**DIRE DAWA UNIVERSITY**

**COLLEGE OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

Postgraduate program curriculum



**MASTER OF ART IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

**የአርት ማስተርስ ዲግሪበ ሎጅስቲክስ እና ሰፕላይቼይን‎‎‎‎ ስራ አመራር**

**June 2018**

**Diredawa, Ethiopia**

**LIST OF COURSES**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Course Title** | **Course**  **Code** | **Credit**  **Hour** | **ECTs** |
| 1 | Management Theories and Practices | MBA6011 | 2 | 3 |
| 2 | Cost and Management Accounting | ACCT6021 | 2 | 3 |
| 2 | Transport and Logistics System Management | LSCM6031 | **3** | 5 |
| 3 | Global logistics Management | LSCM6032 | **2** | 3 |
| 4 | Humanitarian Logistics Management | LSCM6033 | **2** | 3 |
| 5 | International Business Management | LSCM6041 | **2** | 3 |
| 6 | Port operation management | LSCM 6042 | **2** | 3 |
| 7 | Quantitative Decision Making in logistics Supply Chain Management | LSCM6043 | **2** | 3 |
| 8 | Supply chain Management Theories and Practices | LSCM6051 | **3** | 5 |
| 9 | Supply Chain Management Information System | LSCM6052 | **2** | 3 |
| 10 | Strategic Supply Chain Management | LSCM6053 | **2** | 3 |
| 11 | Strategic Procurement Management | LSCM7054 | **2** | 3 |
| 12 | Operations Management | LSCM7044 | 2 | 3 |
| 13 | Research Method | LSCM6061 | 2 | 3 |
| 14 | Econometrics Theory and Application | Econ 6062 | 2 | 3 |
| 15 | Thesis | LSCM7063 | 6 | 10 |
| Total | | | 38 | 59 |

1. **MODULE and COURSE LIST**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Module Title** | **Module code** | **Cr. Hr** | **ECTS** | **No.** | **Course title** | **Course**  **code** | **Cr.hr.** | **CP** | **ECTS** | | | | |
| **Lecture** | **Lab** | **Tutorial** | **Home Study** | **Total** |
| **01** | **Management theories and practices** | **MBA-M**  **6012** | **2** | **3** | 1 | Management theories and practices | MBA  6011 | 2 | 3 | 32 |  |  | 49 | 81 |
| **02** | **Cost and management accounting** | **ACCT-M6022** | **2** | **3** | 1 | Cost and Management Accounting | ACCT6021 | 2 | 3 | 32 |  |  | 49 | 81 |
| **02** | **Logistics management** | **LSCM-M**  **6031** | **6** | **10** | 1 | Transport and Logistics system management | LSCM  6031 | 3 | 5 | 48 |  |  | 87 | 135 |
| 2 | Global logistics management | LSCM  6032 | 2 | 3 | 32 |  |  | 49 | 81 |
| 3 | Humanitarian logistics management | LSCM  6033 | 2 | 3 | 32 |  |  | 49 | 81 |
| **03** | **Supply chain logistics management** | **LSCM-**  **M6041** | **6** | **9** | **1** | International business management | LSCM  6041 | 2 | 3 | 32 |  |  | 49 | 81 |
| **2** | P ort operation management | LSCM  6042 | 2 | 3 | 32 |  |  | 49 | 81 |
| **3** | Quantitative Decision Making in logistics and Supply Chain Management | LSCM6043 | 2 | 3 | 32 |  | 20 | 87 | 108 |
| **04** | **Supply Chain management** | **LSCM-M6051** | **11** | **17** | **1** | Supply chain Management Theories and practices | LSCM  6051 | 3 | 5 | 48 |  |  | 87 | 135 |
| **2** | Supply Chain Management Information system | LSCM  6052 | 2 | 3 | 32 | 30 |  | 48 | 108 |
| **3** | Strategic Supply chain  Management | LSCM  6053 | 2 | 3 | 32 |  |  | 49 | 81 |
| **4** | Strategic procurement management | LSCM  7054 | 2 | 3 | 32 |  |  | 49 | 81 |
| **5** | Operations Management | LSCM  7055 | 2 | 3 | 32 |  | 15 | 34 | 81 |
| **05** | **Research Method and application** | **LSCM-**  **M 6061** | **10** |  | 1 | Research Method | LSCM  6061 | 2 | 3 | 32 |  |  | 49 | 81 |
| 2 | Econometrics theory and application | Econ 6062 | 2 | 3 | 24 | 36 |  | 21 | 81 |
| 3 | Thesis | LSCM  7063 | 6 | 10 |  |  |  |  |  |
| Total | | | | | | | | 38 | 59 |  | | |  |  |

|  |
| --- |
|  |

1. **COURSE STRUCTURE**
   1. **For Regular Program**

**YEAR I SEMESTER I**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Module title** | **Module code** | **No** | **Course Title** | **Course**  **Code** | **Cr. Hrs** | **CP** | **Mode of delivery** | **Weeks** |
| 01 | **Management theories and practices** | **MBA-M**  **6012** | 1 | Management theories and practices | MBA  6011 | 2 | 3 | Semester | Whole weeks |
| 02 | **Logistics management** | **LSCM-M**  **6021** | 2 | Transport and Logistics system management | LSCM  6031 | **3** | 5 | Semester | Whole weeks |
| 03 | **Supply Chain management** | **LSCM-M6051** | 3 | Supply chain Management Theories and practices | LSCM 6051 | **3** | 5 | Semester | Whole weeks |
| 04 | **Supply chain logistics management** | **LSCM-**  **M6041** | 4 | International business management | LSCM 6041 | **2** | 3 | Semester | Whole weeks |
| 05 | **Research Method and application** | **LSCM-**  **M 6061** | 5 | Research Method | 6061 | 2 | 3 | Semester | Whole  week |
| Total | | | | | | **12** | **19** |  |  |

**YEAR I SEMESTER II**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Module title | Module  Code | No | Course Title | Course Code | Cr. Hrs | CP | Mode of delivery | Weeks |
| 01 | **Logistics management** | **LSCM-M**  **6031** | 1 | Global logistics management | LSCM6032 | **2** | 3 | Semester | Whole week |
| 2 | Humanitarian logistics management | LSCM  6033 | **2** | 3 | Semester | Whole weeks |
| 02 | **Supply Chain management** | **LSCM-M6051** | 3 | Strategic Supply chain  Management | LSCM6053 | **2** | 3 | Semester | Whole weeks |
| 4 | Supply Chain Management Information system | LSCM6052 | **2** | 3 | Semester | Whole week |
| 03 | **Cost and management accounting** | **ACCT-M6022** | 5 | Cost and Management Accounting | ACCT6021 | 2 | 3 | Semester | Whole week |
| 04 | **Research Method and application** | **LSCM-M 6061** | 6 | Econometrics theory and application | Econ 6062 | 2 | 3 | Semester | Whole week |
| Total | | | | | | **12** | **18** |  |  |

**YEAR II SEMESTER I**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Module title | Module  Code | No | Course Title | Course Code | Cr. Hrs | CP | Mode of delivery | Weeks |
| 01 | **Supply chain logistics management** | **LSCM-**  **M6041** | 1 | Quantitative Decision Making in logistics and Supply Chain Management | LSCM7044 | **2** | 3 | Semester | Whole |
| 02 | **Supply Chain management** | **LSCM-M6051** | 2 | Operations Management | LSCM7055 | 2 | 3 | Semester | Whole  Week |
| **03** | **Supply chain logistics management** | **LSCM-**  **M6041** | 3 | Port operation management | LSCM 7042 | **2** | 3 | Semester | Whole weeks |
| 04 | **Supply Chain management** | **LSCM-M6051** | 4 | Strategic procurement management | LSCM  7054 | **2** | 3 | Semester | Whole weeks |
| 05 | **Research Method and application** | **LSCM-M 6061** | 5 | \*Thesis | LSCM-M7063 | - | - | Semester | Whole week |
| Total | | | | | | 8 | 12 |  |  |

