



Chowgule Education Society's
**Parvatibai Chowgule College of Arts and Science
(Autonomous)**

Accredited by NAAC with Grade 'A+'
Best Affiliated College-Goa University Silver Jubilee Year Award



MINUTES OF MEETING OF THE BOARD OF STUDIES IN ECONOMICS

HELD ON 15th APRIL, 2023 at

**Parvatibai Chowgule College of Arts & Science
(Autonomous) Margao – Goa.**

Vide Chowgule College notice F.133(C)/36 dated 3rd April 2023 a meeting of this B.O.S. was convened on 15th April 2023 at 10:00 a.m. through online Google Meet, Parvatibai Chowgule College of Arts & Science, Autonomous, Margao – Goa. Since the number of members joined online represented the Quorum, the B.O.S. began its proceedings.

Members present:

1. Ms. Rupali Tamuly
2. Mr. Ramu P. Pagi
3. Ms. Pooja Gaonkar
4. Ms. Parvin Koppal
5. Ms. Kavya Sudarsan
6. Dr. Malati Roy
7. Dr. Meenakshi Bawa
8. Dr. Aparna Lolayenkar
9. Ms. Swara Naik

Member Absent with Intimation

1. Abhijit Chatterjee



Proceedings

The Chairperson welcomed the members of the Board of Studies (B.O.S.). The Chairperson introduced and explained the agenda for the meeting and read out the minutes of the previous B.O.S meeting. The meeting proceeded with the following agenda.

Agenda Items:

1. To approve the courses for S.Y.B.A. & T.Y.B.A. under Autonomy.
2. To appraise the New Course structure as per the new U.G.C. guidelines based on N.E.P.
3. To approve the list of Courses under the Nomenclatures, Discipline Core, Skilled Enhancement Course (S.E.C.), Value Added Course (V.A.C.), and Multidisciplinary Course (MDC).
4. To approve the syllabi of Semester I and II courses under the New UGC-NEP Course Structure.
5. A.O.B



PART A: The BOS passed the resolutions as follows:

1. Approval of the course syllabus for S.Y.B.A. & T.Y.B.A. under Autonomy (Annexure A)

- i. The Chairperson, Ms Rupali Tamuly, presented the syllabus of Human Resource Management, which will be offered under Autonomy as a G.E.C. course for Semesters III and IV instead of Gandhian Economic Thought, and B.O.S. members approved the same.
As a practical component, B.O.S. suggested:
 - a. Internship in Human Resource department of company/ organization.
 - b. One continuous assessment based on the case study of Human Resource functioning of a company/ organization.
 - c. Lecture Series by inviting H.R. officials from the company/ organization.
- ii. The syllabus of the course 'Introduction to Health Economics' will be offered as an elective course for semester V instead of Microeconomic Analysis, and B.O.S. members approved the same.
- iii. The syllabus of the course 'Introduction to Data Science' will be offered as an elective course for semester VI instead of Macroeconomic Analysis, and B.O.S. members approved the same.
- iv. Syllabus in the course Introduction to Experimental Economics is deferred for the next B.O.S.

2. Approval of the list of Courses under the Nomenclatures, Discipline Core, Skilled Enhancement Course (S.E.C.), Value Added Course (V.A.C.), and Multidisciplinary Course (MDC) (Annexure B)

The chairperson presented the list of nomenclatures approved as per the new U.G.C. guidelines based on NEP: Discipline Core, Skill Enhancement Course, Value Added Course, and Multidisciplinary Course. The course codes were also discussed. BOS resolved to approve the nomenclatures.



3. Approval of the syllabi of Semester I and II courses under the New UGC-NEP Course Structure (Annexure C)

- The syllabus of the following courses was presented for the Semester I and II
- The chairman presented the syllabus of the courses covering: Discipline Core, Skill Enhancement Course, Value Added Course, and Multidisciplinary Course.
 - o Core courses: Microeconomics-I for Semester I, Economics of Growth and Development for Semester II.
 - o MDC courses: Financial Investment for All and Natural Resource Economics for Semester I, Taxation for All for Semester II, and Transport Economics for Semester III
 - o Valued added courses: Kautilya's Arthashastra and Financial Literacy for Semester I and Gandhian Economic Thought for Semester II
 - o Skill Enhancement Courses: Accounting for non-accountants for Semester I and Entrepreneurship and Project Management and Evaluation for Semester II.
- The syllabus of all these courses is approved by the BOS.



The following members of the Board of Studies in Economics attended the meeting.

1. Ms. Rupali Tamuly
2. Mr. Ramu P. Pagi
3. Ms. Pooja Gaonkar
4. Ms. Parvin Koppal
5. Ms. Kavya Sudarsan
6. Dr. Malati Roy
7. Dr. Meenakshi Bawa
8. Dr. Aparna Lolayekar
9. Ms. Swara Naik

Member Absent with Intimation

1. Abhijit Chatterjee



Mr. Ramu Pagi
Member Secretary
Board of Studies



Ms. Rupali Tamuly
Chairperson
Board of Studies

Date: 26th April 2023



PART B: Important Points/ Recommendations of B.O.S. that require consideration/approval of the Academic Council:

1. Approval of the course syllabus for S.Y.B.A. & T.Y.B.A. under Autonomy (Annexure A)

- i. Human Resource Management, a G.E.C. course for Semesters III and IV.
- ii. Introduction to Health Economics as an elective course for semester V.
- iii. Introduction to Data Science' as an elective course for semester VI.

2. Approval of the list of Courses under the Nomenclatures, Discipline Core, Skilled Enhancement Course (S.E.C.), Value Added Course (V.A.C.), and Multidisciplinary Course (MDC) (Annexure B)

The list of Nomenclatures approved as per the new U.G.C. guidelines based on N.E.P.: Discipline Core, Skill Enhancement Course, Value Added Course, and Multidisciplinary Course,

3. Approval of the syllabi of Semester I and II courses under the New UGC-NEP Course Structure (Annexure C)

- The syllabus of the courses approved for the Semester I and II:
- Discipline Core courses: Microeconomics-I for Semester I, Economics of Growth and Development for Semester II.
- MDC courses: Financial Investment for All and Natural Resource Economics for Semester I, Taxation for All for Semester II, and Transport Economics for Semester III
- VAC: Kautilya's Arthashastra and Financial Literacy for Semester I and Gandhian Economic Thought for Semester II
- SEC: Accounting for non-accountant for Semester I and Entrepreneurship and Project Management and Evaluation for Semester II.



The following members of the Board of Studies in Economics attended the meeting.

1. Ms. Rupali Tamuly
2. Mr. Ramu P. Pagi
3. Ms. Pooja Gaonkar
4. Ms. Parvin Koppal
5. Ms. Kavya Sudarsan
6. Dr. Malati Roy
7. Dr. Meenakshi Bawa
8. Dr. Aparna Lolayekar
9. Ms. Swara Naik

Member Absent with Intimation

10. Abhijit Chatterjee



Mr. Ramu Pagi
Member Secretary
Board of Studies

Date: 26th April 2023



Ms. Rupali Tamuly
Chairperson
Board of Studies




PART C: The remarks of the Dean of the Faculty: -

- a. The minutes are in order.
- b. The minutes may ~~not~~ be placed before the Academic Council with remarks, if any.
- c. Important points of the minutes which need clear policy decisions of the Academic Council to be recorded.

Date: 26th April 2023


Signature of the Dean:
(Faculty of Arts)


Dr. Sachin Moares

PART D: The remarks of the Members Secretary of the Academic Council: -

- a. The minutes are in order.
- b. The minutes may be placed before the Academic Council with remarks, if any.
- c. Important points of the minutes which need clear policy decisions of the Academic Council to be recorded.

