbook of Microbial Biofertilizers, by M. K. Rai





SCHOOL OF HUMANITIES & SOCIAL SCIENCES

Health & Fitness through Yoga

Course Code: VCSHSS001

Course Objectives :

1. To turn students towards their real goals
2. Promoting positive health, prevention of stress related health problems & rehabilitation through Yoga

Course Outcomes :

1. Increase their confidence & positive self image
2. Build concentration
3. Easily transformation of negative aptitudes

Module I

Foundation of Yoga, History, School of Yoga, Origin of Yoga, Development of Yoga, Aim & Objective, Yoga in modern time, Essence of Geeta, Difference between Sakama & nishkama karma, Concept of Gunas .

Module II

Definition & Importance of Health According to WHO; Dimensions of Health: Physical, Mental, Social and Spiritual, Yogic Concept of Health :Meaning and definitions.

Module III

Practical

Recitation of hymns & hatha mudra, Recite Bhagwat Geeta sloke.

Shatkarmas - Neti

Asana - Yogic Suksmavyayama, Surya Namaskar.

Breathing Practices & Pranayama -

Breathing practices: Hands in and out, Hands stretch, Ankle stretch, Rabbit, Dog.

Pranayama - Nadi Shodhan Pranayama, Bhramari Pranayama

Meditation - Om Chanting

References:

1. Kumar Kamakhya: Super Science of Yoga.
2. Dr. R. Nagarathna and Dr. H.R. Nagendra: Yoga and Health, Swami Vivekananda Yoga Prakashana, 2002
3. Swami Satyananda Saraswati : Asana, Pranayama, Bandha, Mudra, Bihar School of Yoga, Munger, 2006.

Media and Communication Skills

Course Code: VCSHSS002

Course Objectives:

1. To develop communication skills
2. Course will develop fulfill their interest and societal values
3. Course will develop their practical skills.

Course Outcomes:

1. Understanding of basic concepts of communication and its role in society
2. Apply the media behavior and communication skills in development of personality
3. Evaluate the importance of communication in self motivation
4. Able to use creativity to create media content for different media outlets

Module I: Introduction to Media Meaning of media, nature, scope and its different types Function of communication, verbal, non verbal and written communication, types of communication

Module II : Media behavior and communication skill Concept of interviews, Importance, types of interview Translation for different communication medium, The concept of personality, importance of self motivation

Module III : Practical Practicing in different media Writing for media Print media writing: Writing for newspaper, magazine and periodicals Radio writing: writing for different genre of broadcasting Television writing: writing for different program

Reference Books:

1. Handbook of journalism, Vir Bala Aggrawal
2. Mass communication in India, Keval. J Kumar
3. M.L. Stein, Susan Paterno& R. Christopher Burnett. News writer's
4. Handbook: An Introduction to Journalism; BlackwellPublishing,2006.
5. Kamath, M.V. Professional Journalism, Vikas Publications
6. The Television Writers Handbook by Nash & Oakey

Women Entrepreneurship

Course Code: VCSHSS003

Course Objectives:

1. To study the role of women entrepreneurship in different sectors.
2. To understand the women employment opportunities.
3. To explain the different strategies and scheme supporting for women entrepreneurship.

Course Outcomes:

1. Understand the role of women entrepreneurship in different facets of society.
2. Know the various livelihood supports for women Employment opportunities.
3. Elucidate the role of various developmental schemes supporting women entrepreneurship.

Module I : Women Entrepreneurship

Introduction of Women Entrepreneurship Significance of women entrepreneurship - Factors contributing to women Entrepreneurship, Characteristics, Challenges faced by Women Entrepreneurs.

Module II: Women Employment Opportunities

Income Generating Programme – IRDP - Rural Credit & women's Self-help Groups - Skill Development and Technology Transfer - Technologies for Women - Impact on Women's Development Programs and policy measures at International, National and State Levels.

Module III : - 3: Strategies of Women Entrepreneurship Development

Micro Enterprises and Self-employment - Opportunities - Trends and Patterns of Women Entrepreneurship, Schemes supporting Women Entrepreneurs: SIDO, DIC and Institutional infrastructure

Reference Books:

1. Donald L. Sexton & Raymond W. Smilor, The Art and Science of Entrepreneurship, Ballinger Pub. Co 1986.
2. Clifford M. Baumbach & Joseph R. Mancuso, Entrepreneurship and Venture Management, Prentice Hall, 1987.
3. Hisrich, Robert D., Michael Peters and Dean Shepherd Entrepreneurship 9th Tata McGraw 2012

Communicative English

Course Code: VCSHSS004

Course Objectives:

1. Being fluent in English, a global language provides opportunities in both India as well as abroad.
2. Improves English language Skills of the individual.

Course Outcomes:

The student will be able to understand , explore, aware, know the methods and techniques Syllabus in detail

Module -I

Basic Grammar Parts of Speech, Subject and Predicate, Subject verb Agreement, Types of Sentences, Clauses, Direct and Indirect speech, Basics of Phonetics, Punctuation, Department of English SHSS, SGRRU Proverb, idioms and phrases, Degree of comparison, Modals, Translation of local language.

Module -II

Writing Skills Significance of writing, the art of Condensation, Paragraph writing by using linkers write messages for given contexts, Essay writing, Email writing, Business Letters, Resumes, business Report, Blog Writing, Memo, Circulars, Notice, Agenda and Minutes, Advertising. Activities- Pre-writing, Clustering/grouping ideas, Rough draft, Revision/editing, Final draft, Task based complex

Module -III

Speaking Practice Professional Presentation, Group Discussions corporate Etiquette, Public Speaking, Conversations, Dialogues, Debates, Art of Negotiation, Interview skill problem solving, Dealing with moods and feelings (Anger, sadness and indifference), Conversation on different occasions Activities- Pair work, individual work.

Reference Books:

1. Raman, Meenakshi and Sharma, Sangeeta. (2011) Communication Skills, Oxford University Press.
2. Adair, J. (2003) Effective Communication, Pan Mcmillan.
3. Bowmam, J.P. & Branchaw, P.P. (1987) Business Communication: From process to product, Dyrden Press, Chicago.