**YEAR II SEMESTER II**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Module title** | **Module code** | **No** | **Course Title** | **Course Code** | **Cr.Hrs** | **CP** | **Mode of delivery** | **Weeks** |
| 01 | **Research Method and application** | **LSCM-**  **M 6061** | 1 | Thesis | LSCM-M7063 | 6 | 10 | Semester | Whole week |
|  | **Total** | | | | | **6** | **10** |  |  |

Thesis shall be graded based on DDU senate legislation

\*Indicates to be continued to the second semester (course in progress). Thesis shall be graded as “Excellent”, “Very good”, “Good” “Satisfactory”, “Fair”, and “Fail”

**For Extension Program**

**Year I Semester I**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***No*** | ***Module***  ***Name*** | ***Module code*** | ***No*** | ***Course Title*** | ***Course Code*** | ***Cr. Hrs*** | ***CP*** | ***Mode of delivery*** | ***weeks*** |
| 01 | **Management theories and practices** | **MBA-M**  **6012** | 1 | Management theories and practices | MBA  6011 | 2 | 3 | Semester | Whole weeks |
| 02 | **Logistics management** | **LSCM-M**  **6031** | 2 | Transport and Logistics system management | LSCM  6031 | **3** | 5 | Semester | Whole weeks |
| 03 | **Supply Chain management** | **LSCM-M6051** | 3 | Supply chain Management Theories and practices | LSCM  6051 | **3** | 5 | Semester | Whole weeks |
| ***Total*** | | | | | | ***8*** | ***13*** |  | |

**Year I Semester II**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***No*** | ***Module***  ***Name*** | ***Module code*** | ***No*** | ***Course Title*** | ***Course Code*** | ***Cr. Hrs*** | ***CP*** | ***Mode of delivery*** | ***weeks*** |
| 01 | **Supply chain logistics management** | **LSCM-**  **M6041** | 1 | International business management | LSCM  6041 | **2** | 3 | Semester | Whole weeks |
| 02 | **Supply Chain management** | **LSCM-M6051** | 2 | Strategic Supply chain  Management | LSCM  6053 | **2** | 3 | Semester | Whole weeks |
| 03 | **Research Method and application** | **LSCM-**  **M 6061** | 3 | Research Method | LSCM  6061 | 2 | 3 | Semester | Whole  week |
| 04 | **Logistics management** | **LSCM-M**  **6031** | 4 | Global logistics management | LSCM  6032 | **2** | 3 | Semester | Whole week |
| **Total** | | | | | | 8 | 12 |  | |

**Year I semester III**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***No*** | ***Module***  ***Name*** | ***Module code*** | ***No*** | ***Course Title*** | ***Course Code*** | ***Cr. Hrs*** | ***CP*** | ***Mode of delivery*** | ***weeks*** |
| 01 | **Cost and management accounting** | **ACCT-M6022** | 1 | Cost and Management Accounting | ACCT6021 | 2 | 3 | Semester | Whole week |
| 02 | **Supply Chain management** | **LSCM-M6051** | 2 | Supply Chain Management Information system | LSCM  6052 | **2** | 3 | Semester | Whole week |
| 03 | **Research Method and application** | **LSCM-**  **M 6061** | 3 | Econometrics theory and application | Econ 6062 | 2 | 3 | Semester | Whole week |
| 04 | **Logistics management** | **LSCM-M**  **6031** | 4 | Humanitarian logistics management | LSCM  6033 | **2** | 3 | Semester | Whole weeks |
| ***Total*** | | | | | | ***8*** | ***12*** |  | |

**Year II semester I**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Module title | Module  Code | No | Course Title | Course Code | Cr. Hrs | CP | Mode of delivery | Weeks |
| 1 | **Supply chain logistics management** | **LSCM-**  **M6041** | 1 | Quantitative Decision Making in logistics and Supply Chain Management | LSCM7044 | **2** | 3 | Semester | Whole |
| 2 | **Supply Chain management** | **LSCM-M6051** | 2 | Operations Management | LSCM7055 | 2 | 3 | Semester | Whole  Week |
| 3 | **Supply chain logistics management** | **LSCM-**  **M6041** | 3 | Port operation management | LSCM 7042 | **2** | 3 | Semester | Whole weeks |
| 4 | **Supply Chain management** | **LSCM-M6051** | 4 | Strategic procurement management | LSCM  7054 | **2** | 3 | Semester | Whole weeks |
| 5 | **Research Method and application** | **LSCM-**  **M 6061** | 5 | \*Thesis | LSCM-M7063 | - | - | Semester | Whole week |
| Total | | | | | | 8 | 12 |  |  |

**Year II Semester II and III**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***No*** | ***Module***  ***Name*** | ***Module code*** | ***No*** | ***Course Title*** | ***Course Code*** | | ***Cr. Hrs*** | | ***CP*** | | ***Mode of delivery*** | | ***weeks*** |
| **1** | \*Thesis | LSCM-M7051 | 1 | Thesis | LSCM7053 | | 6 | | 10 | | Semester | | Whole weeks |
| ***Total*** | | | | |  | | ***6*** | | ***10*** | |  | | |
| **Grand total** | | **38** | | **59** | |

Thesis shall be graded based on DDU senate legislation.

\*Indicates to be continued to the second semester (course in progress). Thesis shall be graded as “Excellent”, “Very good”, “Good” “Satisfactory”, “Fair”, and “Fail”

**For summer program**

**SUMMER I**

**YEAR I SEMESTER I**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Module title** | **Module code** | **No** | **Course Title** | **Course**  **Code** | **Cr. Hrs** | **CP** | **Mode of delivery** | **Weeks** |
| 01 | **Management theories and practices** | **MBA-M**  **6012** | 1 | Management theories and practices | MBA  6011 | 2 | 3 | Face to face | Whole weeks |
| 02 | **Logistics management** | **LSCM-M**  **6021** | 2 | Transport and Logistics system management | LSCM  6021 | **3** | 5 | Face to face | Whole weeks |
| 03 | **Supply Chain management** | **LSCM-M6051** | 3 | Supply chain Management Theories and practices | LSCM  6051 | **3** | 5 | Face to face | Whole weeks |
| 0 | **Supply chain logistics management** | **LSCM-**  **M6041** | 4 | International business management | LSCM  6031 | **2** | 3 | Distance |  |
| 4 | **Logistics management** | **LSCM-M**  **6031** | 5 | Global logistics management | LSCM6032 | **2** | 3 | Distance |  |
| 05 | **Research Method and application** | **LSCM-**  **M 6061** | 6 | Research Method | LSCM  6051 | 2 | 3 | Face to face | Whole  week |
| Total | | | | | | **14** | **22** |  | |
|  | | | | | |  |  |  | |

**Summer II**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Module title | Module  Code | No | Course Title | Course Code | Cr. Hrs | CP | Mode of delivery | Weeks |
| 01 | **Supply chain logistics management** | **LSCM-**  **M6041** | 1 | Port operation management | LSCM 7042 | **2** | 3 | Distance |  |
| 2 | Humanitarian logistics management | LSCM  6033 | **2** | 3 | Distance |  |
| 02 | **Supply Chain management** | **LSCM-M6051** | 3 | Strategic Supply chain  Management | LSCM6053 | **2** | 3 | Face to face | Whole weeks |
| 4 | Supply Chain Management Information system | LSCM6052 | **2** | 3 | Face to face | Whole week |
| 5 | Strategic procurement management | LSCM  7054 | **2** | 3 | Face to face | Whole weeks |
| 03 | **Cost and management accounting** | **ACCT-M6022** | 6 | Cost and Management Accounting | ACCT6021 | 2 | 3 | Face to face | Whole week |
| 04 | **Research Method and application** | **LSCM-M 6061** | 7 | Econometrics theory and application | Econ 6062 | 2 | 3 | Face to face | Whole week |
| 3 | \*Thesis(Title selection) | LSCM-M7063 | - | - |  |  |
| Total | | | | | | **14** | **21** |  |  |