Date:


Signature of the Member Secretary
Mr. V.C. Kumaresh
Academic Council



Annexure A

Annexure A.1: Course Structure for S.Y.B.A & T.Y.B.A. under Autonomy

| SEMESTER | CORE | | CORE ELECTIVE | | | | | |
|----------|---|---|--|---|---|---|--|--|
| I | ECO-I.C-1 Principles of Economics | ECO-I.C-2 Mathemat ical Technique s | | | | | | |
| II | ECO-II.C-3 Economics of Growth and Developm | ECO-II.C-4 Empirical Technique s for Economic | | | | | | |
| III | ECO-III.C-5 Micro- economics | | ECO-E-8 Economics and Law | ECO-E-4 Regional Economi cs | ECO-E-19 Behavior al | ECO-E-14 Environ mental E | ECO-SEC-1 Entrepr eneursh | |
| IV | ECO-IV.C-6 Macro- economics | | ECO-E-20 Research Methodolo gy | ECO-E-3 Emergin g Market Economi es | E.C.O.- E-15 Introduct ion to Industrial Economi cs | E.C.O.- E-21 Introduc tion to Money and Banking | ECO-SEC-2 Account ing for Non- account ants | |
| V | ECO-V.C-7 Public Economics | ECO-V/ VI.C-9 Project | ECO-E-9 Introductio n to Econometr ics | ECO-E-1 Indian Economy | ECO-E-11 Actuarial Economi cs | #ECO-E-22 Introdu ction to Health E | | |
| VI | ECO-VI.C-8 Internation al Trade and Policy | ECO-V/ VI.C-9 Project | ECO-E-10 Introductio n to Operations Research for | ECO-E-2 Economi cs of Foreign Exchang | E.C.O.- E-16 Financial Economi cs | #ECO-E-23 Introdu ction to Data Science | | |
| SEMESTER | GENERIC ELECTIVE COURSES | | | | | | | |

| | | | | | |
|------------------|-------------------------------|--|--|--|--|
| I, II III, IV | ECO-GEC-1 Taxation for All | ECO-GEC-2 Financial Investments for All | #ECO-GEC-4 Human Resource Management | | |
|------------------|-------------------------------|--|--|--|--|

Course to be offered from the academic year 2023-24

Annexure A.2: Syllabus of the courses under Autonomy

Course Title: Human Resource Management (G.E.C.)

Course code: ECO-GEC-4

Credits: 4

Marks: 100

Semester: III/IV SYBA/BSC

Duration: 60 Hours

Course Objectives: The aim of this course is to give students the knowledge, understanding and key skills that are required by today's human resource professionals and to enable students to effectively contribute to dynamic organizations.

Course Learning Outcomes:

Upon completion of this course students will be able to

CLO1: Understand the value and importance of human resources in an organization.

CLO2: Analyze the ways and means of hiring and appraising human resources.

CLO3: Administer and contribute to the design and evaluation of the performance management program.

CLO4: Develop, implement, and evaluate employee orientation, training, and development programs.

CLO5: Get hands on training with case studies.

SYLLABUS

MODULE 1: Introduction to Human Resources Management (15 hours)

Human resource management (H.R.M.) : Introduction, Definitions, Nature , Features , Scope , Objectives, Functions, and Principles. Global Challenges; Internal and External forces affecting the human resource function; H.R.M. department: Objectives, importance, global setting.

MODULE 2: Recruitment and Selection Process (15 hours)

Purpose, Importance and Sources of Recruitment; Planning and Forecasting; Factors governing recruitment process; Effective Recruiting Tools of selection and Selection Process;, Internal and External Sources of Candidates; Recruiting a Diverse Workforce; Employee Testing and Selection; Induction and Placement; Role of recruitment agencies, Dispute resolution and settlement mechanism.

MODULE 3: Appraising and Managing Performance (15 hours)

Performance appraisal: Introduction, definition, objectives, need and importance; Process of Performance Appraisal; Traditional and Modern Techniques of Performance Appraisal; Limitations of Performance Appraisal; Ethical aspects in Performance Appraisal.

MODULE 4: Training and Development (15 hours)

Training - need, objectives and importance of training; Need and importance of Management Development Programme; Designing an Effective Training and Development Programme; Evaluation of the Effectiveness of Training Programmes; Challenges before a Trainer; Self Development Mechanism, Knowledge Enrichment and Career Advancement.

*Practical Component

Mandatory Readings:

1. Aswathappa. K. (2008), Human Resource and Personnel Management (5th edition), Tata McGraw-Hill Publishing Company Ltd., New Delhi.
2. Bernardin, H. J. (2007). Human Resource Management. An Experiential Approach. Tata McGraw Hill.

Supplementary Readings:

1. DeCenzo, D. A. & Robbins, S. P, (2008), Fundamentals of Human Resource Management, 8th edition, John Wiley & Sons Ltd, ISBN: 9812-53-171-8.
2. Dessler, G. (2008) Human Resource Management. Pearson Prentice Hall, Upper Saddle River.
3. Ivancevich, J. M. (2008), Human Resource Management, Tata McGraw Hill.

Online Resources:

1. Human Resource <https://www.aihr.com/blog/human-resource-basics/>
2. Human Resource management <https://www.managementstudyguide.com/human-resource-management.htm>
3. Performance appraisal <https://www.managementstudyguide.com/performance-appraisal.htm>
4. Training and Development <https://www.ibm.com/in-en/topics/training-development>
5. <https://www.toppr.com/guides/business-management-and-entrepreneurship/human-resource-management/training-and-development/>

Course Title: Introduction to Health Economics (Elective)

Course Code: ECO-E-22

Credits 04

Marks: 100

Semester: V

Duration: 60 Hours

Course Objectives:

This course is an introduction to the field of health economics. Health economics is an active field of microeconomics with a large and growing literature. The goal of this course is twofold. One is to better understand the economic theory of health and healthcare. We will study several economic models in detail, including models of health, addiction, demand for healthcare and demand for insurance. The emphasis will be on key economic concepts that health economists use to analyze health and healthcare markets. The second goal is to learn to evaluate and interpret empirical findings in health economics.

Course learning outcomes

Upon completion of this course students will be able to

CLO1. Develop an understanding of the key concepts in health economics.

CLO2. Identify principles and concepts of economic evaluation in health systems.

CLO3. Evaluate the skills that recognize and address the challenges of limited resources within the health sector.

CLO4. Evaluate inter-related components of health systems from an economic perspective.

CLO5. Examine the various issues related to health insurance

Module I: Health and Economic Development

(15 Hours)

Investment in human capital, Health, and Social Welfare, Determinants of Health; Economic growth, Economic development and Health Linkages; Economic Analysis of Health care, Data on health and health-related aspects in India; Global burden of diseases; India and S.D.G. 3: Universal health care.

Module II: Demand for Health Care Services (15 Hours)

Demand for Health care; Issues of success to health care; Health expenditure: out of pocket expenditure on health, Measurement of Impoverishment, and catastrophic effects of out-of-pocket expenditure on health; WHO data on out-of-pocket expenditure on health for India.

Module III Supply of Health care services (15 Hours)

Supply of healthcare; Physicians and Medical Personnel as Health care providers, Non-labour inputs: Health infrastructure, Interaction of Demand and Supply of Health care, Private versus public health care provider; National Health accounts, Health infrastructure Statistics in India.

Module IV: Health Insurance (15 lectures)

Health policy of India; Health insurance market: asymmetric information, principal-agent relationship; Private & public health insurance scheme; Various State government health insurance schemes; Ayushman Bharat.