4. Krizan, A. Merrier, P., & Jones, C. (2002). Business Communication (5th ed.). Ohio: South-Western College Publishing.
5. Dangwal, Surekha. (2017). The Art of effective Communication, Delhi: Macmillan.
6. Vorholt, J. (2018). New ways in teaching speaking (2nd ed.). Alexandria, VA: TESOL Press.



Personality Development

Course Code: VCSHSS005

Course Objectives:

1. To understand the concept of personality and its development.
2. To comprehend the formation of attitude.
3. To recognize the importance of motivation.
4. To cultivate the positive cognitive states for the development of personality.
5. To develop the other aspects of personality development

Course outcomes:

1. Recognize the concept of personality .
2. Identify the correlates' of personality.
3. Evaluate the importance of personality development
4. Apply the ways to develop personality effectively

Module I : Introduction: The concept of personality, Types of personality, Determinants of personality; Trait Approaches of Personality (Allport and Cattell); Personality Skills and Development, the concept of SWOT analysis.

Module II : Attitude: Nature, formation and change of attitudes, Factors affecting attitude, Positive attitude advantages , Negative attitude disadvantages, Ways to develop positive attitude - Differences between personalities having positive and negative attitude.

Module III : Motivation: Nature and Concept; Types of Motives; Significance of Internal and external motives, Importance of self- motivation, Factors leading to de-motivation.

Module IV Positive Cognitive States: Positive Thinking: Concept of Optimism, Hope and Resilience; Self Efficacy; Self-esteem: Positive and negative self esteem; Self-confidence.

Reference Books:

1. Baron, R.A. & Byrne, D. (2000). Social Psychology. New Delhi: Prentice Hall
2. Heller, Robert.(2002). Effective leadership. Essential Manager series. Dk Publishing,
3. Lucas, Stephen. (2001). Art of Public Speaking. New Delhi. Tata - Mc-Graw Hill.
4. Mile, D.J. (2004). Power of positive thinking. Delhi. Rohan Book Company
5. Smith, B. (2004). Body Language. Delhi: Rohan Book Company.

Statistical Analysis of Data

Course Code: VCSHSS006

Course Objectives:

1. To understand the nature of data.
2. To understand the basic concepts and importance of statistics.
3. To comprehend the application of statistics in different disciplines.
4. To understand the concept and various techniques of data analysis.

Course outcome:

1. Explain the fundamental concepts of statistics
2. Evaluate the importance & utility of statistics in different disciplines
3. Recognize & Apply the different statistical methods for data analysis.
4. Learn the analysis of Data using SPSS software

Module I

Introduction to Statistics: Nature of Statistics, Uses of Statistics, Statistics in relation to other disciplines, Concepts of population and sample, quantitative and qualitative data, discrete and continuous data; Tabulation and Graphical representation of data; Probability: Definition, Statistical definition of probability, Types of probability.

Module -II

Measures of Central tendency: Mean, Median, Mode and their properties; Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation and their properties, Coefficient of variation, Moments, Skewness.

Module III

Correlation and Regression: Concept, definition and types of correlation, Karl Pearson coefficient of Correlation, Spearman's Ranking coefficient of Correlation; Regression lines, concepts and properties.

Module IV

Testing of Hypothesis and Data analysis: Concept, Definition and Types of hypothesis; Types of errors, Level of significance and test of significance based on t, F and X² test; Data analysis using SPSS software; Data Interpretation.

Reference Books:

1. S.C. Gupta and V.K. Kapoor (2007). Fundamentals of Mathematical Statistics, 11th Ed., Sultan Chand and Sons.
2. V.K. Rohtagi and A.K. Md. E. Saleh (2009): An Introduction to Probability and Statistics, 2 Ed., John Wiley and Sons.

लोक साहित्य (Folk Literature)

पाठ्यक्रम कोड : VCSHSS007

पाठ्यक्रम उद्देश्य:- इस पाठ्यक्रम को प्रारंभ करने के उद्देश्य निम्नलिखित हैं-

1. लोक साहित्य के विस्तृत अध्ययन के लिए।
2. गढ़वाल की संस्कृति का गहन अध्ययन करने के लिए।

पाठ्यक्रम परिणाम :

1. प्रस्तुत पाठ्यक्रम के माध्यम से विद्यार्थी लोक साहित्य की विस्तृत जानकारी ले पाएंगे।
2. छात्रों को लोक साहित्य का अर्थ और वर्गीकरण का ज्ञान हुआ।
3. गढ़वाल में प्रचलित लोकगाथा और लोककथा का बोध हुआ।
4. गढ़वाली लोक साहित्य की मुख्य प्रवृत्तियों का विश्लेषण हुआ।

पाठ्यक्रम सामग्री :-इकाई 1 - लोक साहित्य अर्थस्वरूप और परिभाषा :, लोक साहित्य के प्रकार, लोक साहित्य की विशेषताएं, लोक साहित्य और लोक संस्कृति में अंतर।

इकाई 2 - लोकगीत: अर्थ और परिभाषा, लोकगीतों का वर्गीकरण, लोकगीतों की सामान्य प्रवृत्तियां, लोकगीतों में प्रयुक्त होने वाले वाद्ययंत्र।

इकाई 3 - लोककथाअर्थ और परिभाषा :, लोककथाओं का वर्गीकरण, लोककथाओं की विशेषताएं, लोककथा और पौराणिक कथा में अंतर।

इकाई 4 - लोकगाथाअर्थ और : परिभाषा, लोकगाथाओं का वर्गीकरण, लोकगाथाओं की उत्पत्ति, गढ़वाल की मुख्य लोकगाथाओं का परिचय।

इकाई 5 - लोकनाट्यअर्थ और परिभाषा :, लोकनाट्य के प्रकार, लोकनाट्य की विशेषताएं।

पाठ्य पुस्तक :-

- 1- गढ़वाली भाषा और उसका साहित्य डॉ हरिदत्त भट्ट -'शैलेश'
- 2- गढ़वाली भाषा और उसका लोक साहित्य

Hindustani Music Vocal

Course code VCSS008

Course OBJECTIVES:

1. To provide an education that will enable to make successful career in the fields of music and entertainment industry professions.
2. To develop a deeper understanding of musical notation system, a strong foundation on theory through standard melodic, harmonic and rhythmic structure.
3. To make learners familiar with music styles and genres from different cultures and historical periods.
4. To encourage students to acquire the career development and interpersonal techniques to advance further in career.
5. To provide training for interested learners who are not music major.