**Summer III**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Module title | Module  Code | No | Course Title | Course Code | Cr. Hrs | CP | Mode of delivery | Weeks |
| 1 | **Supply chain logistics management** | **LSCM-**  **M6041** | 1 | Quantitative Decision Making in logistics and Supply Chain Management | LSCM044 | **2** | 3 | Face to face | Whole |
| 2 | **Supply Chain management** | **LSCM-M6051** | 2 | Operations Management | LSCM7055 | 2 | 3 | Face to  f ace | Whole  Week |
| 3 | **Research Method and application** | **LSCM-**  **M 6061** | 3 | \*Thesis | LSCM-M7063 | 6 | 10 |  |  |
| Total | | | | | | 8 | 12 |  |  |

Thesis shall be graded based on DDU senate legislation

1. **Course Outline**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Module number | | **01** | | |
| Module name | | ***Management theories and practice*** | | |
| Module code | | **MBA-M 6012** | | |
| Total ECTS | | 3 | | |
| Module description | | The module deals with acquainting students with contemporary management theories and practices that are relevant to the rapidly changing organizational environment. It includes the concept of systems approach, contingency theory, leadership and decision making approaches and skills. | | |
| Objective of the module | | At the end the students will be able to:   * apply advanced management principles and to develop management skills * develop planning and decision making competencies of the students * enhance the organizational change and development skills * develop the managerial functions to be implemented in the organization | | |
| Module competence | | * Identify advanced management principles * Capability on the organizational change and development * Managerial function implementation ability | | |
| COURSES IN THE MODULE | | | | |
| **Course number** | **Course Name** | | Credit hours | **ECTS (CP)** | |
|
|
| 1 | Management Theories and Practices | | 2 | 3 | |

**Management Theories and Practices (**MBA 6011**)**

**Credit hour: 2**

**Course Description:**

The course deals with acquainting students with contemporary management theories and practices that are relevant to the rapidly changing organizational environment. It includes the concept of systems approach, contingency theory, leadership and decision making approaches and skills.

**OBJECTIVES:**

* apply advanced management principles and to develop management skills
* develop planning and decision making competencies of the students
* enhance the organizational change and development skills
* develop the managerial functions to be implemented in the organization

**Course contents**

**PART-I-INTRODUCTION TO MANAGEMENT**

**Unit-1.Managing and Managers**

Why management-Defining management-the management process-types of managers-management levels and skills-modern management challenges

**Unit-2-Development of Management Thoughts**

Evolution of management thought-the scientific management school: F.W.Tylor contributions of scientific management theory-classical organization theory school-Fayol’s Administrative management, bureaucratic management-the behavioral school-Human relations to the behavioral approach-the quantitative school-attempts to integrate the schools-the systems approach, the contingency approach.

**PART-II-PLANNING AND DECISION MAKING**

**Unit-3 Planning and plans**

The need for planning, steps in planning, classification of planning and plans-strategic and operational plans; strategy; formulating strategy-implementation of strategy, policy procedures methods and rules-making planning effective –barriers to effective planning –barriers to strategic planning-making planning effective-MBO, the MBO system-the strength and weaknesses of MBO, making MBO effective.

**Unit-4 Decision making**

Types of decisions- decision making process-guidelines for making effective decisions-individual versus group decision making-rationality in decision making-decision tree-linear programming-game theory-waiting line theory. Decision making models.

**PART-III-ORGANIZING**

**Unit 5-Organizational structure**

Concepts of organizational structure-formal and informal organizations-need for formal organization structure-Departmentalization-Span of management-determination of span of management-Factors affecting Span of management.

**Unit 6- Authority and Responsibility**

Concept of authority, responsibility-delegation of authority-measures for effective delegation-centralization and decentralization-line and staff authority-line and staff conflict-conflict management-coordination-types of coordination-techniques for Effective coordination

**Unit 7-Organizational Change and Development**

Responses to change pressure-the process of organizational change-resistance to change –overcoming resistance to change-approaches to organizational change-Organizational Development.

**PART-IV-LEADING**

**Unit 8-Motivation**

Theories of motivation- an overview –early views of motivation-contemporary views of motivation-expectancy theory-reinforcement theory-Goal setting theory

**Unit 9-Leadership**

Define leadership-leadership theories; trait theory, behavioral theory-situational theory, leadership styles-likert’s management system-management Grid-Tridimensional Grid-Fielder’s contingency model-Hersey Blanchard’s situational model-Parltu Gold Medal of Leadership-Leadership Development.

**PART-V-CONTROLLING**

**Unit 10-Fundamentals of Controlling**

Concept of controlling- steps in controlling-types of control-controlling and management by exception-design of executive control system-causes of resistance to control.

**Unit -11-Operational Control Techniques**

Financial control- Budgetary control-control through costing- Break-even Analysis-operational control-Quality control-TQM-Inventory control-ABC Analysis-Economic order Quantity

**Assessment Scheme**

* Two Presentations 10%
* Two Term Papers 20%
* Mid Exam 20
* **Final Exam 50%**

**Total 100%**

**REFERENCES**

* Koontz, H and Wechrich.H.1995, **Management**, New York, McGraw Hill
* Stoner, J, 1996, Management 6thed, New Delhi, Prentice Hall of India.
* Robinns S.P,1996 **Management**, New Jersey, Englewood Cliffs
* Richard L.Dafft,2010,**New Era Management**, Thomson, South Western
* Peter F. Drucker (1999).**Management Challenges for the 21st Century**, New York, McGraw Hill
* Freeman stoner management 5th edition (1992) a Simon & Schuster co. new Jersey
* F. Stoner James R. Edward Freeman & Daniel A. Gilbert mans 2001 Connaught circus New dechi.
* Higgins M. James the mgt challenges an introduction to mgt 1991 Mc Milan publishing New York.
* Martic David & Kathryn M. Bartolmgt 3rd edition 1998 Mc Milan
* Terry R. George a guide to management 1981 learning system company

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Program name | **MA in Logistics and supply chain management** | | | | | | | |
| Module Name | **Cost and Management Accounting** | | | | | | | |
| Module code | **ACCT-M6022** | | | | | | | |
| Module number | **1** | | | | | | | |
| Total ECTS | **3** | | | | | | | |
| Module category | **Supportive** | | | | | | | |
| Module Delivery | Semester base/ parallel | | | | | | | |
| COURSES IN THE MODULE | | | | | | | | |
| **Course number** | **Course Name** | Credit hours | Teachers Load | | | | Student load | **ECTS(CP)** |
| Lecture | Tutor | Group Discussion | Assessment |
| Home study |
| 1 | Cost and management accounting | 2 | 32 |  |  |  | 49 | 3 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Module number | | **03** | | | |
| Module name | | ***Logistics Management*** | | | |
| Module code | | **LSCM-M 6031** | | | |
| Total ECTS | |  | | | |
| Module description | | The basic aim of the module is to equip the students with the basic concepts of logistics engineering, global logistics management and humanitarian logistics. Logistics system Management in the Supply Chain *–* illustrates methodology for planning and managing logistics activities, will address the major issues in logistics data mining, logistics performance measurement, customer response, inventory planning and management, supply management, transportation, warehousing, logistics information systems, and logistics organization design and development.  The module introduces students with global and humanitarian logistics management | | | |
| Objective of the module | | This module is designed to equip the learners to:   * Evaluate logistics related costs and the performance of logistics in the economy * Design the logistics system and evaluate its role in the supply chain operations * Has clear understanding of global logistics. * Have concepts on humanitarian logistics * Evaluate humanitarian logistics practice | | | |
| Module competence | | * Plan, implement, control and evaluate the whole logistics related activities. * Evaluate the global logistics. * Evaluate humanitarian logistics | | | |
| COURSES IN THE MODULE | | | | | |
| **Course number** | **Course Name** | | Credit hours | **ECTS (CP)** |
|
|
| LSCM  6031 | Logistics system management | | 3 | 5 |
| 6032 | Global logistics management | | 2 | 3 |
| 6033 | Humanitarian logistics management | | 2 | 3 |

**Transport and Logistics system Management**

**LSCM 6031**

**Credit hours 3**

**Course description**

Logistics system Management in the Supply Chain *–* illustrates methodology for planning and managing logistics activities, will address the major issues in logistics data mining, logistics performance measurement, customer response, inventory planning and management, supply management, transportation, warehousing, logistics information systems, and logistics organization design and development.