List of the books recommended as references

Mandatory Reading:

1. D. Jery Josephin , Jeyasingh,.D. Solomon raj, (2016), Health Economics , Creative crows publishers
2. Nair K. s.(2022), Health Economics and Financing , New century publication

Supplementary Reading

1. Banerjee, D. (1975), Social and Cultural Foundations of Health Service Systems of India, Inquiry, Supplement to Vol. XII, June.
2. Edwin G Dolan and John C Goodman, (1991), Economics of Public Policy: 4th Edition: West Publishing Company, New York.
3. Grossman M, (1991), 'The Shadow price of Health in the Economics of Health' Vol. 1 by A.J. Culyes (ed), Edward Elger publishing Ltd, U.K.
4. Volan Brian, (1993), Economics Incentives, Health Status and Health services, Utilisation, Journal of Health Economics, Vol II.
5. William Jack, (1999), Principles of Health Economics for Developing Countries, World Bank Institute Development Studies.
6. World Development Report, (1993), Investing in Health, the World Bank.

Online Resources:

1. Key concepts in health economics: <http://www.mcrhrdi.gov.in/FC2020/reading%20material/economics/Reading%20health%201.pdf>
2. Introduction to health economics https://www.academia.edu/83748087/Introduction_to_Health_Economics
3. Future of health economics https://www.sciencedirect.com/science/article/abs/pii/S0167629699000338?casa_token=Jb0a3bc2nUQAAAAA:hhAvmKMxZ8gPb2O78X14NJHhJt7_tAGI9t7aZRtZh2PgIwaR_vCAJ3cRPT71EhIk0Q8plDnZkQ4
4. Towards definition of health economics <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1951624/>
5. Essentials of health economics <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1499968/>

Course Title: Introduction to Data Science (Elective)

Course Code: ECO-E-23

Credits: 4

Marks: 100

Semester: VI

Duration: 60 Hours

Course objectives: The main objective of this course is to provide a gentle introduction to data science and tools used by data scientists.

Course Learning Outcomes: Upon completion of this course students will be able to learn.

CLO1: Basic Python programming

CLO2: Data visualization using Python

CLO3: Basics of R programming

CLO4: Data analysis using R

CLO5: Large data sets handling and analysis using R.

Module I: Data handling using Pandas**(15 Hours)**

Features of Python Pandas; Data structure; Series data structure; Data frame and Data structure; Descriptive statistics; Data frame operations. Modifying data frames; Handling missing data; combining data frames; grouping by () functions.

Module II: Data Visualization**(15 Hours)**

Using Pyplot of Matplotlib library; different types of plotting; creating line charts, scatter charts, bar charts, multiple bar plots, pie charts, histograms, frequency polygons, and box plots; customizing plots.

Module 3: Introduction to R**(15 Hours)**

Basic graphics in r; Objects and functions in R; Crane task view; Bivariate data analysis; simple linear regression, multiple linear regression; analysis of covariance; Longitudinal data analysis; summarizing categorical and continuous variable; R inbuilt functions for exploratory data analysis.

Module 4: Large Data analysis using R.**(15 Hours)**

R.B.I. data on the Indian Economy; N.F.H.S. data; World Bank data; WHO data

*Practical Components

(Continuous assessment of 40 marks using any data set and R for data analysis).

List of books recommended for References:**Mandatory Readings:**

N.C.E.R.T. textbook on Information Practice, <https://ncert.nic.in/textbook/pdf/leip1ps.pdf>

Hatekar N(2010) Principles of Econometrics: An Introduction (Using R) SAGE Publications,

Supplementary Readings:

1. Dawson M(2003) Python programming for absolute beginners, Premier press
2. S Chand, (2023), Code with Python S. Chand's publishers
3. Vickler Andy(2022)R Programming, Ladoo Publishing
4. Pace, L. (2012). *Beginning R: An introduction to statistical programming*. Apress.
5. Pathak, M. A. (2014). *Beginning data science with R*. Springer.

Online Resources:

1. Teaching programming to beginners <https://dl.acm.org/doi/abs/10.1145/800104.803365>
2. R software <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7063554/>
3. Beginning to programming <https://www.mdpi.com/2075-1729/12/5/648>
4. Python programming <https://iopscience.iop.org/article/10.1088/1742-6596/423/1/012027/meta>

5. Python <https://orfee.hepl.ch/handle/20.500.12162/3342>

Annexure A.3: Summary of changes incorporated in the syllabus

| Semester | Course Title | Existing (Indicate only the unit where the change is proposed) | Changes Proposed | | Specify the reason for the change |
|-----------------|-----------------------------------|---|-------------------------|------------------------------|---|
| I/II, III/IV | GEC- Gandhian Economic Thought | Entire course replaced with a new course | III/IV | Human Resource Management | Feedback from stakeholders: alumni and parents. |

| | | | | | |
|----|--|---|----|-------------------------------------|---|
| V | Elective- Microeconomic Analysis | Entire course replaced with a new course | V | Introduction to Health Economics | Feedback from stakeholders: alumni and parents. |
| VI | Elective- Macroeconomic Analysis | Entire course replaced with a new course | VI | Introduction to Data Science | Feedback from stakeholders: alumni and parents. |

Annexure B

B.A ECONOMICS 3 YEARS AND 4 YEARS HONOURS LIST OF COURSES 2022-23 UNDER NEP 2020 COURSE STRUCTURE

| SEMESTER | COURSE CODE | TITLE OF THE COURSE | NOMENCLATURE/ TYPE OF COURSE | CREDITS |
|-----------------|------------------------|--------------------------------|---|----------------|
|-----------------|------------------------|--------------------------------|---|----------------|

| | | | | |
|----------|--------------------|--|---------------|----------|
| 1 | UG-ECO-101 | Microeconomics- I | DSC | 4 |
| | UG-ECO-MDC1 | Financial Investment for All | MDC | 3 |
| | UG-ECO-MDC2 | Natural Resource Economics | MDC | 3 |
| | UG-ECO-VAC1 | Kautilya's Arthashastra | V.A.C. | 2 |
| | UG-ECO-VAC2 | Financial Literacy | V.A.C. | 2 |
| | UG-ECO-SEC1 | Accounting for Non-accountants | S.E.C. | 3 |
| | | | | |
| 2 | UG-ECO-102 | Economics of Growth and Development | D.S.C. | 4 |
| | UG-ECO-MDC3 | Taxation for All | MDC | 3 |
| | UG-ECO-VAC3 | Gandhian Economic Thought | V.A.C. | 2 |
| | UG-ECO-SEC2 | Entrepreneurship Development | S.E.C. | 3 |
| | UG-ECO-SEC3 | Project Management and Evaluation | S.E.C. | 3 |
| | | | | |
| 3 | UG-ECO-201 | Macroeconomics- I | DSC | 4 |

| | | | | |
|----------|---------------------|--|---------------|----------|
| | UG-ECO-202 | Empirical Techniques for Economic Analysis – I | DSC | 4 |
| | UG-ECO-MDC4 | Human Resource Management | MDC | 3 |
| | UG-ECO-MDC5 | Transport Economics | MDC | 3 |
| | UG-ECO-SEC4 | Actuarial Economics | S.E.C. | 3 |
| | | | | |
| 4 | UG-ECO-203 | Behavioural Economics | D.S.C. | 4 |
| | UG-ECO-204 | Evolution of Economic Thought | D.S.C. | 4 |
| | UG-ECO-205 | Public Economics | D.S.C. | 4 |
| | UG-ECO-206 | Introduction to Health Economics | D.S.C. | 4 |
| | UG-ECO-VOC 1 | Introduction to Mathematical Techniques for Economic Analysis | V.O.C. | 4 |
| | | | | |
| 5 | UG-ECO-301 | Regional Economics and use of GIS | DSC | 4 |
| | UG-ECO-302 | Introduction to Econometrics | D.S.C. | 4 |
| | UG-ECO-303 | Environmental Economics | D.S.C. | 4 |

| | | | | |
|----------|--------------------|---|---------------|----------|
| | UG-ECO-VOC2 | Introduction to Operations Research for Economists | V.O.C. | 4 |
| | | | | |
| 6 | UG-ECO-304 | Financial Economics | D.S.C. | 4 |
| | UG-ECO-305 | Introduction to Experimental Economics | D.S.C. | 4 |
| | UG-ECO-306 | International Trade and Policy | D.S.C. | 4 |
| | UG-ECO-PRO | Project | D.S.C. | 4 |
| | UG-ECO-VOC3 | Handling of large Data Sets using R and STATA | VOC | 4 |
| 7 | UG-ECO-401 | Microeconomics- II | DSC | 4 |
| | UG-ECO-402 | Macroeconomics- II | DSC | 4 |
| | UG-ECO-403 | Advanced Econometrics | D.S.C. | 4 |
| | UG-ECO-404 | Research Methodology | D.S.C. | 4 |
| | | | | |
| 8 | UG-ECO-405 | Indian Public Finance | D.S.C. | 4 |
| | UG-ECO-406 | International Economics | D.S.C. | 4 |
| | UG-ECO-407 | Indian Economy | D.S.C. | 4 |
| | UG-ECO-408 | Economy of Goa | D.S.C. | 4 |