Course Outcome

Module I: Swaras Knowledge – Practice of singing and recognizing 6 shuddha and 5 vikrit swar. Practice of singing and identifying simple groups of mostly two Swaras. Special knowledge of shuddha swar.

Module II: Yaman, and Bhupali ragas with one drut khayal and two simple tanas. Practice of singing ten simple Alankar, both in sargam and aakar in madhya and drut lay.

Module III: To write the introduction of the rags of syllabus including its aroh, avaroh, jati, vadi, swar, time and some simple-alpas. To write the thekas (bol) in volume, including their volume, department, even, tali, blank. His practice of writing double as well on syllabus talas. Defination-Dhwani, Naad, Swar .

Module IV : To write the thekas (bol) in volume, including their volume, department, even, tali, blank. His practice of writing double as well on syllabus talas. Brief biography of Bhatkhande and their musical works. Defination- Saptak, Jati,Tali,Khali,Matra,Vibhag

Textbooks and Reference book

1. Rag Parichay- Prof.Harishchandra Srivastava
2. Hamare Priy Sangitagya-Prof.Harishchandra Srivastava
3. Hamare Sangeet Ratna- Laxmi Narayan Garg.
4. Sangeet Bodh - Sharad Chandra Pranjpayee.

Hindustani Music Tabla

Course code VCSS009

Course Objective

1. To provide an education that will enable to make successful career in
2. the field of music and entertainment industry professions.
3. To develop a deeper understanding of musical notation system, a strong foundation on theory through standard melodic, harmonic and rhythmic structure.
4. To make learners familiar with music styles and genres from different cultures and historical periods.
5. To encourage students to acquire the career development and interpersonal techniques to advance further in career.
6. To provide training for interested learners who are not music major.

Module I:

Knowledge of basic Bols (varnas) of Tabla Keep the hand beats Theka of Teentaal, Jhaptaal, Kehrwa and Dadra with Thah Dugun laya

Module II :

Playing knowledge of four kayadas Paltas and Tihai , one Rela four Paltas and Tahai
Playing knowledge of kaharwa and dadra with variations

Module III :

Brief history of origin of Tabla. Definition of following terms: Taal , Matra , Theka , Tali , Khali , Vibhag , Sam, Kayda , Palta , Rela , Tihai ect

Reference book

- Tabla Sheshtra
- Tabla Perveshika
- Bhartiya saneet vadhya
- Hamare Priy Sangitagya-Prof.Harishchandra Srivastava
- Hamare Sangeet Ratna- Laxmi Narayan Garg.
- Sangeet Bodh - Sharad Chandra Pranjpayee.



SCHOOL OF AGRICULTURAL SCIENCES

Production and Post Harvest Handling of Mushroom

Course Code : VCASAS001

Course Objectives:

1. To enable the trainees to identify edible and poisonous mushroom.
2. To provide hands on training for the preparation of bed for mushroom cultivation , pest and disease control and harvesting and post harvesting management.
3. To provide awareness about the market trend of mushroom.
4. To give the exposure of experiences of experts in the field and to functioning in mushroom farm.
5. To learn a mean of self-employment and income generation.

Course outcomes:

1. To acquaint with the nutrient value of mushroom.
2. To understand the morphology and types of mushroom.
3. To develop the skill of spawn production technology.
4. To aware the identification of edible and poisonous mushroom.
5. To learn the prospects and scope of mushroom cultivation in small scale industry.
6. To understand the diseases and post harvest handling of mushroom

Module-I

Introduction – History of mushroom cultivation; Classification and distribution of mushroom; life cycle of mushroom. Identification of poisonous mushrooms.

Module- II

Spawn preparation - Isolation of pure culture; Nutrient media for pure culture; layout of spawn preparation room; raw material of spawn; sterilization; preparation of mother spawn and multiplication

Module- III

Cultivation of mushroom, layout of mushroom shed - small scale and large scale production unit. Types of raw material – preparation and sterilization; Mushroom bed preparation – maintenance of mushroom shed; harvesting method and preservation of mushrooms.

Module-IV

Nutrient values of mushroom – protein, carbohydrate, fat, fibre, vitamins and amino acids contents; short and long term storage of mushroom; preparation of various dishes from mushroom. Medicinal value of mushroom – cultivation, extraction,

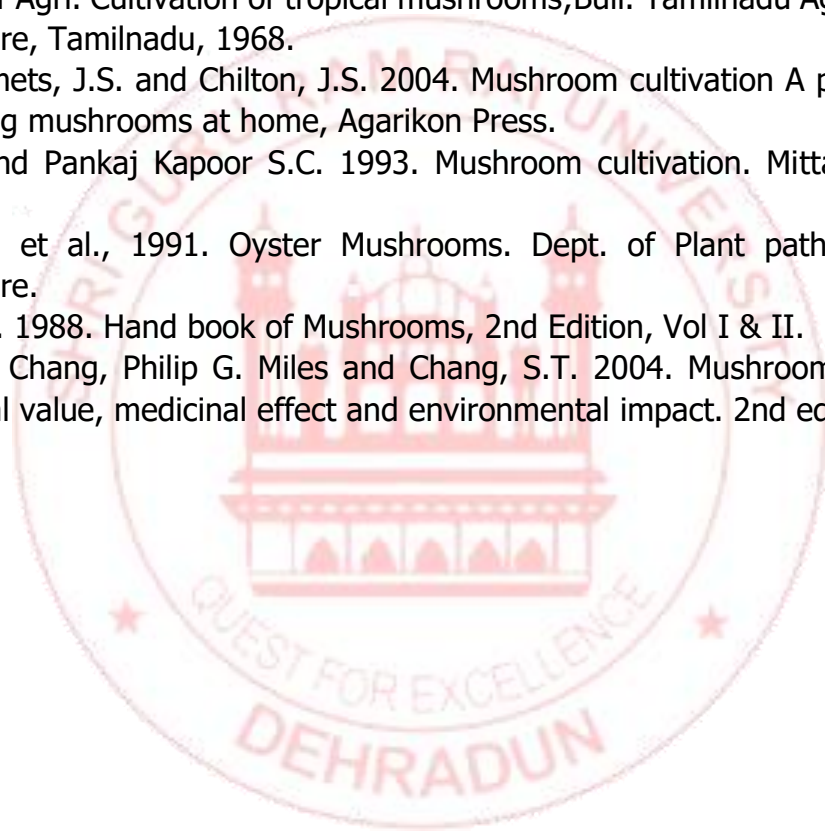
isolation and identification of active principle from mushroom. Pharmacological and economic values of mushroom.

