ANNAMALAI UNIVERSITY

Annamalainagar – 608 002

VALUE ADDED COURSES

Offered By

DEPARTMENT OF BUSINESS ADMINISTRATION

Five Year (CBCS Integrated) Programme
For Faculty of Arts

(2019 - 2020)

SYLLABUS

Even Semester   **19BVAC211 : SMALL BUSINESS MANAGEMENT**   **Credits: 2**
Hours: 60

Learning Objectives:

The objectives of this course is

LO 1 To impart knowledge in project management tools and techniques practiced in a project.

LO 2 To provide exposure in the methods adopted in identifying a new project and to know the difference between pre-feasibility and feasibility study.

LO 3 To understand the role of entrepreneur in the Indian context and   to expose to the importance of small scale industry.

Course outcomes:

Upon completion of the course, students will be able to

CO 1 Generate new methods to identify a project.

CO 2 Analyse the project organization structure.

CO 3 Critically evaluate the reasons for the sickness in small scale industry.

Unit–I Project Planning (14 hrs)

Definition of project – Classifications of projects – Importance – Scope – Project Identification – Idea generation and Screening – Project selection and Planning – Project Formulation – Project life cycle – Project Organisation – Roles and Responsibilities of project manager – Managing project team.

Unit–II Project Feasibility and Project Finance and Evaluation (12 hrs)

Pre–feasibility study – Market and Demand analysis – Feasibility Study: Technical – Commercial – Environmental – Socio economic – Managerial and Financial analysis – Detailed Project Report – Resource Survey – Selection of plant location – Project contracts – Insurance for projects – Project Implementation.

Estimating project time and cost – Cost of capital – Source of finance – Cost control – Project Scheduling and Monitoring – Project Information System and Documents – Project Report – Social Cost Benefit Analysis – Project Evaluation and Performance Review Techniques.

Unit–III   Introduction to Entrepreneur (10 hrs)

Definition – Concept – Classification and types of entrepreneurs – Entrepreneurial Traits – Need and Important – Roles and Responsibilities of Entrepreneurs in Indian business context – Entrepreneurial Motivation – Entrepreneurial Development Programme: Role and objectives of the programme – Contents – Institutions aiding Entrepreneurs – Central and State level Institutions.

Unit–IV Entrepreneurship Environment and Challenges (10 hrs)

Entrepreneurship environment: Social – Cultural – Political – Natural – Geographic – Technological – Economic Environment and its impact on Entrepreneurship – Factors affecting entrepreneurial growth – Globalization and its challenges – Steps to face global challenges – Strategies for the development of women entrepreneurs.

Unit–V Small Business Management (14 hrs)

Small Enterprises – Definition – Classification – Characteristics – Ownership Structures – Steps involved in setting up a small business – Identifying and selecting a good Business opportunity – Market potential analysis – Marketing methods: Pricing and Distribution methods. Sickness in small Business: Concept – Magnitude – Causes and Consequences – Corrective Measures – Government Policy on Small Scale Enterprises – Growth Strategies in small industry: Expansion – Diversification – Joint Venture – Merger and Sub Contracting.

Text books:
1. Prasanna Chandra, Projects, Tata Mcgraw hill, Newdelhi, 2007
2. Khanka.S.S, Entrepreneurial Development, S.Chand& company, Nwedelhi, 2008.

Supplementary readings:
1. Clifford F. Gray and ErikW.Larson, Project management, Tata Mcgraw hill, Newdelhi,20007.
2. Nagarajan.K, Project Management, New Age International publishers, Newdelhi, 2007.
3. Robert D Hisrich, Michael P.Petersand Dean A. Shepherd, Entrepreneurships, Tata Mcgraw hill, Newdelhi,2007.
4. Vasant Desai, Dynamics of Entrepreneurial Development and Management, Himalayas publishing house, Newdelhi, 2008.

