AXIS INSTITUTE OF HIGHER EDUCATION - KN115

VALUE ADDED COURSES

SESSION : 2021-22

AXIS INSTITUTE OF HIGHER EDUCATION – KN115

Rooma Kanpur

VALUE ADDED COURSE
2021-22

SR.	COURSE CODE	COURSE NAME	DURATION
1	VACIC	Laboratory Safety	35 Hours
2	VACHBS	Health Behavior And Sociology	40 Hours
3	VAC/BBA/21-22/01	Stress Management and Well-being	32 Hours
4	VAC/BBA/21-22/02	Personal Financial Management Skills such as Budgeting and Investing	40 Hours
5	VAC/BBA/21-22/03	Introduction to Public Speaking: Build Confidence in Public Speaking	36 Hours
6	VAC/BCA/21-22/01	Artificial Intelligence with Machine Learning in Java	40 Hours
7	VAC/BCA/21-22/03	Effective Verbal Skills	34 Hours
8	VAC/BCA/21-22/02	Database Programming with SQL	90 Hours

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 Program 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.

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 mold 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 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 program 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 on the regular class hours. The value-added courses may be also conducted during weekends / vacation period. Students will be encouraged to opt for the VAC offered by their Department. 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 duration of value added course is of minimum 30 hours.

DURATION AND VENUE

❖ The duration of value-added course should not be less than 30 hours.

❖ The HOD of the Department shall provide class room/s based on the number of students/batches.

❖ VAC shall be conducted in the respective School itself.

GUIDELINES FOR CONDUCTING VALUE ADDED COURSES

❖ Value Added Course is not mandatory to qualify for any program.

❖ It is a instructor supported learning course open to all students without any added fee.

❖ The value-added courses may be also conducted during weekends / vacation period if required.

❖ 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.

LABORATORY SAFETY
(COURSE CODE : VACLS)

Course Objective:

1. To provide a safe, accessible environment for laboratory personnel to conduct their work
2. To allow for maximum flexibility for safe research and teaching use

Course Outcome:

To minimize the risk of injury or illness to laboratory workers by ensuring that theyhave the training, information and support needed to work safely in the laboratory.

Courses contents:

3. 1. Introduction to general lab safety
4. 2. Administrative controls, orientation and training, standard operating procedures safety signs, procedural controls, housekeeping, Do's and Don'ts in the laboratory.
5. 3. Personal Protective equipment's.
6. 4. Glass ware, glassware inspection, safe handling and storage, working with glassware, vacuum and pressure operations, cleaning and drying glassware, disposal and spill clean-up.
7. 5. Chemical safety, chemical exposure and monitoring, chemical storage guidelines.
8. 6. Cryogenic safety, biological safety, Biological safety levels, safety data sheets for infectious. Clean room safety.
9. 7. Introduction to waste management

List of reference books:

10. 1. Handbook for Laboratory Safety– by By Benjamin R. Sveinbjornsson, SveinbjornGizurarson
11. 2. A Guide To Laboratory Safety And Microscale OrganicLaboratory Techniques- by Kale M

MEDIA AND COMMUNICATION SKILLS

(COURSE CODE : VACAIHE001)

Course Objectives:

1. To bring about the positive Health Behaviour's among the participants.

2. To introduce students to the basic social processes of society, social institutions and patterns of social behaviour.

3. To train students to understand and to interpret objectively the role of social processes, social institutions and social interactions in their lives.

Course Outcomes:

Aim of this course is to train the participants on Health Behaviour and Sociology.

Courses contents:

1. Health Belief Model (HBM)/ Risk Perception
2. Theory of Reasoned Action/ Theory of Planned Behavior
3. Social Cognitive Theory (SCT)/ Self-Efficacy (SE)
4. Trans Theoretical Model (TTM)
5. Motivation and Self-Efficacy; Stress, Coping, and Social Support
6. Self-Determination Theory (SDT)
7. Motivational Interviewing
8. Behavior Modification
9. Goal Setting, Attributions, Self-Regulation
10. Building Conceptual Frameworks

List of reference books:

1. Health Behavior: Theory, Research, and Practice - by Karen Glanz, Barbara K.Rimer, K. Viswanath
2. Theoretical Foundations of Health Education and Health Promotion - by ManojSharma
3. Introduction to Community and Public Health - by Manoj Sharma, PaulW. Branscum, Ashutosh Atr

Stress Management and Well-being

(COURSE CODE : VAC/BBA/21-22/01)

Course Objective:

This course aims to provide students with strategies and techniques for managing stress and promoting overall well-being. It covers the psychological and physiological aspects of stress, coping mechanisms, and practices for enhancing mental and physical health.