Module-V

Cultivation of following types of mushroom – milky mushroom; oyster mushroom, button mushroom and any one medically valuable mushroom.

Reference Books:

1. Agri. Information Service, Himachal Pradesh, Shimla. How to grow mushroom Bull. Agri. Inf serv. 1, 1972.
2. AOAC Official Methods of Analysis of Association of Official Agricultural Chemists, 12th ed. Published by the Association , Washington, 1975.
3. College of Agri. Cultivation of tropical mushrooms; Bull. Tamilnadu Agri. University, Coimbatore, Tamilnadu, 1968.
4. Paul Stamets, J.S. and Chilton, J.S. 2004. Mushroom cultivation A practical guide to growing mushrooms at home, Agarikon Press.
5. Tewari and Pankaj Kapoor S.C. 1993. Mushroom cultivation. Mittal Publication. Delhi.
6. Marimuth et al., 1991. Oyster Mushrooms. Dept. of Plant pathology, TNAU, Coimbatore.
7. Nita Bahl. 1988. Hand book of Mushrooms, 2nd Edition, Vol I & II.
8. Shu Fing Chang, Philip G. Miles and Chang, S.T. 2004. Mushrooms Cultivation, nutritional value, medicinal effect and environmental impact. 2nd ed., CRC press.



Conservation, development and Economic prospects of Medicinal and Aromatic Plants

Course Code : VCASAS002

Course Objectives:

1. To acquire knowledge on medicinal and aromatic plants
2. To bridge the gap between industry and academia with technology for conservation, development, processing and marketing of MAPS.
3. To provide an opportunity for self employment and entrepreneurship

Course Outcome:

1. To enable the students/ participants to know the Medicinal and Aromatic Plants (MAPs).
2. To provide knowledge for conservation, development, extraction of MAPs; its processing & value added products.
3. To provides the students awareness about the marketing trend of MAPs.
4. To help the students to learn about the self-employment and income generation.

Module I: Importance and Scope of MAPS. Classification of medicinal and aromatic plants.

Module II: Conservation and development practices, processing and utilization of medicinal and aromatic plants

Module III: Extraction, and preservation of crude drugs. Classification and estimation of phyto-constituents of crude drugs.

Module IV: Traditional and advance knowledge about the MAPS

Module V: Post-harvest technology in medicinal plants scope and importance. Importance of herbal marketing -Future prospects and constraints of the herbal drug industry

Practical:

1. Survey of field for identification of MAPs.
2. Collection of plant parts for extraction of crude extract
3. Estimation of phyto-constituents on qualitative basis.
4. Post -harvest practices and estimation of total yield.
5. Conservation of MAPs by developing herbal garden (ex situ conservation).

Reference Books:

1. Farooqi, A.A. and B. S. Sreeramu, 2004. Cultivation of medicinal and aromatic crops. Revised edition, Universities Press (India) Private Limited, Hyderabad
2. Harbone, J.B. 1998. Phytochemical Methods: A guide to modern techniques of plant analysis. 3rd Supplementary Reading: Edn., Springer (India) Private Limited, New Delhi.
3. WHO, 2002. Quality control methods for medicinal plant materials, World Health Organization, Geneva, A.I.T.B.S., Publishers and Distributors, New Delhi.
4. Halliwall, B. and J.M.Gutteridge. 1985. Free radicals in Biology and medicine. Oxford University.



Hill Agriculture

Course Code: VCASAS003

Course Objectives:

1. To impart the basic knowledge about agro-ecological zones of India.
2. To develop understanding of mechanization for hilly areas.
3. To develop the skills to analyze soil and water conservation techniques.
4. To impart the knowledge of improved crop varieties for doubling farmers income.

Course outcomes:

1. Identify the crops, farm implements and manures.
2. Summarize improved for crop production technologies.
3. Prepare farming system models for hill agriculture.
4. Integrate alternate land use system and watershed management.

Module I: Agro-climatic and topographical parameters prevailing in hills of India. Soil composition, pH, texture, fertility and productivity of soils in hilly region. Soil and weather constraints in hills of India. Different tillage operations required for sustainable agriculture in hills.

Module II: Improved crop Production technology of field crops, vegetable crops and fruit crops suitable for temperate regions viz. millets, cereals, pulses, Medicinal plants, spices and condiments, traditional fruits and vegetables grown widely in forest of hills.

Module III: Role of women in hill agriculture, limitations and opportunities for agribusiness related in hills, Role of government and non governmental bodies for upliftment of farmers in hills, Research and extension programmes for enhancing farm returns.

Module IV: Integrated hill farming and watershed management . Alternate land uses for community needs and conservation. Wild animal menace in agriculture and strategies for its management. government schemes for farmers. Organic farming in hills.