Besides, this block describes the role of IT as supply chain enabler, supply chain integration software, degree of supply chain integration among supply chain members, vertical integration, horizontal integration, virtual integration. Besides, the block will illustrate different types of performance measures (financial and non-financial) among supply chain members using different models like Supply Chain Operation’s reference (SCOR) model and Balanced Score Card (BSC) model.

**Objective of the course**

* Define and discuss the evolution of logistics management
* Evaluate logistics related costs and the performance of logistics in the economy
* Analysis the whole logistics activities and evaluate their performance
* Design the logistics system and evaluate its role in the supply chain operations

**Course Outline:**

**Unit One**: **The Definition, Evolution, and Role of Logistics in Supply Chain**

1.1 The Definition of Logistics

1.2 The Evolution of Logistics and Supply Chain Management

1.3 Logistics Activities

1.4 Logistics Optimization

1.5 Logistics Master Planning

1.6 Logistics around the World: Necessity Is the Mother of Invention

1.7 Performance Based Logistics

1.8. The Need for Logistics Engineering

**Unit2: Reliability, Maintainability and Availability Measures**

* 1. Reliability measures and Failure rate
  2. Maintainability measures and related factors
  3. Availability Factors

**Unit3**: **Logistics Performance, Cost, and Value Measures**

3.1 Financial Measures of Logistics Performance

3.2 Productivity Measures of Logistics Performance

3.3 Quality Measures of Logistics Performance

3.4 Cycle Time Measures of Logistics Performance

3.5 Logistics Performance Gap Analysis

3.6. Supply chain factors

**Unit4: Logistics and Supportability Analysis**

* 1. The Analysis Process
  2. The Analysis Methods and Tools
  3. Supportability Analysis Applications
  4. Logistics Management Information

**Unit 5 Customer Response Principles and Systems**

5.1 Customer Response Fundamentals and Notations

5.2 Customer Activity Profiling

5.3 Customer Response Performance Measures

5.4 Customer Service Policy Design

5.5 Customer Satisfaction Monitoring

5.6 Order Capture and Entry

5.7 Order Processing

5.8 Documentation, Invoicing, and Collections

5.9 Customer Response Systems

5.10 Customer Response Organization Design and Development

**Unit 6**: **Inventory Planning and Management**

6.1 Inventory Fundamentals

6.2 Inventory Activity Profiling

6.3 Inventory Performance Measurement

6.4 Forecasting

6.5 Order Quantity Engineering

6.6 Fill Rate Planning

6.7 Inventory Control Policy and Replenishment Design

6.8 Inventory Deployment

6.9 Inventory Management Systems

6.10 Inventory Organization Design and Development

**Chapter seven: Costs and Benefits of Transportation**

7.1 Introduction

7.2 Internal Costs and Benefits

* Accounting Costs
* Capital vs. Operating Costs
* Marginal vs. Average Costs
* Total Costs: Fixed vs. Variable, and Short Run vs. Long Run
* Opportunity Costs

7.3 External Costs and Benefits

**Chapter eight: Pricing of Transportation Services**

8.1 Introduction

8.2 What is an Optimal Price?

8.3 Roadway Pricing

8.4 Road Pricing’s Impacts on Equity

**Chapter nine: Regulation and Competition**

9.1 Introduction

9.2 Regulations

9.3 Deregulation

9.4 Competition

**Chapter ten: Movement, Transportation, and Location**

10.1 Introduction

10.2 Accessibility and Mobility

10.3 Transportation and Location Choice

10.4 Transportation and Land Values

10.5 Transportation and Wages

10.6 Transportation and Economic Development

**Chapter eleven: Economic Impact Analysis of Transportation Investments and Policies**

11.1 Introduction

11.2 Generative and Redistributive Impacts

11.3 Paths of Economic Analysis

11.4 Computable General Equilibrium (CGE) Models

**Chapter twelve:**

12.1. Functions of an international freight forwarder

12.2 In depth definition and role of an international freight forwarder

12.3 multi-modal shipments and costs Analysis

12.4 Analyze government programs for promoting various modes of shipment

12.5 Analyze International modes of transport and Conventions relating to them

12.6 Terms of sales and payment related to documents utilized in International freight forwarding.

12.7 Rules and regulations of INCOTERMS as stipulated by the ICC

12.8 Evaluate the transport document vis-à-vis terms of sales

12.9 Analysis of the B/L and AWB used in International Freight Forwarding

**Unit thirty: Transportation and Distribution Management**

13.1 Transportation Optimization

13.2 Transportation Fundamentals

13.3 Transportation Activity Profiling

13.4 Transportation Performance Measures

13.5 Logistics Network Design

13.6 Shipment Planning and Management

13.7 Fleet, Container, and Yard Management

13.8 Carrier Management

13.9 Freight and Document Management

13.10 Transportation Management Systems (TMSs)

13.11 Transportation Organization Design and Development

**Unit forty: Warehouse Operations**

14.1 Warehousing Fundamentals

14.2 Warehouse Activity Profiling

14.3 Warehouse Performance Measures

14.4 Receiving Principles

14.5 Put away

14.6 Storage Operations

14.7 Order Picking Operations

14.8 Shipping Principles

14.9 Warehouse Management Systems

14.10 Warehouse Workforce Design and Development

**Unit fifty: Logistics and Supply Chain Information Systems**

15.1 Logistics Information System (LIS) Functionality and Architectures

15.2 Logistics Data Warehousing, Data Mining and Decision Support Systems

15.3 Web-Based Logistics

15.4 Paperless and Wireless Logistics Systems

15.5 LIS Justification, Selection, and Implementation

**Unit sixty : Logistics Management**

* 1. Logistics Program Planning
  2. Development of a work breakdown structure (WBS)
  3. Scheduling of Logistics Tasks
  4. Cost estimating and control
  5. Organization for Logistics
  6. Management and Control

Evaluation:

Journal Review---------------------------------15%

Group work ------------------------------------10%

Project work------------------------------------20%

Book Review-----------------------------------15%

Final Exam-------------------------------------40%

**References**

*FrazelleEdward(2002), Supply Chain Strategy: The Logistics of Supply Chain Management, McGrawhill, Newyork.*

*Blanchard B.(2004), Logistics Engineering and Management,6thedn., Eastern Economy Edition.*

*Bowersox et al.,(2002), Supply Chain Logistics Management, McGraw-Hill Higher Education, Boston.*

**Global Logistics management (LSCM- 6032)**

**Credit hours: 2**

Course descriptions

Today’s logistics managers operate in a demanding environment and are charged with streamlining the many and complex activities that provide organisations with the essential materials and services to accomplish their missions, frequently controlling material flows moving in multiple directions across many countries and regions. They must know how to balance cost, effectiveness and risk to fulfil the demands of their organisation’s supply chain and deliver the required customer service levels. All of this takes place against the backdrop of the larger economic and social forces shaping consumption, production and distribution trends across the globe. Global Logistics is a comprehensive, senior-level course that explores how integration is crucial to sound logistics operations within successful and sustainable organizations. It helps learners create efficient, silo-free logistics systems and decision-making environments, integrating all activities involved in the cost- effective and uninterrupted movement of materials and information from their source to the point-of-consumption.