Annexure C: Course Structure and Syllabus for Semester I & II



**Parvatibai Chowgule College of Arts and Science
(Autonomous)**

Accredited by NAAC with Grade 'A+'
Best Affiliated College-Goa University Silver Jubilee Year Award

DEPARTMENT OF ECONOMICS

**SYLLABUS FOR THREE/FOUR YEAR
UNDERGRADUATE DEGREE HONOURS
PROGRAMME IN BA ECONOMICS**

(Implemented from the Academic Year 2023-2024 onwards)

COURSE STRUCTURE

| SEME STER | MAJOR CORE | MINOR/ VOCATIONAL | MULTIDISC IPLINARY COURSE (MDC) | VALUE ADDED COURSE S (VAC) | SKILL ENHANCEM ENT COURSE |
|--------------|--|----------------------|---|---|--|
| I | UG-ECO-101: Microeconomics- I | ----- | UG-ECO- MDC1: Financial Investment for all UG-ECO- MDC2: Natural Resource | UG-ECO- VAC1: Kautilya's Arthshasht ra UG-ECO- VAC2: Financial | UG-ECO- SEC1: Accounting for Non- accountants |
| II | UG-ECO-102: Economics of Growth and Development | ----- | UG-ECO- MDC3: Taxation for all | UG-ECO- VAC3: Gandhian Economic Thought | UG-ECO- SEC2: Entrepreneurshi p UG-ECO- SEC3: Project |
| III | UG-ECO-201: Macro Economics- I | | UG-ECO- MDC4: Human Resource | | UG-ECO- SEC4: Actuarial Economics |

| | | | | | |
|-----------|---|--|--|--|--|
| | UG-ECO-202: Empirical Techniques for Economic Analysis | | UG-ECO- MDC5: Transport Economics | | UG-ECO- SEC5: Introduction to Money and |
| IV | UG-ECO-203: Behavioural Economics | UG-ECO-207: Introduction to Mathematical Techniques for Economic Analysis | | | |
| | UG-ECO-204: Evolution of Economic Thought | | | | |
| | UG-ECO-205: Public Economics | | | | |
| | UG-ECO-206: Health Economics | | | | |
| V | UG-ECO-301: Regional Economics and use of GIS | UG-ECO-304: Introduction to Operations Research for Economists | | | |
| | UG-ECO-302: Introduction to Econometrics | | | | |
| | UG-ECO-303: Environmental Economics | | | | |
| VI | UG-ECO-305: Financial Economics | UG-ECO-308: Handling of large Data Sets using R and | | | |
| | UG-ECO-306: Introduction to Experimental economics | | | | |

| | | | | | |
|-------------|--|--|--|--|--|
| | UG-ECO-307: International Trade and Policy | | | | |
| | UG-ECO-PRJ Project | | | | |
| VII | UG-ECO-401: Microeconomics- | | | | |
| | UG-ECO-402: Macroeconomics- | | | | |
| | UG-ECO-403: Advanced to Econometrics | | | | |
| | UG-ECO-404: Research Methodology | | | | |
| VIII | UG-ECO-405: Indian Public | | | | |
| | UG-ECO-406: International Economics | | | | |
| | UG-ECO-407: Indian Economy | | | | |
| | UG-ECO-408: Economy of Goa | | | | |

SEMESTER I

DISCIPLINE SPECIFIC CORE COURSE

Course Title: Microeconomics

Course Code: UG-ECO-101

Credits: 4

Marks: 100

Duration: 60 Hours

Prerequisite Courses: (NIL)

Course Objectives

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Course Learning Outcomes

Upon completion of the course, the student will be able to:

CLO1: Distinguish concepts related to consumer & producer behavior theories

CLO2: Construct Indifference curve and Budget lines under different scenarios

CLO3: Distinguish between price effect, substitution effect, and income effect using Slutsky & Hicks method for different types of goods.

CLO4: Compute total, average & marginal concepts related to production, cost & revenue.

CLO5: Compare & contrast competitive & non-competitive market structures.

Course Content

Module I: Consumer Behavior and Demand (15 Hours)

Distinction between Cardinal and Ordinal Utility, Law of Utility, Indifference Curves, Budget Line, Substitution Effect and Income Effect; Hicksian and Slutsky's Analysis; Derivation of the demand curve and Engel's Curve, Revealed preference theory.

Module II: Production (15 Hours)

Production function – A.P. and M.P., Non-linear production function, Production with one variable input, Production with two variable inputs, Isoquants – MRTS-elasticity of factor substitution, so-cost line - Ridge Line, Returns to Scale.

Module III: Cost and Revenue (15 Hours)

Cost of Production, Behavior of cost, Short run and Long run Costs, Derivation of Average and marginal cost curves, Least cost input Combination, Introduction to Modern Cost Curves: L shaped and inverted J shaped cost curves, Concepts of revenue: A.R., MR, T.R., Break-even analysis.

Module IV: Perfect and Imperfect market structure (15 Hours)

Perfect markets, Behavior of profit-maximizing firms and the production process; Price and output decisions; costs and output in the short and long run;

Nature and types of imperfect market structures, Assumptions, Conditions of imperfections, Imperfect markets: price & output under Monopoly, monopolistic competition and Oligopoly.

List of books recommended for reference

Mandatory Reading

1. Salvatore, Dominick, Principles of Microeconomics,(Eighth Edition) Oxford International student edition,
2. Pindyck, Robert S and Rubinfeld, Daniel L. (2012) Microeconomics, Pearson, Delhi
3. Tucker ,I. *Economics for Today* ,(Eleventh edition), Cengage learning , Inc

Supplementary Reading

1. Hubbard, R. G. and O'Brien, A. P. (2012), Microeconomics, Pearson, Delhi.
2. O'Sullivan, A., Sheffrin S. M. and Perez S. J. (2012). Microeconomics, Principal, Application and tools, Pearson, Delhi.
3. Koutsoyannis, A, Modern MicroEconomics, (Second Edition), Palgrave Macmillan

Online resources:

1. https://www.researchgate.net/publication/276345195_Indifference_Curve_Analysis_The_Correct_and_the_Incorrect/link/584de00008ae4bc8993312cd/download
2. <https://economics.ucsc.edu/research/downloads/Friedman-Sakovics-MU23.pdf>
3. <http://etheses.lse.ac.uk/3053/1/U616008.pdf>
4. <http://www.oecd.org/daf/competition/1920526.pdf>

MULTIDISCIPLINARY COURSES (MDC)

Course Title: Financial Investment for All

Course code: UG-ECO-MDC1

Credits: 3

Marks: 75

Duration: 45 hours

Prerequisite Courses: (NIL)

Course Objectives

This is an introductory course on the fundamentals of investments. This course cover topics such as financial Markets, corporate and government securities, financial intermediaries, mutual funds, security markets, stock and bond valuations, security analysis, and derivatives. The objective of the course is to provide students with a basic understanding of various investment alternatives and how to value those investments.