Reference Books

1. Hartmann, H.T., Kester, D.E., Davies, F.T. and Greeneve, R.L. 1997. Plant propagation – Principles and Practices, Prentice Hall of India Private Ltd., New Delhi.
2. Prasad, S. and Kumar, V. 1999. Green House Management of Horticultural Crops, AgroBios India, Jodhpur.
3. Kanwar, J.S. (Ed.). 1976. Soil Fertility: Theory and Practice. ICAR.

4. Olson, R.A., Army, T.S., Hanway, J.J. & Kilmer, V.J. 1971. Fertilizer Technology and Use. 2nd Ed. Soil Sci. Soc. Am. Madison.
5. Prasad, R., & Power, J.F. Soil Fertility Management for Sustainable Agriculture. CRC Press



Agripreneurship Development in Beekeeping

Course Code: VCASAS004

Course Objectives:

2. To impart the basic knowledge about honey bee species and bee flora
3. To develop understanding about handling of honey bee keeping equipments & management of diseases & pests of honey bee
4. To develop the skills in scientific methods of bee keeping and extraction of honey
5. To impart the knowledge regarding apiary management by month wise calendar

Course outcomes:

1. Understand importance of beekeeping, Selection of bee species & Identification of bee flora and location of site.
2. Handling of bee keeping equipments, Management of insects and diseases & natural enemies.
3. Scientific methods of bee keeping & honey processing.
4. Seasonal apiary management by month wise calendar.

Module I: Introduction to Bee Keeping, History, Present scenario & scope, Selection of bee species & races, identification of bee flora and location of site.

Module II: Honey bee keeping equipments, Building & division of comb and colony, Management of insects and diseases and nuisance in bee hives.

Module III: Scientific methods of bee keeping, Bee Boxes Maintenance, Collection and preservation of honey,

Module IV: Month wise calendar of operations in bee keeping, Seasonal Management of honey bees.

Reference Books:

1. Graham, J M (1992) The hive and the honey bee. Dadant and Sons, Hamilton, Illinois.
2. Mishra R.C. (1995) Honey bees and their management in India. ICAR Publication, New Delhi.

Protection of Plant Varieties and Farmer's Rights

Course Code : VCASAS005

Course Objective: Creating awareness and developing skill about plant variety protection and rights of breeder's, researcher's and farmer's.

Course outcomes:

1. Upon successful completion of course students are able to identify the DUS characters of crop plants.
2. Students will aware about breeder's, researcher's and farmer's rights in India.
3. Students will get the skill to register and protect the varieties of crop plant

Module I: Historical background and importance of plant variety protection, Protection of plant varieties and farmer's rights authority, registration of plant varieties and essentially derived varieties.

Module II: Breeder's, researcher's and farmer's rights in India, compulsory licence, Appellate Tribunal, Infringement, offences and penalties.

Module III (Practical): Procedure to protect plant varieties, DUS testing-principles and applications in agricultural crops, visit to DUS testing centre.

Reference Books:

1. Protection of Plant Varieties and Farmer's Rights Act 2001. Ministry of Law, Justice and Company Affairs (Legislative Department). New Delhi, the 30th October, 2001.
2. Protection of Plant varieties and Farmers Rights Act, 2001, along with rules, 2003 & Regulations, 2006. Bare Act. Professional Book Publishers, New Delhi.
3. Plant Variety Journal of India. Protection of Plant Varieties & Farmer's Rights Authority, New Delhi

On farm practices of agricultural Waste management

Course Code: VCSAS006

Course Objectives:

1. To impart knowledge to students on various methods of agricultural waste management for eco friendly energy and manure production.
2. To develop understanding of some identified areas of organic farming
3. To develop skills at village level on organic management practices with special focus on soil health base crop management
4. To create job opportunities in organic sector particularly in the area of organic production

Course outcomes :

1. To acquaint with on-farm resource management under organic farming.
2. To understand soil health base crop management
3. To develop the skill of input production and quality control.
4. To aware the traditional Biofertilizer, Biopesticides and Soil health promoters.
5. To learn the nutrient management and plant protection including formulation techniques.
6. To develop the skills at village level required for organic farming practices and related marketing economics.

Module I :

Introduction, Concept, Philosophies, Principles and Need of organic farming

Module II:

Soil health: the prime need in organic management. Organic farming an integrated approach. Traditional organic input preparation/formulation of Biofertilizer, biopesticides, plant health promoters like Panchgavya, Beejamrut etc

Module -III:

Manure preparation and introduction to compost. Methods of composting – vermicomposting, Shivansh khad - Factors involved, Infrastructure required, maturity parameters, value addition and application methods

Module IV :

Crop management, Nutrient Management and Pest Management and Multilayer cropping system base farm planning.

Module V:

System of organic certification and inspection. Standards and guidelines of NPOP (National Programme for organic production). Branding of rural products, FSSAI, marketing and packaging of organic produce.

References:

- Dahama, A.K.2009. Organic farming for sustainable agriculture, Agrobros publishers.
- Mukund Joshi. 2015. Sustainability to Organic Farming, Kalyani publication
- Nicholas lampkin 1994. Organic farming. Farming press London.Arun kumar Sharma 2008. A Hand book of organic farming.Agrobios Publishers.
- SP.Palaniappan and K Annadurai.2008.Organic Farming: Theory and Practice.2008. Scientific Publishers.
- Stockdale, E et al., 2000. Agronomic and environmental implications of organic farming systems. Advances in Agronomy, 70, 261-327
- S. R. Reddy.2020. Principles of Organic farming, Kalyani publication
- T.D. Pandey et al. 2013. Organic farming, Kushal Publication and distributors, Varanasi, U.P.
- Veeresh, G.K. 2010. Organic farming, Cambridge university press.

Novel techniques of fruits and vegetables processing

Course code: VCASAS007

Course objective:

1. To give the students a way to evaluate and understand ecotourism in their context.
2. To increase the benefits and to reduce the negative impacts caused by tourism for destinations.
3. This can be achieved by: Protecting natural environments, wildlife and natural resources when developing and managing tourism.