**Objectives of the course**

The objective of the course is to provide with the capability to strategically review, plan and manage a logistics supply chain system with specific reference to financial, operational, control, integrated management criteria and its strategy throughout the course.  Significant advancement of information and communication systems in recent years has changed the world towards globalization of economy.  The design and operation of logistics systems require substantial planning and integration of services and support.  Due to the complexity and multi-disciplinary nature, the knowledge and expertise required to implement an efficient and effective logistics system should not be underestimated.  You will learn a complete range of logistics knowledge and skills covering areas such as the process from supplier to consumer, Third Party Logistic (3PL), distribution demands, reverse logistics, quality control, performance management, and total cost of ownership inventory management.

* To provide an advanced and integrated understanding of the role and importance of logistics, including supply chain management, in the organisation and the economy.
* To discern how logistics operations are part of an integrated system and how these operations become more competitive

**UNIT I: Global Logistics Management**  
   1.1. Introduction to logistics management  
   1.2.Current logistics management strategies  
   1.3.Customer service and logistics  
   1.4.Channels of distribution  
   1.5. Planning framework for logistics  
   1.6. Logistics management and organization

**Unit II: Outsourcing Trends and Best Practice in Logistics systems**  
   2.1. Outsourcing operations and services  
   2.2. Value added services  
   2.3. Key drivers for outsourcing  
   2.4. Outsourcing management  
   2.5. Managing the 3PL relationship  
   2.6. Detailed metrics and Key Performance Indicators (KPIs)

**Unit III: Finance, Costing and Financial Control**  
   3.1. Finance  
     - Types of finance debt, equity and others  
     - Return on capital employed  
     - Leasing and the difference between finance and operating leases  
     - The influence of logistics on shareholder value  
   3.2. Accounting  
   3.3.Costing.  
   3.4. Budgeting  
   3.5. Working capital and the supply chain  
     - The cost of stockholding/inventory and how the supply chain can reduce this  
     - The cost of credit  
     - Management of working capital  
   3.6. Capital project appraisal  
     - Commercial and financial evaluations  
     - Return on investment (ROI)  
     - Payback periods  
   3.7. Ratio Analysis

|  |  |
| --- | --- |
| **UNIT IV:  Logistics Contracts**    4.1. International conventions and Laws in international logistics     4.2. Logistics risks and insurance      - Liability - value added services      - Risk management tools    4.3. Third and fourth party logistics solutions      - Agents and principals      - Determining contractual capacity      - Liability      - What are 3PL and 4PL solutions and risk profile    4.4. When to use a tailor-made contract      - Standard conditions      - Special agreements      - Key commercial clauses    4.5. The tender process    4.6. Negotiation techniques    4.7. Contract management |  |

UNIT 5: **Freight Transport Industry - Introduction and Development**  
   5.1. Economics, environment and policy  
     - Effect of trade deregulation on industrial development  
     - Global sourcing, industry relocation and its impact on transportation requirement  
     - Globalisation and energy efficiency  
     - The environment and CO2 emissions  
     - The World Trade Organisation process and quota regimes  
   5.2. Legislation, authorities and the regulatory environment  
  UNIT 6.**Freight Transport Industry/Mode of transportation - Road, Rail, Air and Sea Transport**  
   • Transport characteristics  
   • Pressures on the industry  
     - Social  
     - Security  
     - Environmental  
   • Forecasting transportation demand  
   • Port and terminal capacity  
   • Current and future trends

**UNIT 7: Warehouse and Distribution Centre Design**  
   • Outsourcing of warehouse operations  
   • Warehouse location planning  
   • Operations - order picking  
   • Operations - packaging  
   • Warehouse design and fittings  
   • The green influence  
     - Building and utilities  
     - Storage  
     - Material handling  
     - Monitoring overall energy and carbon usage  
     - Distribution transport  
     - Waste management  
   • e-fulfillment (B2C)

**UNIT 8: Key Issues for Global Logistics Management**  
   • Developments impacting on the supply chain  
   • Logistics processes  
   • Logistics network planning  
   • Inventory and the integrated supply chain  
  • Logistics and the environment  
     - Best practice  
     - Reverse logistics

**UNIT 9: Performance Measurement and Improvement - Optimisation Strategies**  
   • Modelling techniques in logistics management  
   • Review of logistics performance indicators  
   • Analytical performance and benchmarking techniques  
   • Current issues in logistics performance and optimization

Evaluation:

Journal Review---------------------------------15%

Group work ------------------------------------10%

Project work------------------------------------20%

Book Review-----------------------------------15%

Final Exam-------------------------------------40%

**Humanitarian Logistics management (LSCM-6033)**

Credit Hours: 2

**Course Description**

The basic task of a logistics system is to deliver the appropriate supplies, in good condition, in the quantities required, and at the places and time they are needed. Although mostly concerned with the movement of goods and equipment, relief logistics also encompasses the relocation of disaster-affected people, transfer of casualties, and the movement of relief workers. The Humanitarian Logistics course focuses on the importance of logistics in the provision of aid to disaster survivors as well as its place in carrying out other disaster management operations. It examines the design of logistics systems and the co-ordination required by the various agencies and actors involved in implementing the system and carrying out the operation.

**Course Objectives**

Course objectives

The course is intended to provide students with understanding and practical use of global logistics and supply chain management in Disaster Management. This course also provides systematic overview of planning, organization, operational and financial dimensions of global logistics and supply chain management in Disaster Management in the context of national and international levels.

Up on successful completion of this course, students should be able to:

Explain the basic issues in humanitarian logistics

Understand the importance of logistics function in provision of humanitarian assistance.

Learn the basics of managing logistics during humanitarian response

Appreciate the significance of coordinated ‘Supply Chain Management’ for an efficient & effective humanitarian response

Understand the procurement, receiving, recording, controlling, monitoring, storage and distribution of emergency supplies

Explain assessing logistics and supply needs

Address the practical difficulties in humanitarian Supply Chain Management

Work towards optimizing the use of scarce resources during emergencies & enhancing the quality of humanitarian operations

**Contents**

**UNIT One: Logistics in Humanitarian sector**

* 1. Basic Definitions
  2. Logistics & Supply Chain Management from Humanitarian aspect.
  3. Challenges , gaps ,and trends in humanitarian Logistics
  4. Logistics skills and performance
  5. Characteristics of humanitarian supply chain
  6. Benchmarking & Metrics for humanitarian logistics
  7. Over view of Key performance indicators in logistics management
  8. Sharing Knowledge the private and the humanitarian sector

**UNIT Two: Logistics & Humanitarianisms**

* 1. An overview of Humanitarianism
  2. Humanitarianism Space
  3. Conflict Connection
  4. Disaster General Aspect
  5. Main effects of disasters
  6. Logistics & Emergencies
  7. Logistics planning and preparedness
  8. Assessing logistical and supply needs

2.8.1. The importance of need assessment

2.8.2. Assessment of local capacity

2.8.3. factors that may restrict or facilitate relief efforts

2.8.4. social ,environmental ,and cultural features of the affected population and region

**UNIT Three :Coordination**

* 1. The Need for Coordination
  2. Levels of Coordination
  3. Coordination structure
  4. Coordination arrangements
  5. Humanitarian Coordination: obstacles to over come
  6. Request for humanitarian Assistance

**UNIT Four: Procurement ,Receiving ,Recording ,Controlling ,Monitoring ,Storage ,Distribution of Emergency Supplies**

* 1. **Key characteristics of emergency supplies**
  2. Source and procurement of emergency supplies
  3. Receiving supplies
  4. Arrival and recording of supplies
  5. Controlling ,monitoring and follow of systems
  6. Storage of emergency supplies

Distributions of emergency supplies

**UNIT Five :Transparency ,Telecommunication and Information Management In humanitarian Supply chain**

1. Introduction
2. Role of Information Management
3. Visibility (pipelines)
4. Transparency (PROCESS)
5. Accountability (PARTIES/PERFORMANCE)
6. Benefits of accountability
7. Information flows
8. The communication strategy
9. Telecommunications system