Outcome Mapping

PO/CO	Programme Outcomes												Programme Specific Outcomes							
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8
CO1								√					√							√
CO2										√						√				
CO3	√									√							√			√
CO4				√										√						
CO5												√								√
CO6								√										√		

Learning Objective:

LO 1 Studies core statistical techniques; data retrieval, analysis and mining;

LO 2 Decision modeling to effectively persuade in the project-oriented world of data-driven decisions.

LO 3 To understand the purpose of using business analysis tools within an organization, dataset for making a business decisions and R studio for data analysis.

Course Outcome

Upon completion of this course, the student will have the ability to

> **CO 1 Critically analyze the business problems especially solves business problems.**
>
> **CO 2 Recognize, understand and apply the language, theory and models of the field of business analytics**
>
> **CO 3 Students can able to understand the applications of business analytics.**
>
> **CO 4 They have get ideas on data visualization and time series analysis.**
>
> **CO 5 Compare the application of using R statistics**

UNIT I Introduction to Business Analytics and Big Data (14 hrs)

Business Analytics – Definition - Need – Scope - A categorization of Analytical Methods – Analytics in action – Big data – Business analytics in practice – types of data – modifying data in excel – creating Distributions from data– measures of location

UNIT II   Application of Business Analytics (10 hrs)

Machine Learning - Introduction and Concepts - Differentiating algorithmic and model based frameworks, Decision analytics. Descriptive analytics - Predictive analytics - Prescriptive analytics.

UNIT III Decision support and Data Visualisation (10 hrs)

DSS- Executive and enterprise support- Automated decision support - Web analytics- Data mining -Applied artificial intelligence - Visual analysis: Data concepts – Data Dashboards - Data exploration & visualization - Scorecards

UNIT IV Time Series and Forecasting (14 hrs)

Time series pattern – forecasting accuracy – moving averages and exponential smoothing - using regression analysis for forecasting – determining the best forecasting model to use - building good spreadsheet model – What-If analysis – some useful excel functions for modeling – auditing spreadsheet model – a simple maximization problem.

UNIT V   Data Analysis using R (12 hrs)

R Studio: Introduction – R data types and objects, reading and writing data - Data structures in R - R programming fundamentals - Advantages and disadvantages of using R.

Text Books

1) **Majid Nabavi, David L.Olson, Introduction to Business Analytics, Business Expert Press, 2018**
2) **Umesh R Hodeghatta and Umesha Nayak,** *Business Analytics Using R - A Practical Approach-* **Apress, 2017.**

Supplementary Readings

1) **Jeffery D.Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann, David R. Anderson, Essentials of Business Analytics, Cengage Learning, 2015**
2) **Sandhya Kuruganti, Business Analytics: Applications To Consumer Marketing, McGraw Hill, 2015**
3) **Bernard Marr, Big Data: Using Smart Big Data, Analytics and Metrics to Make Better Decisions and Improve Performance, Wiley, 2015**

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CO1			√					√					√							√
CO2										√										√
CO3	√									√							√			√
CO4				√										√						
CO5										√										√
CO6								√										√		

Even Semester **19BVAC213: E-GOVERNANCE AND CYBER LAW** **Credits: 2**
Hours: 60

Learning Objective

The objective of the course is

LO1:   To introduce the cyber world and cyber law in general
LO2:   To explain about the various facets of cyber crimes
LO3:   To enhance the understanding of problems arising out of online transactions and provoke them to find solutions
LO4:   To clarify the Intellectual Property issues in the cyber space and the growth and development of the law in this regard,
LO5:   To educate about the regulation of cyber space at national and international level.