Course outcomes

1. To aware with the history, importance and principles of preservation.
2. To learn the prospects and scope of fruit and vegetable processing sector.
3. To develop skill of various processing methods.
4. To aware with develop procedure of various fruits and vegetable products.
5. To acquaint with organoleptic evaluation of processed products.
6. To understand technologies of fruit and vegetable processing and its role in providing better quality produce to the consumer .

Module I :

History, importance and scope of preservation of fruits and vegetables, Principles of preservation, Methods of preservation-Physical, Chemical, Fermentation, other methods.

Module II

Role of preservatives, fruit color, flavors, chemicals, salt, sugar and vinegar. Study of containers for packaging of preserved products- Tin cans, Glass containers, plastic and polythene pouches and their advantages and disadvantages.

Module III

Canning of fruits and Vegetables, Drying and Dehydration of fruits and Vegetables Preparation of Juice from Fruits and Vegetables, Squash & cordial. Sensory or organoleptic evaluation of processed products.

Module IV

Preparation of Jam, Jelly and marmalade, Preparation of unfermented fruit beverages, juice Ready to serve (RTS), nectar, Fruit juice powder, fruit juice concentrate. Preparation of preserve and candy from Fruits and Vegetables. Preparation of tomato

products - Tomato juice, Tomato puree and paste , Tomato sauce and ketchup , Tomato chutney , Tomato soup , Tomato chilli sauce.

References :

- Battacharjee, S. K. and De, L. C. 2005. Post Harvest Technology of Flowers and Ornamentals Plants. Ponteer Publisher, Jaipur, India.
- Bhutani RC. 2003. Fruit and Vegetable Preservation. Biotech Books
- Fellows, P. J. 1998. Food Processing Technology: Principles and Practices. Ellis Horwood.
- Hulme, A.C. 1970. Food Science & Technology- A Series of Monograph: The Biochemistry of
- Fruits and their Products (Vol. 1). Academic Press London & New York.
- Jacob, J. P. 2008. A Handbook on Post Harvest Management of Fruits and Vegetables. Daya
- Publishing House, Delhi.
- Kitinoja, L. and Kader, A. A. 2003. Small-Scale Postharvest Handling practice: A Manual for
- Horticulture Crops (4th edt.). US Davis, PHT Research and information Center.
- Mitra, S. K. 1997. Post Harvest Physiology and Storage of Tropical and Sub-tropical Fruits. CAB
- International.
- Ranganna, S. 2017. Handbook of Analysis and Quality Control for Fruit and Vegetable Products (2nd Edt.). McGraw Hill Education.
- Saraswathy, S. 2008. Post harvest Management of Horticultural Crops. Agribios (India).
- Shanmugavelu, K. G., Kumar, N. and Peter, K.V. 2002. Production Technology of Spices and Plantation Crops. Agrobios (India).
- Sharma, N. and Mashkoor, A. M. 1998. Post Harvest Diseases of Horticultural Perishables. International Book Distributing Co., Lucknow.
- Srivastava, R.P. and Sanjeev, K. 2017. Fruit and Vegetable Preservation: Principles and Practices. CBS Publishers & Distributors.
- Stanley, J. K. 1998. Post Harvest Physiology of Perishable Plant Products. CBS, New Delhi.
- Thomposon, A. K. 1996. Post Harvest Technology of Fruits and Vegetables. Blackwell Science.
- Verma, L. R. and Joshi, V. K. 2000. Post Harvest Technology of Fruits and Vegetables (Vol. I & II). Indus Publishing Co., New Delhi

Basic Concepts in Laboratory Techniques

Course Code : VCASAS008

COURSE OBJECTIVES

1. To impart the basic knowledge about safety measures and good laboratory practices.
2. To develop understanding of basics of sterilization techniques.
3. To develop the skills to analyze different methods of preparations of solutions.
4. To impart the knowledge of handling sophisticated laboratory equipment's and instruments

COURSE OUTCOME

Upon successful completion of the course students are able to acquaint knowledge and develop skills of commonly used techniques in laboratory

Module I :

Safety measures while in Lab; Handling of chemical substances; Use of burettes, pipettes, measuring cylinders, flasks, separatory funnel, condensers, micropipettes.

Module II:

Washing, drying and sterilization of glassware; Drying of solvents/ chemicals; Weighing and preparation of solutions of different strengths and their dilution.

Module III:

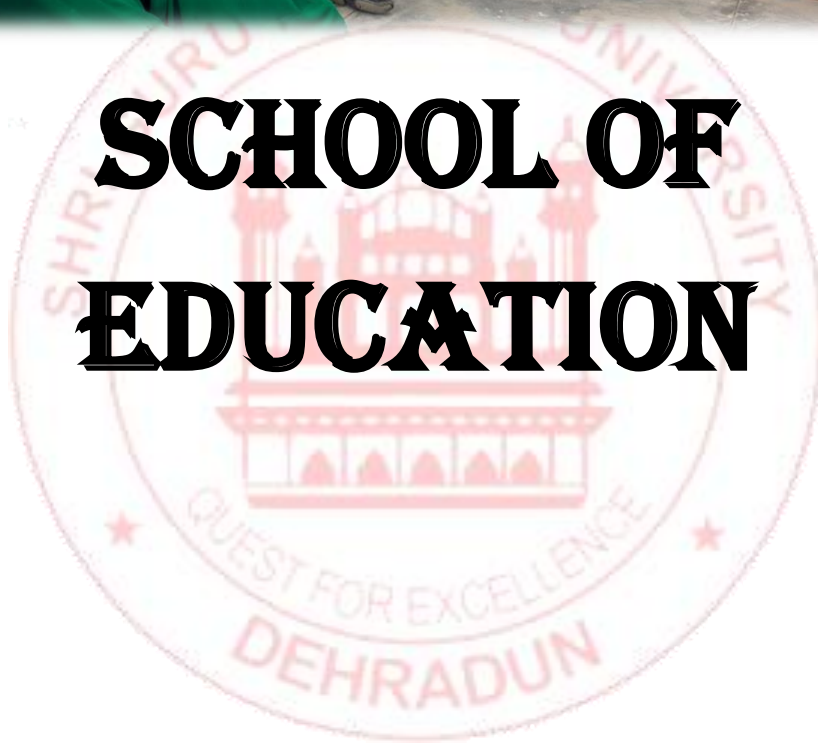
Handling techniques of solutions; Preparation of different agro-chemical doses in field and pot applications; Preparation of solutions of acids; Neutralization of acid and bases; Preparation of buffers of different strengths and pH values.