Evaluation:

Journal Review---------------------------------15%

Group work ------------------------------------10%

Project work------------------------------------20%

Book Review-----------------------------------15%

Final Exam-------------------------------------40%

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Module number | | **04** | | |
| Module name | | **Supply chain logistics management** | | |
| Total ECTS of the module | |  | | |
| Module Description | | This module is designed for students who will work in the field of logistics services management. In business, logistics may have either internal focus (inbound logistics), or external focus (outbound logistics) covering the flow and storage of materials from point of origin to point of consumption. The main functions which are performed as logistics services are transportations services, port and terminal operations, customs clearing in international business, etc.  Providers of logistics services, such as transporters, forwarders and ships agents, work in a rapidly changing environment. They are only competitive if they have full competence in logistics management and multi-modal transport systems, such as consolidation, airfreight, river transport, port operations, transshipment, and warehousing and information management.  Therefore, this module will help students combine a professional knowledge of each of these functions. | | |
| Objective of the module | | The objectives of the module are:   * Describe the main logistical service activities * Identify procedures of port operation * Understand how to operate logistical activities * Understand the role of transportation and freight forwarding * Apply their knowledge of managing and operating warehouses * Adapt with procedures and practices of customs clearing and bank involvement in the international business. | | |
| Module competency | | With the accomplishment of this module students are expected to be competent on:   * The way how to operate and manage logistics services * International business operation * Ensuring a thorough knowledge and understanding of port and terminal operations. * Ways of providing transportations service. | | |
|  | |  | | |
| COURSES IN THE MODULE | | | | | |
| **Course number** | | **Course Name** | | Credit hours | **ECTS (CP)** |
|
|
| LSCM 6041 | | International business management | | 2 | 3 |
| LSCM 6042 | | Transportation and port operation management | | 2 | 3 |
| LSCM 6043 | | Quantitative Decision Making in logistics and Supply Chain Management | | 2 | 3 |

**International Business Management (LSCM-6041)**

**Credit Hours: 2**

Across the globe, organizations are seeking dynamic managers with the skills to work away from their domestic country. This course will equip you with a comprehensive understanding of relevant and current international issues, giving you the opportunity to take your career anywhere in the world. Covering topics such as globalization, operations and procurement, e-commerce, and corporate government, the course offers a good balance of theoretical knowledge and practical application. The course International Business will also equip you with the knowledge and skills to advance your career to the global level in industry, government and non-government organizations. The course emphasis on the effective management of people within multicultural settings is essential for managers working on an international scale. You will develop the ability to think globally and will be equipped to go on to a rewarding career with a multinational company, government agency, international aid agency or organization with global business links.

The International Business course is designed to provide students with the knowledge and skills relevant to the development, strategy, and management of international business organizations; and an understanding of the institutional context for their development, growth, and operation.

**COURSE contents**

**UNIT I: INTERNATIONAL BUSINESS: ROLE AND PROCESSES**

* 1. Introduction to management
  2. International Business (Trade) Theories
  3. International Investment Process and Finance

**UNIT II: STRATEGIC MANAGEMENT OF INTERNATIONAL BUSINESS**

2.1. Structural Design of Multinational enterprises

2.2. Strategic Planning in MNEs

2.3. Strategic Considerations

**UNIT: III CONTROL AND EVALUATION**

3.1. Control and Information in International Business

3.2. Performance Measurement and Evaluation

3.3. Multinational Corporate Culture and Host Countries

**UNIT IV: MANAGEMENT PROCESSES AND PRACTICES**

4.1. Human Resource Management in MNEs

4.2. *International Dimensions of HRM*.

4.3. Production Management and Logistics

4.4. Negotiations in International Business

4.5. *Business Negotiations*

**PART V: MULTILATERAL ARRANGEMENTS**

5.1. International Business and Developing Countries

5.2. Regional Trade Groupings and Cooperation

5.3. International Intervention and International Business

5.4. Multilateral Negotiations

**UNIT VI: Global Business Environment**

* 1. Global Business Operations
  2. Global Trade Relations
  3. The Legal Environment of International Business
  4. Global Management and Culture
  5. Global Strategy
  6. Managing Global Operations
* *Comparative International Management*
* *Export and import Management*
* *Business Innovation and Sustainability*
* *Intellectual Property Management*
* *Global Outsourcing and Offshoring*

**Chapter 7: C**orporate social responsibility and ethics in international business

7.1. Corporate social responsibility

7.2. Business ethics

Chapter eight: international trade terms (INCO terms)

Evaluation:

Journal Review---------------------------------15%

Group work ------------------------------------10%

Project work------------------------------------20%

Book Review-----------------------------------15%

Final Exam-------------------------------------40%

**Port operation management (LSCM 6042)**

**Credit hours: 2**

**Course description**

**Course description**

The ports sector has changed radically since started 15 years ago, but ports continue to play a vital, and growing, role in the movement of goods around the world making education in the sector more relevant than ever. At the same time the course has changed to reflected the dynamic industry, and particularly of the growing private sector role in the delivery of port and terminal facilities and operations.

Ports are the economic drivers of a country’s economy and ships are the principal mode of delivery. As countries develop and their economies grow, reliance on ships and ports also grows. Emerging and established economies require graduates who have developed a solid knowledge and understanding of operating a port successfully and managing the ships that deliver to the ports. Studying shipping and port management will help you to capitalize on these opportunities and equip you with the balance of modern shipping knowledge and port management expertise sought after by employers in the industry.

Shipping is a key link in the global supply chain and accounts for over 95 per cent of all imports and exports. With the growing demand of a global population, levels of international trade have dramatically increased over the last four decades. With the world shipping fleet growing at just under 4 per cent per year and anticipated annual growth in seaborne trade demand currently sitting at 3-4 per cent, the employment opportunities within the maritime sector look set to expand.

On ship and port management course students gain key knowledge and specific expertise in ship, port and transport operations, maritime law, marine finance and general management – all of the essential skills required to apply for a range of roles in this major global industry. From ship management and operations, port and terminal management, to shipping analysts, freight forwarding, logistics professionals and supply chain specialists - the opportunities in this industry are as diverse as the cargo it carries.

As a key part of the international global supply chain network, ports have a vital role to play in facilitating trade for any country – both in terms of export and import success and in serving a nation’s economic hinterland – in a cost-effective and reliable manner, all of which impact on trade competitiveness. Further services also include working with partners to ensure hinterland transport connections are efficient, liaising with third parties such as terminal and shipping line customers, developing the port estate to reflect customer requirements, attracting new terminal business, working with terminals to attract new cargo business and general management functions. All these activities ensure it is a varied, interesting and challenging occupation.

**Unit 1: Introduction to International Trade and Logistics**

* 1. Introduction to the global supply chain and logistics  
     1.1.1. History of trade development and modern trade flows
  2. Globalisation, maritime transport supply and demand  
     1.2.1. Role of ports and terminals in global logistics chains
     1. Historic development of ports and terminals
     2. Ports and their hinterlands
     3. Port connections
* Export, transhipment, import and gateway  
     - Hub/spoke  
     - Marine, road, rail, river, air connections  
     - Distribution hubs  
     - Freight corridors
* Hinterland connections
* Port Centric Logistics and warehousing
  1. Current trends in port logistics