Course Learning Outcomes

Upon completion of the course, the student will be able to:

CLO1: Understand different types of financial markets and financial instruments

CLO2: Explain the organization and institutional details of financial markets and banks

CLO3: Apply the theoretical concepts to the actual working of the financial markets

Course Content

Module I: Introduction to the financial system (15 Hours)

Meaning; financial system: an overview, flow of funds, financial institutions, financial markets, financial instruments, financial services, regulators; Primary markets: types of issues, public issues: IPO-FPO, right issues; Bonus issue: private placement, preferential allotment, qualified institutions placement, documents, prospectus, letter of offer, placement document; Types of financial markets: security markets, money markets, foreign exchange markets, commodity markets, insurance market; Differences between investing in low risk vs. high risk instruments.

Module II: The Banking system: (15 Hours)

Time value of money: present and future value,*calculation; Importance of a banking system; Bank deposits as a low-risk asset class; Types of bank deposits; Bank loans; types of loan instruments; interest rate spread; *E.M.I. calculations; other facilities provided by the banks;

Effects of interest rates on the banking system; Role of a central bank as a regulator of the banking system; Cryptography & cryptocurrencies: Bitcoin's; Recent changes in the banking sector in India.

Module III: Stock Market and Mutual Funds

(15 Hours)

Meaning of a stock market Index: Sensex, Nifty; Stock market indicators: fundamental and technical analysis market capitalization, turnover, turnover ratio, market capitalization ratio trade value ratio; Types of financial derivatives; Meaning and types of mutual funds: Systematic Investment Plans, benefits of investing in mutual funds, tax benefits on selected mutual fund investments, types of mutual fund schemes, *Calculation of NAV, *Steps in the creation of an initial investment Portfolio.

List of books recommended for reference

Mandatory Reading

1. Chandra. P. (2021), *Investment Analysis and Portfolio Management*, Tata McGraw-Hill, New Delhi
2. Khan M. Y.; Jain P. K. (2015), *Financial Management*, Tata McGraw-Hill Publishing, New Delhi.

Supplementary Readings

1. Graham, B. (2008), *The Intelligent Investor*, Harper
2. Siegel, Jeremy J. (1998) *Stocks for the Long Run*, McGraw-Hill. New York
3. L.M. Bhole (3rd Edition, 2002): *Financial Institutions and Markets*, Tata McGraw Hill, Delhi.

Online resources

1. Bombay Stock Exchange <https://www.bseindia.com/>
2. National stock Exchange <https://www.nseindia.com/>
3. Security and Exchange Board of India <https://www.sebi.gov.in/>
4. <https://economictimes.indiatimes.com>

Course Title: Natural Resource Economics

Course Code: UG-ECO-MDC2

Credits: 03

Marks: 75

Duration: 45 hours

Prerequisite Courses: (NIL)

Course Objectives: This course covers the role of economics in decisions that affect natural resources and the environment. The overall objective of this course is to provide students with conceptual insight, problem-solving skills, and general knowledge needed to better analyze and solve natural resource and environmental issues and problems from an economic perspective which recognizes the important linkages between economic, environmental, and ethical systems.

Course Learning Outcomes: Upon completion of this course students will be able to

CLO1: Examine economic concepts to issues that involve the sustainable use of natural resources

CLO2: Apply key themes, principles, terminology, and relevant economic theory to real-world problems.

CLO3: Analyze, from an economic perspective, the relevance of resource use, allocation, and policy to public decision-makers, as well as private individuals and firms.

Course content

Module I: Issues in Natural Resource Economics & Visions of the Future (15 Hours)

The Economic Approach to Natural Resources; Normative Criteria for decision making; the optimal outcome; Microeconomic Concepts Applied to Natural Resources; Resource Supply and Scarcity; Economic efficiency and risk.

Module II: Criteria for Natural Resource Policy (15 Hours)

Introduction to Natural Resource Policy: Property Rights, Externalities and Natural Resource Problems, Market failures; Institutional framework; Valuation of Natural Resources: Types of

values; issues in benefit estimation; discounting, Benefit-cost analysis, Non-market valuation; Economics of Non-renewable resources; Optimal rate of extraction; Hotelling's rule.

Module III: Economics Forestry, Fisheries and Wildlife and Sustainable Development (15 Hours)

Forestry: The maximum sustained yield; the single rotation, and the multiple rotations.

Fisheries and wildlife: The yield effort-function; the static model of open access and efficient harvest; population growth & open access-hunting; Sustainability; ethics; institutional response, Collective action, Civic society movement.

List of books recommended for reference

Mandatory Reading

Tietenberg t. and Lewis L.(2020) , Environment and Natural Resource Economics, Taylor and Francis

Supplementary Reading:

1. Conrad John and Clark Colin (2012) Natural resource economics: Notes and problems, Cambridge University Press
2. Field Berry (2015) , Natural resource Economics (Third Edition), Waveland Press
3. Harris J and Roach B.(2013) Environmental and natural resource economics: contemporary approach(third edition), M.E. Sharpe Inc
4. Neher P. (1990) Natural resource economics: conservation and exploitation Cambridge University Press
5. Pearce D and Turner R., (1990) Economics of Natural Resource and Environment, John Hopkins university press

Online Resources

1. Natural resource economics under rule of hotelling:https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2966.2007.00441.x?casa_token=f9d62DXf8fgAAAAA%3AiqZWLpENZUDZcbaRRU_eSwT8uWTSjpX_9WT0ZYnosVYT29Irpw6cHlrg7Xggy5QR53Q_mDIT4XJG7Pg
2. Natural resource economics <http://users.accesscomm.ca/hramsey/econ832/Material/HartwickOlewiler1986-TOC-Ch3.pdf>

3. Economics of natural resource availability https://onlinelibrary.wiley.com/doi/abs/10.1111/1467-6419.00112?casa_token=1eEnZINgGAAAAAA:dTeQU7wnUDusGiIVG6MoQF0R0XT_mQBWpEePSgR7mSOHOq5uNGovgEM5SReAwye8ZkqS1itvm8bqWS
4. Property rights <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1467-8489.2004.00257.x>
5. Natural resource economics and economic growth <https://www.nber.org/papers/w5398>

SKILL ENHANCEMENT COURSE (S.E.C.)

Course Title: Accounting for Non-accountants

Course code: UG-ECO-SEC1

Credits: 3

Marks: 75

Duration: 45 Hours

Prerequisite Courses: (NIL)

Course Objectives

The key objective of this course is to provide the students an exposure to the accounting discipline and help them to understand the language of accounting. There are a number of sub-disciplines that fall under the umbrella of "accounting," but in this course, we will be focused on a few basic disciplines of accounting. This course introduces you to financial, cost, and management accounting in preparation for more advanced business topics within the business major. In this course, the formats of focus will be identified as the Income Statement, the Balance Sheet, the Statement of Cash Flows, and the Statement of Shareholders' Equity. In this course, you will learn how to compile and analyze these financial statements, determine the value of a firm, and compare the firm to its competitors.

Course Learning Outcomes

Upon completion of the course, the student will be able to:

CLO1: Identify the concept of Financial, Cost, and Management accounting

CLO2: Develop the understanding and skills to prepare accounts of the corporate and banking sector.

CO3: Understand the basics of accounting, preparation of various accounts via Tally ERP software.

Course Content

Module I: The Accounting Process (15 Hours)

Theoretical Framework of Accounting; Generally Accepted Accounting Principles, Concepts and Conventions; Capital and Revenue transactions: capital and revenue expenditures, capital and revenue receipts; Measurement, Valuation, and Accounting estimates; Double entry system, Books of prime entry, Subsidiary Books; Recording of Cash and Bank transactions; Preparation of Ledger Accounts; Preparation of Trial Balance: interpretation and usefulness; Rectification of Errors; Type of entries: Opening entries, Transfer entries, Adjustment entries, Closing entries.