Module IV:

Use and handling of microscope, laminar flow, vacuum pumps, viscometer, thermometer, magnetic stirrer, micro-ovens, incubators, water bath, Hot air oven, Autoclave, centrifuge, spectrophotometer etc.



SCHOOL OF EDUCATION



Educational Guidance

Course Code : VASOE001

Course Objectives

1. To monitor the academic progress of the students.
2. To acquaint the students with the prescribed curriculum.
3. To identify the academically gifted, backward, creative and other category of special learners.
4. To assist students in getting information about further education.
5. To diagnose the learning difficulties of students and help them overcome the same.

Course Outcome:

1. To understand the concept of educational guidance.
2. To help the student in the adjustment to the school environment, the peer group and the school curriculum.
3. To prepare a plan for rendering guidance services according to the needs of students.
4. To assist the pupils to understand their strengths and weaknesses.
5. To help the students in developing good study habits.
6. To help the children in selection of subjects in accordance with their need, aptitude and interest.
7. To help the pupils in selecting the co-curricular activities.
8. Student will be able to Organisation of guidance services.

Module I: Basics and Principles of Educational Guidance

Introduction to Guidance, Concept, meaning, nature and importance of Guidance, Role of Teachers and Parents in Guiding Children.

Module II: Rationale, Bases, Objectives, Functional and Principles of Educational Guidance

Rational and bases of educational guidance, Purpose and Objectives of Educational Guidance

Module III: Relation between Education and Guidance

Module IV: Organisation of School Educational Guidance Services Components and patterns of educational guidance, Community resources for EG, Prerequisites of a EG programme.

Reference Books:

1. Aggrawal JC (1991): Educational & Vocational Guidance & Counseling, 7th edition, Doaba House, N. Delhi.
2. Bhatagar RP: Guidance & Counseling in Education
3. Gibson Robert & Mitchell Marianne (2005): Introduction to Guidance & Counseling, 6th edition, Prentice Hall of India, N. Delhi.
4. Kochhar SK (1981) Guidance in Indian education, N. Delhi
5. Kochhar SK (1987): Educational & Vocational Guidance in Secondary Schools, Sterling Publishers, N. Delhi.



Communication Skill and Personality Development

Course Code : VASOE002

Course Objectives

1. To understand the concept of personality.
2. To explore various aspects of personality development.
3. To understand the concept of Communication.
4. To acquire knowledge about the body language.
5. To learn about the leadership development.
6. To understand the concept of time management and communication skills.

Course Outcome:

1. Students will be able to understand the Concept of personality
2. Students will know various aspects of personality.
3. Students will be able develop effective communication skill
4. Students will be able to acquire knowledge of body language.
5. Students will be able to learn about the leadership development.
6. Students will be able understand the concept of time management and communication skill.

Module I: Introduction

Meaning and concept of personality, personality traits, Self development, Personality development, Theory related to personality development, Motivation

Module II: Aspects of personality development:

Self image, self concept, self identity, self awareness and components improving self awareness, emotional intelligence and its components, attitude-its meaning, importance and factors affecting attitude, creativity as personality development

Module III: Team work and Leadership development:

Group dynamic, team development, Body language- its types and role, conflict management, anger management, Leadership and importance of developing leadership

Module IV: Mental health and Time management:

Stress- meaning, nature, types, symptoms, causes, Stress management rules, Role of personality development in reducing stress Time management- importance, need and techniques, affect of time management on personality

Module V: Personality skills:

Soft skills, communication skills, interpersonal skills, introduction skills, personal skills, presentation skill, resume wrting, personal interview, mock interview, group discussion

Reference Books:

1. Mangal, S.K. ,Advanced Educational Psychology, PHI Learning Private Limited, New Delhi
2. Lal and Joshi, Educational Psychology and Elementary Statistics, R.Lal Book Depot, Meerut
3. Personality development and soft skill- Goyal Brothers Prakasan
4. Bond M. (1988) Stress and Self Awareness: a Guide.
5. Linda Mendoza, Developing Effective Communication Skills.
6. H. S. Jamadagni, Digital Communication Systems
7. Dwivedi A., Communications skills for professionals and students.



Creative Writing

Course Code : VASOE003

Course Objectives

1. To acquaint the learners with ideas related to creative writing including the art, the craft and the basic skills required for a creative writer
2. To help learners to understand the principles of creative writing and the distinction between the literary genres
3. To explain the differences in writing for various literary and social media
4. To enable learners to put into practice the various forms of creative writing that they have studied through the course

Course Outcome:

1. Distinguish between the literary genres
2. Write for various literary and social media
3. Critically appreciate various forms of literature
4. Make innovative use of their creative and critical faculties
5. Seek employment in various creative fields

Module I: Fundamentals of Creative Writing:

Meaning and Significance of Creative Writing

Genres of Creative Writing: poetry, fiction, non-fiction, drama and other forms

Writing book reviews, product reviews.

Proposal Writing.