**Unit 2: Introduction to Port Management**  
2.1. Introduction to ports and port development

2.2. Management structures, ports personnel, roles and functions

2.3. Port users and their agents  
2.4. Competition and other challenges facing the industry  
**Unit 3: Regulatory, Legal Issues and Insurance for Ports**  
• Background law  
• Port setting-up statutes/authorisations  
• Rights and obligations of port authorities  
• Privatisation models - public private partnerships (PPP) and the private finance initiative (PFI)  
• Regulatory models  
• Customs and tariffs controls  
• Port health and border management  
• Legal issues in port development and real estate management  
• Grant funding  
• Government regulatory and competition frameworks  
• Corporate relationships with companies operating in ports  
• Employment and human resource issues  
• Legal ethics  
• Port insurance and risk management strategies **Unit 4: Managing Marine Operations and Conservancy**• Management responsibility for maritime safety  
• Applying national and international rules and regulations  
• Dangerous cargoes and the IMDG Code  
• Supporting services  
• The role of the harbour master  
• Working with the maritime port community  
• Maintaining access to the port  
**Unit 5: Port Marketing and Business Development**• Competition  
   - The competitive landscape  
   - Identifying and understanding customers and competitors  
   - Understanding yours and your competitors’ strengths and weaknesses  
   - Gaining competitive advantage  
• Marketing  
   - The role of marketing and marketing concepts  
   - Market and marketing strategy  
   - Promotional plans  
• Marketing research  
   - Customer focus and effective marketing  
   - Selecting the marketing medium  
   - Public relations  
• Business development  
   - Identifying niches and unique selling points (USPs)  
   - Buyer influences  
   - Negotiating and closing contracts  
• Customer focus  
   - Establishing customer’s requirements  
   - Working with customers to improve your service  
• Port business performance management  
   - Measuring port productivity  
   - Benchmarking  
• Quality assurance  
Unit 6: **Port Project Management: Principles and Techniques**• Feasibility studies - design, investigations and construction  
• Contract strategy  
• Project and planning principles  
• Roles and responsibilities  
• Leadership  
• Managing the team  
• Risk management  
• Scheduling  
• Appointment of contractors  
• Reviewing quality  
• Monitoring and control  
• Managing project change  
• Closure and review

**Unit 7: Economics of Port Operations, Port Pricing and Port Financing**  
• Principles of port economics  
• Financial concepts  
• Cost reduction programmes  
• Funding development  
• Risk management  
• Port investment

Unit 8: **Health, Safety, Security and the Environment (HSSE) in Ports**  
• Importance of HSSE  
• Promoting a HSSE friendly work place  
• Occupational health and safety management  
• Emergency planning  
  • Security of vessels  
• Security of cargo and passengers  
• Role of security bodies  
• Environmental concerns

Unit 9: **Port Labour and People Management**  
• History of port and dock labour  
• Labour reform and social issues  
• Employment framework and employee relations  
• Management of staff in ports  
• Performance management and appraisals  
• Training and development  
• Managing conflict  
• Customer focus

**Unit 10:** shipping and logistics operations

* introduction to shipping management
* international shipping
* managing harbour operations,
* managing terminal operators

**Quantitative Decision Making in Supply Chain Management**

**LSCM 6043**

**Credit hours: 2**

**Course Description**

Supply Chain Quantitative for Decision making-This course contains management science approaches for improved decision making across the supply chain members to optimize supply chain profitability using different deterministic and stochastic supply chain models.

**Course Outline**

**I. INTRODUCTION**

* 1. Development in management theory and practice (from scientific management to management science)
  2. Review of probability Theory Bayesian statistics in particular (for independent review)
  3. Decision making through quantitative analysis management science models.

Example of models-1) Break even Analysis 2) EOQ model 3) EMV analysis

**II. GETTING STARTED**

2.1 Introduction to modeling

2.2 Variable and objectives

2.3 The influence diagram: Tool for structuring relationships among variables

**III. MULTI CRITERIA DECISION MAKING**

3.1 Goal Programming

3.2 The Analytical Hierarchy Process

3.2 Scoring Models

**IV. QUEUING ANALYSIS**

4.1 Elements of waiting line analysis

4.2 The single server waiting line system

4.3 Undefined and constant server time

4.4 Finite queue length

4.5 Finite calling population

4.6 The multiple server waiting line

**V. ADDING UNCERTAINTY –RISK ANALYSIS**

5.1 Monte Carlo Simulation

5.2 How many trials should you run?

5.3 Stochastic Dominance

5.4 The value of Information

**VI. GAME THEORY**

6.1 Types of game situations

6.2 Pure strategy

6.3 Mixed Strategy

**VII. INCORPORATING DECISION PREFERENCES INTO MODEL**

7.1 Concept in multi objective choice

7.2 Risk preferences and utility

**VIII. TREATING SPECIAL PROBLEMS**

8.1 Group decision

82 Risk and time

**Supply Chain Management: Models, Applications in Manufacturing, service, and construction sectors of Ethiopia (Project works)**

**IX. List of management science model for major group project**

9.1 The Role of the Internet and e-Commerce in the Supply Chain

9.2 Customer Service Models

9.3 B2B Markets: Procurement and Supplier Risk Management in E-Business

9.4 Supply Chain Coordination Models

9.4.1 Partial Quick Response Policies in a Supply Chain

9.4.2 Coordinating the Distribution Chain

9.5 Mathematical Programming Model for Global Supply Chain Management:

9.6 An Optimization Framework for Evaluating Logistics Costs in a Global Supply Chain

9.7 The Supply Chain in the Service/construction Industry: Models and Linkages

9.8 Simulation models

9.9 Forecasting models

**X. List of topics for individually short paper assignments**

* 1. Deterministic models
  2. **Stochastic models**
  3. Heuristic programming
  4. Lagrange multipliers
  5. Application of calculus in optimization decisions
  6. Mathematics of Finance Investment
  7. Application of Matrix Algebra in Optimization Decisions
  8. Index Numbers

**Evaluation:**

Individual assignment----------------------------------------------10%

Test--------------------------------------------------------------------10

Group project work and defense-----------------------------------30%

Final Examination---------------------------------------------------50%

References:

Sharma JK (2005), Operations Research; problems Solutions, 2nd.edn, Macmillan Publisher, India.

Taylor III Bernard W.  ( 2006)-  Introduction to Management Science, Ninth Edition Virginia Polytechnic Institute and StateUniversity,9thedn.

Bodily: Modern Decision making; A guide to modeling with Decision Support Systems)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Module number | | 05 | | | |
| Module name | | ***Supply chain management*** | | | |
| Module code | | **LSCM-M6041** | | | |
| Total ECTS | |  | | | |
| Module description | | The basic aim of the module is to equip the students with the basic concepts of supply chain theories, practices and information system. It also equips students with the fundamental concepts of supply chain Management theories, Parkinson’s Law, Peter’s principles, etc. It focuses on the basic theories, concepts and principles of management, and their relationships to its practices on supply chain management.  The module gives emphasis to the role of information in the supply chain management, how information is properly managed to gain competitive advantage across the supply chain, internet technology and different software that helps the efficiency of supply chain information system. | | | |
| Objective of the module | | This module is designed to equip the learners to:   * Study and discuss principles, theories and practices of supply chain management. * Understand the information system in managing different aspect of supply chain management. * Discuss and explain the power of information technology in supply chain management. * Discuss and explain the importance and role of strategic supply chain management | | | |
| Module competence | | * Able to apply supply chain management theories, principles in the practical business world. * Collaborate with IT professionals in the selection of Supply chain enabler(IT) * Able to design supply chain strategy | | | |
| COURSES IN THE MODULE | | | | | |
| **Course number** | **Course Name** | | Credit hours | **ECTS (CP)** |
|
|
| LSCM 6051 | Supply chain management theories & practices | | 3 | 5 |
| LSCM 6052 | Supply chain information system | | 2 | 3 |
| LSCM6053 | Strategic supply chain management | | 2 | 3 |
| LSCM6054 | Strategic procurement management | | 2 | 3 |
| LSCM 6055 | Operation management | | 2 | 3 |
|  |  | |  |  |

**Course Title: Supply Chain Management Theories and Practice**

**Course code: LSCM 6051**

**Credit hours: 3**

**Course Description**

This course will equip the students with the fundamental concepts of supply chain Management theories, Parkinson’s Law, Peter’s principles, etc.