Module II: *Issues in Accounting (15 Hours)

Creating new ledgers/Company; Reconciliation Statements and Accounting for Depreciation: definition and causes of depreciation, need for depreciation, methods of calculating the amount of depreciation: straight-line method, diminishing balance method; Bank Reconciliation Statement; Receivables / Payables Reconciliation Statement; Stock Reconciliation Statement.

Module III:* Preparation of Final Accounts (15 Hours)

Profit making concern: (for sole proprietorship concern and partnership firm only): Preparation of Trading Account, Profit & Loss Account, and Balance Sheet; Accounting treatment of bad debts; Reserve for bad and doubtful debts; Provision for discount on debtors and provision for discount on creditors; Not-for-Profit making concern: Preparation of Receipts and Payments Account; Preparation of Income and Expenditure Account; Preparation of Balance Sheet.

*Practical component to be taught using accounting software Tally ERP 9.

List of books recommended for reference

Mandatory reading:

1. Kansal, Amit (2014), N.C.E.R.T. solutions Accountancy, Arihant, Meerut
2. T.S. Reddy & A. Murthy (2011), Financial Accounting, Margham Publications, Sixth Revision Edition.

Supplementary Reading:

- 1.P.C. Tulsian (2003), Financial Accounting, Tata MC Graw Hill Ltd.
2. Manosh Dutta (2010), "Cost Accounting", Dorling Kindersley (India) Pvt. Ltd.
3. T.S. Reddy & Y. Hari Prasad Reddy,(2014)“Cost Accounting”, Margham Publications.
4. Gibson, Charles H. (2013), Financial Statement Analysis, Cengage Learning, Delhi.
5. Singal, Santosh (2012), Accounting and Financial Analysis, International Book House, New Delhi.
6. M.C. Shukla, T.S. Grewal, Dr. M. P. Gupta (2010) CostAccounting,S.Chand & Company Ltd.

Online Resources:

1. Depreciation- Depreciation Methods: Check Formula, Factors & Types
2. Accounting Principles- Accounting Principles, Accounting Conventions and Concepts

VALUE ADDED COURSES (V.A.C.)

Course Title: Kautilya's Arthashastra

Course Code: UG-ECO-VAC1

Credits: 2

Marks: 50

Duration: 30 Hours

Prerequisite Courses: (Nil)

Course Objectives

The main objective of this course is to give ideas to students about the Political and economic ideas of Chankya. Kautilya's Arthashastra provides a valuable basis for the economy. It contains useful insights into economics.

Course Learning Outcomes

Upon completion of this course students will be able to

CLO1: Get an exposure to the economic ideas of Chankya and linkagesof Arthshastra with modern day economics.

CLO2: Appreciate the relationship between politics and economics.

Course Content

Module I: Introduction to Kautilya's Arthshastra (15 Hours)

Introduction to Kautilya's Arthshastra; Economic ideas of Wealth, Views on Consumption and Production, Concept of 'Varta', Importance of Agriculture and Animal Husbandry, Value of Labour, Significance of Trade, Value, views on Population, Slavery; Relevance and application of Arthshastra to contemporary economics.

Module II: Economic policy, Public Finance and International Economics (15 Hours)

Concept of Welfare State, Views on Public Finance: taxation, revenue collection, public goods provision, Ideas about Town Planning and Social Security, right to Private Property, Justification of Interest; International trade and diplomacy with neighbouring countries.

List of books recommended for reference

Mandatory Reading

1. Singha Roy, S. (2018). Kautilya's' Arthashastra 'and Modern Economics, available at S.S.R.N.
2. Rangarajan, L. N. (Ed.). (1992). *The arthashastra*. Penguin Books India.

Supplementary Reading

1. Waldauer, C., Zahka, W. J., & Pal, S. (1996). Kautilya's Arthashastra: A neglected precursor to classical economics. *Indian Economic Review*, 101-108.
2. Chousalkar, A. S. (2004). Methodology of Kautilya's Arthashastra. *The Indian Journal of Political Science*, 55-76.
3. Sihag, B. S. (2005). Kautilya on ethics and economics. *Humanomics*, 21(3), 1-28.
4. Manrai, R., & Goel, U. (2017). Sustainable economic governance: learning from Kautilya's Arthashastra. *International Journal of Indian Culture and Business Management*, 15(2), 241-253.
5. Sihag, B. S. (2013). Kautilya's Arthashastra: The Origin of Statistical Economics during-4CE. *Journal of Rajasthan Statistical Association*, 2, 1-14.

Online Resources

1. Kautilya's Arthashastra <https://libarch.nmu.org.ua/bitstream/handle/GenofondUA/19273/f2c8936431b9587a3448e1b3d8eff8e8.pdf?sequence=1>

2. The missing link: From Kautilya's The Arthashastra to modern economics <https://www.ceeol.com/search/article-detail?id=764196>
3. Kautilya's Arthashastra: A Recognizable Source of the Wealth of Nations<https://www.scirp.org/journal/paperinformation.aspx?paperid=63343>
4. Kautilyan Economics: An Analysis and Interpretation <https://journals.sagepub.com/doi/abs/10.1177/0019466220000408?journalCode=ieja>

Course Title: Financial Literacy

Course Code: UG-ECO-VAC2

Credits: 2

Marks: 50

Duration: 30 hours

Prerequisite Courses :(Nil)

Course Objectives

The objective of this course is to inculcate financial literacy concepts among college-going students through financial education to make it an important life skill. The course also aims to encourage active savings behaviour, encourage participation in financial markets to meet financial goals and objectives, develop credit discipline and encourage availing credit from formal financial institutions as per requirement.

Course Learning Outcome

Upon completion of this course students will be able to

CLO1: Recognize the need for Financial Literacy and planning

CLO2: Understand the role of financial education to achieve financial well being

Course Content

Module I: Financial Literacy and Planning (15 Hours)

Financial Literacy: Meaning, Need; Role of financial education in achieving financial well-being; Key concepts of Personal Finance: Savings, Investment, Borrowing, Income and Expenses, Surplus/Deficit, Assets and Liabilities, Inflation, Time Value of Money, Active and Passive Income, Instant and Delayed Gratification; Financial Planning: definition, process, Importance, Steps involved in Financial Planning Process, SMART financial goals, Three pillars of investments; Concepts of risk and return, Budgeting and its importance in financial planning.

Module II: Savings, Investment, and Insurance Planning (15 Hours)

Savings: Types of bank accounts; Various modes of transfer through banking channels: N.E.F.T., R.T.G.S., IMPS, U.P.I.; Account opening process and importance of KYC norms; Precaution to be taken while using digital payments; Credit cards and Debit cards; Banking Ombudsman, Role of Reserve Bank of India.

Investment: Investment avenues offered by Securities Markets, Various risks involved in investing in securities markets, Mutual funds, and Benefits of investing through Mutual Funds.

Insurance- Types of insurance, role of Insurance as a risk management tool, various types of Insurance products and their key features.

*Practical component on financial literacy awareness campaign for community.

List of books recommended for reference

Mandatory Reading

1. Chandra. P. (2014), Investment Analysis and Portfolio Management, Tata McGraw-Hill, New Delhi
2. Khan M. Y. & Jain P. K. (2015), Financial Management, Tata McGraw-Hill Publishing, New Delhi

Supplementary Reading:

1. Francis J C & R.W Taylor (1992), Theory and Problems of Investments, McGraw Hill, Schaum's Outline Series, Singapore.
2. Bodie, Zvi Kane, Alex Marcus Alan (2012), Essentials of Investments, 9th Edition, McGraw Hill Higher Education.