Course Outcomes:

By the end of this course, students will be able to:

1. Understand the causes and effects of stress on mental and physical health.
2. Identify personal stressors and apply effective stress management techniques.
3. Develop coping strategies to handle stress and prevent burnout.
4. Implement practices to enhance overall well-being and resilience.
5. Create a personalized stress management and well-being plan.

Module 1: Understanding Stress and Its Impact (8 Hours)

1. **Lecture 1:** Introduction to Stress: Definition and Types
2. **Lecture 2:** The Physiology of Stress: The Stress Response and Its Effects
3. **Lecture 3:** Psychological and Emotional Impact of Stress
4. **Lecture 4:** Identifying Personal Stressors: Sources and Triggers
5. **Lecture 5:** Stress and Its Impact on Health: Physical and Mental Health Consequences
6. **Lecture 6:** Measuring Stress: Tools and Techniques for Self-Assessment
7. **Lecture 7:** Workshop: Identifying Personal Stressors and Responses
8. **Lecture 8:** Case Studies: Analyzing Stress Impact and Outcomes

Module 2: Stress Management Techniques (8 Hours)

1. **Lecture 1:** Cognitive-Behavioral Techniques for Stress Management
2. **Lecture 2:** Relaxation Techniques: Deep Breathing, Progressive Muscle Relaxation
3. **Lecture 3:** Mindfulness and Meditation Practices for Stress Reduction
4. **Lecture 4:** Time Management Strategies to Reduce Stress
5. **Lecture 5:** Developing Healthy Lifestyle Habits: Exercise, Nutrition, and Sleep
6. **Lecture 6:** Setting Boundaries and Managing Work-Life Balance
7. **Lecture 7:** Coping with Stress in the Workplace: Strategies and Tools
8. **Lecture 8:** Workshop: Practicing Stress Management Techniques

Module 3: Enhancing Well-being and Resilience (8 Hours)

1. **Lecture 1:** Understanding Well-being: Components and Theories

2. **Lecture 2:** Building Resilience: Psychological and Emotional Strategies
3. **Lecture 3:** Positive Psychology and its Application to Well-being
4. **Lecture 4:** Developing Healthy Relationships and Social Support Systems
5. **Lecture 5:** Goal Setting and Personal Growth: Strategies for a Fulfilling Life
6. **Lecture 6:** Work-Life Integration: Balancing Personal and Professional Life
7. **Lecture 7:** Utilizing Hobbies and Leisure Activities for Stress Relief
8. **Lecture 8:** Workshop: Creating a Personal Well-being Plan

Module 4: Application and Continuous Improvement (8 Hours)

1. **Lecture 1:** Implementing a Stress Management Plan: Key Components and Strategies
2. **Lecture 2:** Monitoring and Evaluating Stress Management Progress
3. **Lecture 3:** Adjusting Strategies: Adapting to Changing Circumstances and Needs
4. **Lecture 4:** Creating Support Networks and Seeking Professional Help
5. **Lecture 5:** Promoting a Stress-Resilient Culture: Workplace and Community Approaches
6. **Lecture 6:** Case Studies: Successful Stress Management and Well-being Practices
7. **Lecture 7:** Workshop: Developing and Presenting a Comprehensive Stress Management Plan
8. **Lecture 8:** Course Key takeaways

Personal Financial Management Skills: Budgeting and Investing
(COURSE CODE : VAC/BBA/21-22/02 **)**

Course Objective:

This course aims to equip students with essential personal financial management skills, focusing on budgeting, saving, and investing. It covers fundamental principles of financial planning, investment strategies, and tools to help students achieve financial stability and growth.