Course Outcome
After completing the course, students will be familiar with
CO1:   Understanding concepts related to cyber world and cyber law in general
CO2:   Develop competitive edge on various facets of cyber crimes
CO3:   Problems arising out of online transactions and provoke them to find solutions
CO4:   Intellectual property issues in the cyber space and the growth and development of the law
CO5:   Regulation of cyber space at national and international level.
CO6:   Upholding ethical standards in cyber laws and intellectual property issues

Unit-1   Introduction to Web Technology (12 h)
Introduction, Computers and its Impact in Society, Overview of Computer and Web Technology, Need for Cyber Law, Cyber Jurisprudence at International and Indian Level – Introduction to e-governance, techniques, e-governance in India, Challenges faced, Indian theory of Public administration

Unit-2   International Cyber Law (12 h)
Cyber Law - International Perspectives, UN & International Telecommunication Union (ITU) Initiatives, Council of Europe - Budapest Convention on Cybercrime, Asia-Pacific Economic Cooperation (APEC), Organization for Economic Co-operation and Development (OECD), World Bank, Commonwealth of Nations

Unit-3 Cyber Crimes & Legal Framework (12 h)
Concepts of Cyber Crimes & Legal Framework, Cyber Crimes against Individuals, Institution and State, Hacking, Digital Forgery, Cyber Stalking/Harassment, Cyber Pornography, Identity Theft & Fraud, Cyber terrorism, Cyber Defamation, Different offences under IT Act, 2000

Unit-4 Dispute in Cyberspace (12 h)
Dispute Resolution in Cyberspace 1.Concept of Jurisdiction 2. Indian Context of Jurisdiction and IT Act, 2000. 3. International Law and Jurisdictional Issues in Cyberspace. 4. Dispute Resolutions

Unit-5 Ethics and Business (12 h)
Moral & ethical dilemmas. Ethics and Business: A sense of business ethics. Ethics and International Business: Ethics Issues beyond borders. "Current Streams of Thought".

Text Books
1. Satyanarayana.J, E Government: The Science of the Possible, PHI Learning Pvt. Ltd.. (2012)
2. SudhirNaib, The Information Technology Act, 2005: A Handbook, OUP, New York, (2011)

Supplementary Readings
1. Verma S, K, Mittal Raman, Legal Dimensions of Cyber Space, Indian Law Institute, New Delhi, (2004)
2. S. R. Bhansali, Information Technology Act, 2000, University Book House Pvt. Ltd., Jaipur (2003).
3. Vasu Deva, Cyber Crimes and Law Enforcement, Commonwealth Publishers, New Delhi, (2003)

Outcome Mapping

PO/CO	Programme Outcomes												Programme Specific Outcomes							
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8
CO1													√							
CO2																√				
CO3	√																√			
CO4				√										√						
CO5																				√
CO6								√										√		

Odd Semester   **19BVAC311: MACHINE LEARNING**   **Credits: 2**
                                                              Hours: 60

Learning Objective
The objective of the course is
LO1: To understand the basic theory underlying machine learning.
LO2: To be able to formulate machine learning problems corresponding to different applications.
LO3: To understand a range of machine learning algorithms along with their strengths and weaknesses.
LO4: To be able to apply machine learning algorithms to solve problems of moderate complexity.
LO5: To apply the algorithms to a real-world problem, optimize the models learned and report on the expected accuracy that can be achieved by applying the models.

Course Outcome
After completing this course, the student will be able to
CO1: Appreciate the importance of visualization in the data analytics solution
CO2: Apply structured thinking to unstructured problems
CO3: Understand a very broad collection of machine learning algorithms and problems
CO4: Learn algorithmic topics of machine learning and mathematically deep enough to introduce the required theory
CO5: Develop an appreciation for what is involved in learning from data.

Unit-1   Introduction (12 h)
Learning Problems – Perspectives and Issues – Concept Learning – Version Spaces and Candidate Eliminations – Inductive bias – Decision Tree learning – Representation – Algorithm – Heuristic Space Search.

Unit-2   Neural Networks and Genetic Algorithms (12 h)
Neural Network Representation – Problems – Perceptrons – Multilayer Networks and Back Propagation Algorithms – Advanced Topics – Genetic Algorithms – Hypothesis Space Search – Genetic Programming – Models of Evalution and Learning.

Unit-3   Bayesian and Computational Learning (12 h)
Bayes Theorem – Concept Learning – Maximum Likelihood – Minimum Description Length Principle – Bayes Optimal Classifier – Gibbs Algorithm – Naïve Bayes Classifier – BayesianBelief Network – EM Algorithm – Probability Learning – Sample Complexity – Finite and Infinite Hypothesis Spaces – Mistake Bound Model.