Online Resources:

1. Financial Education <https://ncfe.org.in/program/fepa>
2. Investing <https://courses.varunmalhotra.co.in/learn/FLAP>
3. Financial Literacy <https://www.investopedia.com/guide-to-financial-literacy-4800530>

SEMESTER II

DISCIPLINE SPECIFIC CORE COURSE

Course Title: Economics of Growth and Development

Course Code: UG-ECO-102

Credits: 4

Marks: 100

Duration: 60 Hours

Prerequisite Courses: (NIL)

Course Objectives:

The objective of this course is to provide an overview of the diverse concepts related to economic growth and development by giving special emphasis on structural issues. It acquaints students with the concepts, theories, and policies regarding growth and development as it is

evolved over the years by providing various aspects related to the theory of human capital, the role of education, health & nutrition in economic development.

Course Learning Outcomes:

Upon completion of the course, the student will be able to:

CLO1: Distinguish between the concept of economic growth & development

CLO2: Calculate of Human development index

CLO3: Mind-map the theories of growth and development on a timeline

CLO4: State the patterns of growth based on classical & neoclassical theories of growth and development

CLO5: Give examples of economies which have experienced growth & development in line with any given theory.

Course Content

Module I: Growth and Development (15 Hours)

Growth and development, Components, Indicators, Approaches to development: Traditional and Modern; Sen's capabilities approach, Human Development Index.

Module II: Patterns of Growth and Development (15 Hours)

Growth and development in different countries, Critique of classical theories of development: Rostow's model, Lewis model; International dependence revolution: Neoclassical dependence model, Fake paradigm model: Dualistic development models.

Module III: New Growth Theories (15 Hours)

Exogenous growth theories: Solow model, Harrod-Domar model; Endogenous growth theories: Romer and Lucas endogenous model, Robinson model.

Module IV: India's Development Experience (15 Hours)

India's development journey from planning commission to N.I.T.I. Aayog. India on the eve of planning, Nehru Mahalanobis growth and development model, Liberalization, Privatization, and Globalization; Inclusive growth; Interstate variations in development, Case studies: Economic models of few Indian States including Goa.

List of books recommended for reference

Mandatory reading:

1. Todaro M, Smith S.(2013), *Economic Development*, Pearson, Noida, India.
2. Thirlwall A.,(2006), *Growth and development: with special reference to developing economies*, Palgrave, Macmillan, U.S.A.

Supplementary reading :

1. Hayami Y, (2005), *Development economics: from the poverty to the wealth of nation*, Oxford India, Paperback, India
2. Ray Debraj, (2007), *Development economics*, Oxford India paperback, Noida, India

Online Resources:

1. [Human Development Index | Human Development Reports \(undp.org\)](http://undp.org)
2. [Economic Survey \(indiabudget.gov.in\)](http://indiabudget.gov.in)

MULTIDISCIPLINARY COURSES (MDC)

Course Title: Taxation for All

Course Code: UG-ECO-MDC3

Credits: 3

Marks: 75 marks

Duration: 45 hours

Prerequisite Courses: (Nil)

Course Objective:

The objective of the course is to provide basic understanding of taxation system and procedures. This course analyzes direct and indirect tax structures and assesses different types of taxes. It also formulates tax returns for individuals and corporations.

Course Learning Outcomes

Upon completion of the course, the student will be able to

CLO1: Explain the importance of different types of taxes in India

CLO2: Interpret provisions of direct and indirect tax legislations

CLO3: Calculate tax returns for individuals and corporations

Course Content

Module I: Introduction to Taxation (15 Hours)

Importance of taxation; Principles of taxation; Impact and incidence of a tax; equity and ability-to-pay; tax rates and structure of tax rates; direct and indirect taxes, advantages and disadvantages; efficient and inefficient taxes; Shifting and Evasion, Legal basis for the introduction of a Tax.

Module II: Income Tax (15 Hours)

Importance of Income Tax; Legislation supporting the Imposition of Income Tax: Features and Important Provisions; Income tax Rate structure; Taxable Incomes; Avoidance and Evasion of Taxes; *Calculation of Income Tax and Corporate Tax and Filing Tax Returns.

Module III: Goods and Service Tax (15 Hours)

Evolution of Indirect Taxation in India; Types of Indirect Taxes in India; Importance of Goods and Service Tax; Legislation supporting the Imposition of Goods and Service Tax: Features and Important Provisions; G.S.T. Tax Structure; *Calculations of Taxes under G.S.T. and Filing of Tax Returns.

List of books recommended for reference

Mandatory reading:

1. Jain R K (2017) Customs Tariff of India 2017-18, Vol. 1 and Vol. 2, C.E.N.T.A.X.

2. Rosen S.H. (2005) 'Public Finance', Irwin /McGraw- Hill.

Supplementary Reading:

1. Saraogi CA Vishal (2017) Goods and Services Tax Laws Practice & Procedure with Commentary, Law point Publications
2. Singhanian, Monica; Singhanian Vinod K (2017) Student's Guide to Income Tax (University Edition), Taxman
3. Sreekant aradhya B.S., 'Structure and Reforms of Taxation in India', Deep & Deep, New Delhi.

Online Resources:

1. <https://www.incometaxindia.gov.in/Pages/acts/income-tax-act.aspx>
2. Taxmann Goods and Service tax <https://gst.taxmann.com/>
3. Cleartax on G.S.T. <https://cleartax.in/s/gst-law-goods-and-services-tax>
4. G.S.T. India <http://www.gstindia.com/about/>
5. <https://www.taxmann.com/blogpost/2000001834/gst-rates-2019-gst-council-meeting-updates-latest-gst-tax-slabs.aspx>
6. <https://cleartax.in/s/customs-duty-india>

SKILL ENHANCEMENT COURSE (S.E.C.)

Course Title: Entrepreneurship

Course code: UG-ECO-SEC2

Credits: 3

Duration: 45 Hours

Marks: 75 marks

Prerequisite Courses: (Nil)

Course Objectives:

The objective of this course is to make students understand the concepts of Entrepreneurship and build an understanding about business situations in which entrepreneurs act. The objective is to also empower students to analyze the various aspects, scope, and challenges of an entrepreneurial venture.

Course Learning Outcomes:

Upon completion of the course, the student will be able to

CLO1: Identify and evaluate business opportunities and risks.

CLO2: Pursue innovations and Production and marketing of goods to understand the economics of entrepreneurship.

CLO3: Prepare/Create a business plan.

Module I. Entrepreneurship and Innovation (15 Hours)

Entrepreneurship: meaning, definition, Types, qualities, skills, and functions; Risk and uncertainty; Analysis of Business Environment & Policies: Market, Resources & Competition.

Innovations: Concept & theory, Types and forms of innovations; innovation & imitation; Branding, Patents, and Copyrights, Support for start-ups: Purpose of Incubators & Accelerators. Use of SWOT and Porter's Five Forces Analysis; Difference between Entrepreneurship & Start-ups.

Module II: Sources of funds and Costing, Pricing, and Marketing (15 Hours)

Financial Resources: Sources of funds; Uses of funds; Fixed and Working Capital; Material Resources: Supply and distribution chains; Government and local resources; Human Resources.

Costing Strategies: Absorption and marginal costing; Costing for inventories; Pricing and pricing strategies (skimming price, penetration price, mark-up, marginal-cost price); Break- even analysis and break- even chart; Marketing techniques and strategies.

Module III: Preparing the Business Plan*

(15 Hours)

Components and Uses of the Business Plan; Creating a Business Plan; Sources of funds; Marketing Plan Expenditures and Revenues; Profitability; Growth Rate of the Business and the Rate of Return.

*Practical components: Students will submit a business plan.