Module II: New Trends in Creative Writing

Web Content Writing and Blog Writing

Script Writing

Journalistic Writing/Report writing

Copywriting

Module III: Writing A Project

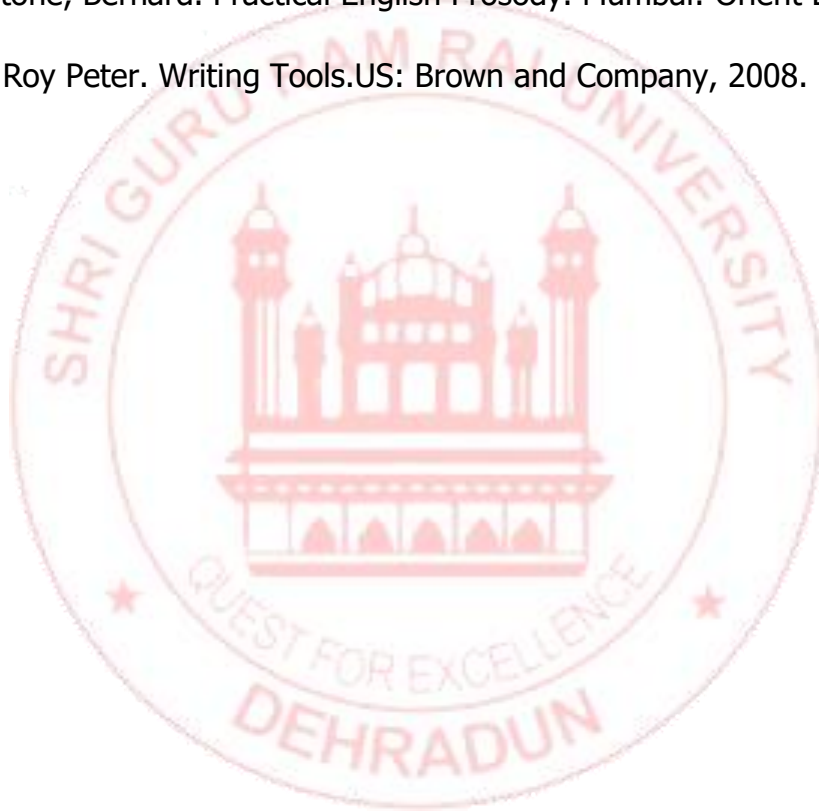
A learner registered for the CWE program is required to undertake a project in an area of Creative Writing of his/her special interest.

The learner will have to prepare a Project which has two components

- (a) Project Proposal and
- (b) Project Report.

Reference Books:

1. Abrams, M.H. Glossary of Literary Terms. Boston: Wadsworth Publishing Company, 2005.
2. Atwood, Margaret. Negotiating with the Dead: A Writer on Writing. Cambridge: CUP, 2002.
3. Bell, James Scott. How to Write Dazzling Dialogue. CA: Compendium Press, 2014.
4. Bell, Julia and Magrs, Paul. The Creative Writing Course-Book. London: Macmillan, 2001.
5. Berg, Carly. Writing Flash Fiction: How to Write Very Short Stories and Get Them Published. *Then Re Publish Them All Together as a Book. Houston: Magic Lantern Press, 2015.
6. Blackstone, Bernard. Practical English Prosody. Mumbai: Orient Longman, 1984.
7. Clark, Roy Peter. Writing Tools. US: Brown and Company, 2008.



Human resource

Course Code : VACSOE004

Course Objectives:/Learning Outcomes :

1. Effectively manage and plan key human resource functions within organizations
2. Examine current issues, trends, practices, and processes in HRM
3. Contribute to employee performance management and organizational effectiveness
4. Problem-solve human resource challenges
5. Develop employability skills for the Canadian workplace
6. Develop effective written and oral communication skills

Module -: I

Human Resource Management - Definition - Objectives - Functions - Scope - Importance - HRM in India - Evolution of HRM - Computer Application in Human Resource Management - Quality of a good Human Resource Managers – Human Resource Planning - Job Analysis, Job description and Job Specification.

Module -II

Recruitment and Selection - Sources of Recruitment - Selection Process - TestTypes - Interview Types - Career Planning - VS Man Power Planning and succession Planning - Career Planning - Process - Career Development – Placement and Induction.

Module III:

Training - Methods of Training - Executive Development - Performance Appraisal - Methods of Performance Appraisal - Transfers - Promotion - Wage & Salary Administration - Wage Boards and Pay Commission - Wage Incentive – Fringe Benefits - Employees Welfare - Safety and Health Measures - GrievanceProcedures - Redressal of Grievances.

Module IV :

Collective - Bargaining - Features - Pre-requisite of Collective Bargaining -Agreement at different levels - Workers Participation in Management – Objectives for Successful Participation.

Reference Books

- Human Resource Management - Dr. C.B. Gupta - Sultan and Sons.
- Personnel & Human Resource Management - P. Subba Rao - Himalaya Publishing House.

- Human Resource and Personnel Management - K. Aswathappa - Tata Mc Graw
- Hill Publishing Co. Ltd.
- Personnel Management & Human Resources - C.S. Venkata Rathnam & B.K. Srivastava. TMPL.
- Dynamics of Industrial Relations - Dr. C.B. Memoria, Dr. Satish Memorian & S.V. Gankar - Himalaya Publishing House.
- Performance Appraisal, Theory and Practice - AIMA - Vikas management Series, New Delhi - 1986.



Morale Education

Course Code : VASOE004

Course Objectives :

1. To Build Character
2. To Instil Ethical Outlook among Students
3. Foster Community
4. Endear Culture among students and enable them to value the wealth of culture available across the world

Course Outcomes :

1. Enabling youth to grow into productive, contributing members of their communities, and anchors of the nation's sustainable development.
2. Equipping youth with the skills they need to become a generation of responsible and resilient people, who know their rights and responsibilities.

Module I: Introduction

- What is Moral Education
- Need content and purpose
- Vedic values
- Character building

Module II: The Self and You

- Understanding the Self-Self awareness, fighting the five evils (lust, anger, attachment, ego and greed), Self growth.
- Personal ethics
- Aspiration v/s ambition, self- seeking v/s selflessness
- Self Discipline

Module III: The Family and You

- Importance of family- the basic unit of human interaction.
- Generation gap
- Relation with peer group, sibling, elders

Module IV: The Society and You

- Social responsibility
- Our rights and duties
- Civic sense
- Opposite sex relations

- Globalization and IT boom - Cellphone menace
- Drug abuse
- Sex abuse

Module V: The Nation and You

- International peace and brotherhood
- Saving the environment

Reference Books

- Ethics and cognitive Science.
- Moral Character
- Moral enhancement.
- Moral states and Processes.