Unit-4   Instant Based Learning (12 h)
K- Nearest Neighbour Learning – Locally weighted Regression – Radial Bases Functions – Case Based Learning.

UNIT-5   Advanced Learning (12 h)
Learning Sets of Rules – Sequential Covering Algorithm – Learning Rule Set – First Order Rules – Sets of First Order Rules – Induction on Inverted Deduction – Inverting Resolution – Analytical Learning – Perfect Domain Theories – Explanation Base Learning – FOCL Algorithm – Reinforcement Learning – Task – Q-Learning – Temporal Difference Learning. **"Current Streams of Thought".**

Text Books
1. **Marco Gori ,** *Machine Learning: A Constraint-Based Approach***, Morgan Kaufmann. 2017**
2. **Ethem Alpaydin, Machine Learning: The New AI, MIT Press-2016**

Supplementary Readings
1. **Ryszard S. Michalski, Jaime G. Carbonell and Tom M. Mitchell,** *Machine Learning: An Artificial Intelligence Approach, Volume 1,* **Elsevier. 2014**
2. **Machine Learning: An Algorithmic Perspective, Stephen Marsland, Taylor & Francis 2009**
3. **Machine Learning – Tom M. Mitchell, - MGH 2009**

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CO1	√												√							
CO2														√						
CO3		√											√							
CO4											√							√		
CO5																			√	
CO6		√																		√

Odd Semester **19BVAC312: BLOCK CHAIN TECHNOLOGY** **Credits: 2**
Hours: 60

Learning Objectives

> The Objective of this course is
>> LO1.   To assess blockchain applications in a structured manner.
>> LO2.   To impart knowledge in block chain techniques and able to present the concepts clearly and structured.
>> LO3.   To get familiarity with future currencies and to create own crypto token.

Course Outcomes

Upon completion of this course the students will be able to

> CO1. Understand the various technologies and its business use.
> CO2. Analyse the block chain applications in a structure manner.
> CO3. Explain the modern concepts of block chain technology systematically.
> CO4. Handle the cryptocurrency.
> CO5. Understand the modern currencies and its market usuage.

Unit–I : Basic Concepts– No. of Hours - 12
Introduction - Decentralized society - Disturbed Database, Byzantine General problem - Fault tolerance, Hadoop Distributed File System, Distributed Hash Table, ASIC resistance, Turing Complete - P2P network - Private key - Public key - Cryptography - Hash Function - Digital Signature - ECDSA - Memory Hard Algorithm - Zero Knowledge Proof.

Unit–II : Block Chain - No. of Hours – 12
Introduction - Advantage over conventional distributed database - Network and protocols - Block chain network - Mining - Mechanism - Life Cycle of Block chain - Distributed consensus - Merkle Patricia Tree - Gas Limit - Transactions and Fee - Anonymity - Reward - Chain policy- Life of Block chain applications -Soft and Hard Fork - Private and Public blockchain.

Unit–III : Distributed Consensus - No. of Hours - 12
Nakamoto consensus - Proof of work - Proof of Stake - Proof of Burn - Difficulty level - Sybil Attack - Energy Utilization and alternate - Fabric model - SDKs - Components of Fabric Model - Architecture of Hyperledger fabric.

Unit–IV: Cryptocurrency - No. of Hours - 12

History - Distributed ledger - Bitcoin protocols - Mining strategy and rewards - Ethereum - construction - Truffle - DAO - dApps - Smart Contract - Boot strapping - GHOST Vulnerability - Attacks - Sidechain - Namecoin.

Unit–V : Cryptocurrency Regulations - No. of Hours - 12

Stakeholders - Roots and Bitcoin - Legal Aspects - Crypto currency exchange - Black market and Global economy. Applications : IoT - Medical Record Management system - Domain Name Service and future of Blockchain - Business applications and assessing blockchain projects.