Course Outcomes:

By the end of this course, students will be able to:

1. Develop and manage a personal budget effectively.
2. Understand and apply savings strategies for short-term and long-term goals.
3. Explore various investment options and develop an investment plan.
4. Analyze financial statements and make informed financial decisions.
5. Implement strategies for debt management and financial growth.

Module 1: Introduction to Personal Financial Management (6 Hours)

1. **Lecture 1:** Overview of Personal Financial Management: Importance and Objectives
2. **Lecture 2:** Key Concepts: Assets, Liabilities, Income, and Expenses
3. **Lecture 3:** Financial Goals: Setting SMART Financial Goals
4. **Lecture 4:** Understanding Financial Statements: Income Statement and Balance Sheet
5. **Lecture 5:** Assessing Your Financial Health: Tools and Techniques
6. **Lecture 6:** Workshop: Analyzing Personal Financial Statements

Module 2: Budgeting and Expense Management (10 Hours)

1. **Lecture 1:** Principles of Budgeting: Creating and Maintaining a Budget
2. **Lecture 2:** Budgeting Techniques: Zero-Based Budgeting, Envelope System
3. **Lecture 3:** Tracking Expenses: Tools and Apps for Expense Management
4. **Lecture 4:** Identifying and Reducing Unnecessary Expenses
5. **Lecture 5:** Creating a Savings Plan: Emergency Fund and Savings Goals
6. **Lecture 6:** Evaluating and Adjusting Your Budget: Regular Review and Modification
7. **Lecture 7:** Workshop: Developing a Personal Budget and Savings Plan
8. **Lecture 8:** Case Studies: Successful Budgeting Practices

Module 3: Saving and Debt Management (8 Hours)

1. **Lecture 1:** Importance of Saving: Short-Term vs. Long-Term Savings
2. **Lecture 2:** Savings Accounts: Types and Benefits
3. **Lecture 3:** Strategies for Effective Saving: Automated Savings, High-Interest Accounts
4. **Lecture 4:** Understanding Debt: Types of Debt and Their Impact

5. **Lecture 5:** Strategies for Managing and Reducing Debt: Snowball and Avalanche Methods
6. **Lecture 6:** Credit Scores and Reports: Understanding and Improving Your Credit Rating
7. **Lecture 7:** Workshop: Creating a Debt Management and Savings Plan
8. **Lecture 8:** Case Studies: Debt Reduction Success Stories

Module 4: Investing Fundamentals (10 Hours)

1. **Lecture 1:** Introduction to Investing: Why and How to Invest
2. **Lecture 2:** Types of Investments: Stocks, Bonds, Mutual Funds, ETFs
3. **Lecture 3:** Risk and Return: Understanding Investment Risk
4. **Lecture 4:** Diversification and Asset Allocation: Principles and Strategies
5. **Lecture 5:** Investment Accounts: Brokerage Accounts, Retirement Accounts (401(k), IRA)
6. **Lecture 6:** Analyzing Investment Opportunities: Research and Evaluation Techniques
7. **Lecture 7:** Developing an Investment Plan: Setting Investment Goals and Strategies
8. **Lecture 8:** Workshop: Creating a Personal Investment Plan

Module 5: Advanced Financial Strategies and Planning (8 Hours)

1. **Lecture 1:** Tax Planning: Understanding Taxes and Tax-Advantaged Accounts
2. **Lecture 2:** Retirement Planning: Preparing for Financial Security in Retirement
3. **Lecture 3:** Estate Planning: Basics of Wills, Trusts, and Estate Taxes
4. **Lecture 4:** Insurance and Risk Management: Types of Insurance and Their Role
5. **Lecture 5:** Financial Planning for Major Life Events: Education, Buying a Home, etc.
6. **Lecture 6:** Long-Term Financial Planning: Creating and Adjusting a Financial Plan
7. **Lecture 7:** Workshop: Comprehensive Financial Plan Development
8. **Lecture 8:** Course Key takeaways

Introduction to Public Speaking: Build Confidence in Public Speaking
(COURSE CODE : VAC/BBA/21-22/03 **)**

Course Objective:

This course is designed to help students build confidence and competence in public speaking. It covers the fundamentals of effective communication, speech preparation, delivery techniques, and audience engagement strategies.