List of books recommended for reference

Mandatory reading:

1. Charantimath, Poornima M. (2014), Entrepreneurship Development and Small Business Enterprises, Pearson, Chennai.
2. Colombo Plan Staff College for Technical Education, Manila (2001), Entrepreneurship Development, Tata McGraw Hill, New Delhi.
3. Chandra, Prasana (2017), Projects: Planning, Analysis, Selection, Implementation & Review, Tata Mc Graw Hill, New Delhi.

Supplementary reading:

1. Kuriloff, Arthur H; Hemphill, John M. (2005), Starting and Managing the Small Business, McGraw-Hill, New York.
2. Mukherjee AbhikKumar; Roy Shaunak, (2019)Entrepreneurship Development and Business Ethics,Oxford University Press, New Delhi.

Online Resources:

1. Start-up- <https://up.startupindia.gov.in/content/sih/en/home-page.html>
2. Incubation centre in Goa - <http://www.ciba.org.in/>
3. Start-up policy- <https://www.goa.gov.in/wp-content/uploads/2017/09/Goa-IT-Start-up-Policy-2017.pdf>
4. <https://www.forbes.com/pictures/mgj45fgmd/100-best-websites-for-entrepreneurs3/#1c3d2dd71e87>
5. <https://www.india.gov.in/people-groups/community/entrepreneur>
6. <https://www.entrepreneur.com/magazine>

Course Title: Project Management and Evaluation (S.E.C.)

Course code: UG-ECO-SEC3

Credits: 3

Duration: 45 Hours

Marks: 75 marks

Prerequisite Courses: (Nil)

Course Objectives:

The goal of the course is to give students the tools to initiate a project plan, manage both stakeholders and relationships, organize their team, develop a project charter, and build a business case for a project.

Course Learning Outcomes:

Upon completion of the course students will be able to:

CLO1: Gain conceptual clarity about project organization and feasibility analyses.

CLO2: Analyze the ways and means of hiring, appraising human resources.

CLO3: Learn and understand techniques for Project planning, scheduling and Execution Control.

Module I: Introduction to Project Management and Project Identification (15 Hours)

Introduction to project, Project Management: Definition, Classification, Characteristics/features, Objectives, Importance; Role of Project Manager; Project Management Environment; Project Management Life Cycle; Project Identification: Source of Project Ideas, Who Identifies Projects, Project Concepts and Profiles, Prioritization and Ranking; Identification of Commercial Project Ideas.

Module II: Technical, Financial and Economic Analysis of a Project (15 Hours)

Technical Analysis: Market demand analysis, Production program and Plant capacity, Raw materials and supplies study, Location and site selection and Environmental impact assessment.

Financial Analysis: Measuring Project cash flows, non-discounted cash flow approaches, discounted cash flow approaches, Criteria for Investment Decisions, and Project financing alternatives

Economic Analysis: Rationale for Economic Analysis, Valuation and Shadow Prices, Basic Principle of Shadow Price, Use of Conversion Factor, Source of Shadow Prices, Social Cost Benefit Analysis.

Module III: Project Planning, Organizing and Implementation (15 Hours)

Project Scope; Estimation of the Project cost: Cost of Capital; Project Representation and Preliminary Manipulations, Basic Scheduling Concepts, Resource Levelling, Resource Allocation.

Project Planning and Organizing: Managing the Implementation Process; S.W.O.C. analysis of project implementation; Project Monitoring, Project Evaluation, Project Impact Analysis, and Reporting evaluation results.

List of books recommended for reference

Mandatory Reading

1. Prasanna Chandra; (2002) Projects- Planning, Analysis, Selection, Financing, Implementation and Review', VI Edition, Tata Mc Graw Hill, 8th Edition
2. Gray, Clifford .F. (2017) Project Management. McGraw Hill

Supplementary Reading

1. Chaudhary S.; Project Management, Tata Mc Graw Hill
2. Kerzner H.; Project Management, II Edition, C.B.S. Publishers
3. Meredith Jack R., Mantel Samuel J.; Project Management, IV Edition, John Wiley & Sons
4. Gopalakrishnan P., Ramamoorthy V.E; Textbook of Project Management, MacMillan Publishers
6. Maylor Harvey, Project Management, MacMillan Publishers
7. Matheen A. Prof., Comprehensive Project Management, Laxmi Publications (P) Ltd.

Online Resources:

1. <https://www.projectmanager.com/blog/improving-project-evaluation-process>
2. https://www.ilo.org/wcmsp5/groups/public/---dgreports/-exrel/documents/genericdocument/wcms_172679.pdf
3. <https://www.publicsafety.gc.ca/cnt/cntrng-crm/crm-prvntn/tls-rsrcs/prjct-plnng-en.aspx>
4. <https://www.ebookbou.edu.bd/Books/Text/SARD/DYDW/module08.pdf>

VALUE ADDED COURSES (V.A.C.)

Course Title: Gandhian Economic Thought

Course code: UG-ECO-VAC3

Credits: 2

Marks: 50

Duration: 30 hours

Prerequisite Courses: (Nil)

Course Objectives:

The main objectives of this course is to acquaint the students with the basic concepts of Gandhi's economic thought. The course provides comparison between modern economics with Gandhi's economic thought. One of the objective of the course is to comprehend the issues in sustainable development and Gandhian solutions day economic problems.

Course Learning Outcomes:

Upon completion of the course, the student will be able to:

CLO1: Illustrate the Gandhian concepts of Economics

CLO2: Propose alternative solution based on Gandhian economic thought to any economic problem.

Course Content

Module I: Basic Principles of Gandhian Economy

(15 Hours)

Background of Gandhian Economic thought, Concept of bread Labor, Views on distribution of wealth, Principles of Trusteeship; Swadeshi and its present relevance to India; Principle of Sustainability: Economic, environmental and social; Policy of education, vocational training and status of women; Principle of Sarvodaya Economics: Bhoodan, Gramdan, Contribution of Vinoba Bhave to Sarvodaya movement; Sarvodaya and Globalization: Relevance.

Module II: Decentralized and Industrial Economy

(15 Hours)

Decentralization of economic power; self-sufficient village economy, Role of agriculture; Solutions to issues of poverty and unemployment in India.

Industrial economy: Efficiency, power, tractors, electricity, diffusion, work, development of personality. Agro and Village industries: Introduction, Purpose, Public Utilities; Importance of Village and Cottage Industries in National Economy, Comparative study of large and small scale industries, Economics of Khadi, Charkha, and its relevance to Indian economy

List of books recommended for reference

Mandatory Reading:

1. Kumarappa, J.C.(1987), Gandhian economic thought, Sarva Seva Sangh Prakasham, Rajghat, Varansi.

Supplementary Reading:

1. Bose, N.K. (1966), Gandhi the man and his mission, BhartiyaVidyaBhawan, Bombay.
2. Datta, Amlan. (1986), The Gandhian Way, N.E. Hill University publications, Shillong.
3. Diwarkar, R.R. (1963), Gandhiji's basic Ideas and some modern problems, BharatiyaVidya Bhawan.
4. Iyer, Raghavan(1963), Moral and Political Thought of Gandhi, Oxford Univ. Press, New York
5. Iyengar, S. (2005). *Gandhi's Economic Thought and Modern Economic Development: Some Reflections*. Centre for Social Studies.

Online Resources:

1. https://www.mkgandhi.org/articles/gandhian_economics.html
2. Relevance of gandhian economic thought <https://www.indianjournals.com/ijor.aspx?target=ijor:ijarmss&volume=4&issue=1&article=012>

3. Gandhian Economic Thought and Its Influence on Economic Policymaking in India
https://www.researchgate.net/profile/Dilip-Nachane/publication/228587596_Gandhian_Economic_Thought_and_Its_Influence_on_Economic_Policymaking_in_India/links/5630d92208ae506cea674520/Gandhian-Economic-Thought-and-Its-Influence-on-Economic-Policymaking-in-India.pdf
4. Economic thought of Gandhiji <https://www.jstor.org/stable/587582>