Text Books

1. Daniel Drescher, Block chain basics A non-technical introduction in 25 steps, Apress , 2017.
2. Paul Vigna & Michael J.Casey, The Age of Cryptocurrency, 2015.

Supplementary Readings

1. Antonopoulos, Mastering Bitcoin : Unlocking Digital Cryptocurrencies.
2. Satosh Nakamoto, Bitcoin : A peer-to-peer electronic Cash system.
3. Mastering Blockchain - Imar Bashir - Second edition - Packt - 2018.

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CO1	√												√							
CO2														√						
CO3		√											√							
CO4											√								√	
CO5																			√	

Odd Semester **19BVAC313: SUSTAINABLE DEVELOPMENT** **Credits: 2**
Hours: 60

Learning Objectives
        The objective of this course is
LO1   : **Understand the basic concept of sustainable management the environmental, social and economic dimensions.**
LO2   : **Know the history of the sustainable development idea.**
LO3   : **Be able to discuss the conflicts which are involved in the SD concept on the national as well as on the global scale.**
LO4   : **Be familiar with potential strategic options for SD (efficiency, sufficiency).**
LO5   : **Be able to discuss the (dis-) advantages of instruments for SD.**
LO6   : **Understand the SD challenge for companies their responsibility and their potentials for action.**

Course Outcomes
Upon completion of the course students will be able to
        CO1 Further develop the ability of students to integrate and make autonomous use of their knowledge to sustain the environment.
        CO2 Develop the students ability to deal with complex phenomena, issues and situations of sustainable development.
        CO3 Develop the students potential towards, sustain the environment for professional activities that demand considerable autonomy or for research and development work.
        CO4 Develop the ability of students to integrate various management concepts and procedures to sustain the environment with minimum cost.
        CO5 Understand the role of corporate in environment sustainability.
        CO6 Understand the role of various national and international organisation in sustainable development.

Unit-I: Introduction Fundamentals of Environment (14 h)
        Status of environment - Environmental, social and economical issues - Need for sustainability - Nine ways to achieve sustainability - Linkage between population, resources, development and environment.

Unit -II Sustainable Concept (10 h)
        Concept of sustainability - factors governing sustainable development-linkages among sustainable development - Environment and poverty - Determinants of sustainable development.
Unit - III Sustainable Development Goals (10h)
        UN sustainable development goals -causes and potential consequences of climate change and their relationship to SDG. Environmental finance - Eco marketing - green advertisement - organic products - issues in marketing of organic products - Eco -tourism - Natural resource conservation and management.
Unit – IV Organisational Social Responsibility (12hr)
        Corporate / Organisation Social Responsibility - sustainability strategy development - management tools for sustainable development - sustainable / ethical investment accounts - sustainable product development and design - conflict between farming and the environment.

Unit – V Organisations in SD (14 h)

Environmental impact assessment - participants in environmental management - approaches to environmental management - approaches to environmental management - emerging environmental issues - Role of international organisations, national and local governments, environmental organisation industry and commerce and non-government organisation.

Text Books
1. "Sustainable Development: Linking Economy, Society, Environment" by Tracey Strange and Anne Bayley, Himalaya Publication, Mumbai 2004.
2. "Innovation for Sustainable Development" by Jean - Yves Grosclaude and Rajendra K. Pachauri , Sultan Chand & Sons, New Delhi, 2011.

Supplementary Readings
1. "Engineering Applications in Sustainable Design and Development" by Bradley Striebi, New Delhi, Prentice Hall of India, 2003.
2. "Ecology and Sustainable Development" by P.S. Ramakrishnan, Sultan Chand & Sons, New Delhi, 2013.
3. "Management of Resources for Sustainable Development" by Sushma Goel, PHI Learning, New Delhi, 2008.

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PO/ CO	Programme Outcomes													Programme Specific Outcomes						
	PO 1	PO 2	PO 3	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO1		✓												✓						
CO2																	✓			
CO3										✓		✓								
CO4																	✓			
CO5									✓						✓					
CO6							✓													