Course Outcomes:

By the end of this course, students will be able to:

1. Develop and organize speeches effectively.
2. Deliver speeches with confidence and clarity.
3. Utilize vocal techniques and body language to enhance presentations.
4. Engage and interact with audiences effectively.

Handle public speaking challenges and receive feedback constructively.

Module 1: Fundamentals of Public Speaking (8 Hours)

1. **Lecture 1:** Introduction to Public Speaking: Importance and Objectives
2. **Lecture 2:** Overcoming Stage Fright: Techniques for Building Confidence
3. **Lecture 3:** Understanding Your Audience: Analyzing and Tailoring Content
4. **Lecture 4:** Structuring Your Speech: Introduction, Body, and Conclusion
5. **Lecture 5:** Crafting a Compelling Message: Clarity, Persuasiveness, and Engagement
6. **Lecture 6:** Workshop: Developing a Speech Outline and Key Messages
7. **Lecture 7:** Case Studies: Analyzing Effective Speeches and Presentations

Module 2: Speech Preparation and Practice (8 Hours)

1. **Lecture 1:** Researching and Organizing Content: Finding and Structuring Information
2. **Lecture 2:** Writing and Refining Your Speech: Drafting and Editing Techniques
3. **Lecture 3:** Using Visual Aids: Designing and Incorporating Slides and Graphics
4. **Lecture 4:** Rehearsing Your Speech: Techniques for Practice and Improvement
5. **Lecture 5:** Time Management: Pacing Your Speech and Managing Duration
6. **Lecture 6:** Workshop: Practicing and Refining Prepared Speeches
7. **Lecture 7:** Peer Feedback: Providing and Receiving Constructive Criticism

Module 3: Delivery Techniques and Audience Engagement (10 Hours)

1. **Lecture 1:** Vocal Techniques: Volume, Pitch, Tone, and Pace
2. **Lecture 2:** Body Language: Gestures, Eye Contact, and Facial Expressions
3. **Lecture 3:** Managing Nerves and Maintaining Composure
4. **Lecture 4:** Engaging the Audience: Interactive Techniques and Audience Participation
5. **Lecture 5:** Handling Questions and Feedback: Techniques for Effective Interaction

6. **Lecture 6:** Using Humor and Anecdotes to Enhance Your Speech
7. **Lecture 7:** Adapting to Different Speaking Environments: Formal and Informal Settings
8. **Lecture 8:** Workshop: Delivering Speeches and Receiving Feedback
9. **Lecture 9:** Practice Session: Speaking in Varied Scenarios

Module 4: Advanced Public Speaking Strategies (10 Hours)

1. **Lecture 1:** Persuasive Speaking: Techniques for Convincing and Influencing
2. **Lecture 2:** Impromptu Speaking: Strategies for Thinking on Your Feet
3. **Lecture 3:** Storytelling: Using Stories to Illustrate Points and Engage the Audience
4. **Lecture 4:** Effective Use of Technology: Clickers, Microphones, and Presentation Software
5. **Lecture 5:** Managing Difficult Situations: Handling Disruptions and Challenges
6. **Lecture 6:** Creating a Personal Speaking Style: Developing Your Unique Voice
7. **Lecture 7:** Preparing for Different Speaking Opportunities: Keynotes, Panels, and Workshops
8. **Lecture 8:** Workshop: Advanced Speech Delivery and Practice
9. **Lecture 9:** Course Key takeaways

Artificial Intelligence with Machine Learning in Java

(COURSE CODE : VAC/BCA/21-22/01 **)**

Course Objective:
- To provide a foundational understanding of AI and ML concepts.
- To offer hands-on experience with Java-based AI and ML tools.
- To enable students to apply AI and ML algorithms in real-world scenarios.

Course Outcomes:
- Students will grasp the basic principles of AI and ML.
- Students will gain practical experience in implementing AI and ML algorithms using Java.
- Students will be able to develop AI-based applications and models.

Course Modules: As mentioned on Oracle Academy portal

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