This Course focuses on the basic theories, concepts and principles of management, and their relationships to key its practice supply chain management. It will examine principles that help in the process for designing, developing, optimizing, and managing the internal and external components of the supply system, including material supply, transforming materials, and distributing finished products or services to customers, that is consistent with the overall objectives and strategies of firms and members at different stages of supply chain trading partners.

**Course Objective**

This course is intended to equip students with the principles, theories, and applications of supply chain management.

Besides, it focuses more on the functions of supply chain management, like supply, warehousing, production, logistics and relationship management issues of modern supply chain management concepts like green supply chain management and supply chain social responsibility issues briefly.

**COURSE OUTLINE:**

**Chapter One: Basic supply chain and Management Thoughts**

* 1. Supply chain management
  2. Basic concepts of Supply chain and supply chain management
  3. Supply Chain Management as a Management Philosophy
  4. Pre-classical theories of management
  5. Classical theories of management
  6. Advanced theories of management
* Quantitative management approach
* Systems theory
* Contingency theory
* Integrative approach
* Chaos theory

[1.7. Characteristics of Supply Chain Management](#_Toc242812941)

1.8. [Theories of Supply Chain Management](#_Toc242812942)

[1.9. Supply Chain Decision Making Areas](#_Toc242812943)

[1.7 Participants in the Supply Chain](#_Toc242812944)

**Chapter Two**

[**Role Of Procurement In Supply Chain Management**](#_Toc242812945)

[2.1 Basic concepts of purchasing](#_Toc242812946)

[2.2. Purchasing Function](#_Toc242812947)

[2. 3 Sourcing Decisions: The Make – or- Buy Decision](#_Toc242812948)

[2. 4 Important Theories and Their Implications for the Sourcing Function](#_Toc242812949)

[2. 5 Role of Supply Base](#_Toc242812950)

[2. 6 Creating and Managing Supplier Relationship](#_Toc242812951)

[2. 7. Supplier Evaluation and Certification](#_Toc242812952)

[2. 8. Supplier Selection](#_Toc242812953)

[2. 9. Supplier Development](#_Toc242812954)

[2. 10. Supplier Integration and Relationship Management](#_Toc242812955)

**CHAPTER THREE**

[Role Of LogisticsIn Supply Chain Management](#_Toc242812956)

[3.1 The Definition, Evolution, And Role Of Logistics In Business](#_Toc242812957)

[3. 2 Logistics Activities](#_Toc242812958)

[3.3 Logistics Optimization](#_Toc242812959)

[3.4 Logistics Master Planning](#_Toc242812960)

[3.5 Financial Measures Of Logistics Performance](#_Toc242812961)

[3.6 Productivity Measures Of Logistics Performance](#_Toc242812962)

[3.7 Quality Measures Of Logistics Performance](#_Toc242812963)

[3.8 Cycle Time Measures Of Logistics Performance](#_Toc242812964)

3.9.[Logistics Relationship and Third- party Logistics (3PL)](#_Toc242812965)

3.10.[The Role of warehouse in the Supply chain Management](#_Toc242812966)

[**CHAPTER FOUR**](#_Toc242812967)

[**Managing Inventory Flows In The Supply Chain**](#_Toc242812968)

[4.1 Definitions](#_Toc242812969)

[4.2 Purpose Of Inventory In Logistics Systems](#_Toc242812970)

[4.3 Inventory Performance Measurement](#_Toc242812971)

[4.4 Inventory Control Policy And Replenishment Design](#_Toc242812972)

[4.5 Inventory Deployment](#_Toc242812973)

[4.6 Inventory Management Systems](#_Toc242812974)

[**CHAPTER FIVE**](#_Toc242812975)

[**The Role Of Transportation In Supply Chain Management**](#_Toc242812976)

[5.1 Transportation](#_Toc242812977)

[5.2 The Role of Transportation in Logistics](#_Toc242812978)

[Legal Forms of Transportation](#_Toc242812979)

[Factors to be considered in Transportation Management](#_Toc242812980)

[5.5 Transportation Performance Measures](#_Toc242812981)

[5.6 Fleet, Container, And Yard Management](#_Toc242812982)

[5.7 Freight And Document Management](#_Toc242812983)

[5.8 Transportation Management Systems (TMS)](#_Toc242812984)

[5.9 Transportation Organization Design And Development](#_Toc242812985)

[5.10 Core carrier programs and carrier relationship management](#_Toc242812986)

[**CHAPTER SIX**](#_Toc242812987)

[**Production/Operations Issues In Supply Chain Management**](#_Toc242812988)

[6.1 Production](#_Toc242812989)

[6.2 Demand Forecasting](#_Toc242812990)

[6.3 Collaborative Planning, Forecasting and Replenishment (CPFR)](#_Toc242812991)

[6.4 Aggregate Planning and Inventory Management](#_Toc242812992)

[6.5 The Development of Enterprise Resource Planning (ERP)](#_Toc242812993)

[6.6 Process Management: Just- in-time and Total Quality Management Issues in Supply Chain Management](#_Toc242812994)

[6.7 Total Quality Management (TQM) and Supply Chain Management](#_Toc242812995)

[6.8. Supply Chain Decision Classification](#_Toc242812996)

[**CHAPTER SEVEN**](#_Toc242812997)

[**Customer Relationship Management**](#_Toc242812998)

[CUSTOMER RESPONSE FUNDAMENTALS AND NOTATIONS](#_Toc242812999)

[7.2 Customer Activity Profiling](#_Toc242813000)

[7.3 Customer Response Performance Measures](#_Toc242813001)

[7.4 Customer Relationship Management (CRM)](#_Toc242813002)

[7.5 CRM Success Factors](#_Toc242813003)

[7.6 CRM Role in Supply Chain Management](#_Toc242813004)

**CHAPTER EIGHT**

[**Supply Chain Integration, Logistics And Supply Chain Information Systems**](#_Toc242813005)

[8.1 Intra-Functional Integration in Supply Chain Management](#_Toc242813006)

[8.2 Inter-Corporate Integration in Supply Chain Management](#_Toc242813007)

[8.3 The supply chain integration model](#_Toc242813008)

[8.4 Logistics and Supply Chain Information Systems](#_Toc242813009)

[8.5 Contemporary Logistics Information Technologies](#_Toc242813010)

[**CHAPTER NINE**](#_Toc242813011)

[**Performance Measurement Along The Supply Chain**](#_Toc242813012)

[9.1. Dimensions of Performance Metrics](#_Toc242813013)

9.2. [World Class Performance Measurement Systems](#_Toc242813014)

[9.3 Supply Chain Performance Measurement Models](#_Toc242813015)

9.4. [Market Based Supply Chain Performance Measure](#_Toc242813016)

[**CHAPTER TEN**](#_Toc242813017)

[**Recent Developments In Supply Chain Management**](#_Toc242813018)

[10.1 Green Supply Chain Management](#_Toc242813019)

10.2. [Supply Chain Social Responsibility](#_Toc242813020)

10.3. [Sustainability in supply chains](#_Toc242813021)

**Evaluation:**

Journal Review-------------------------------20%

Project work----------------------------------25%

Book Review---------------------------------15%

Final Exam------------------------------------40%

**References:**

Bowersox Donald J., Closs David J., and Cooper M. Bixby **(2002), “Supply Chain Logistics Management”,**Michigan State University, McGraw-Hill Companies Inc.,USA

Chopra,Sunil, and Peter Meindl (2001) “***Supply Chain Management: Strategy, Planning,and Operations***” , Upper Saddle River, NJ: Prentice-Hall, Inc.

Frazelle Edward (2002), “**Supply Chain Strategy: The Logistics of Supply Chain Management”** The McGraw-Hill Companies, Inc., USA.

Ganeshan, Ram, and Terry P. Harrison (1995), **An Introduction to Supply Chain Management,**” Department of Management Sciences and Information Systems, 303 Beam Business Building, PennStateUniversity, University Park, PA).

GeunesJoseph ,PardalosPanos M., Romeijn H. Edwin , (2005) “**Supply Chain Management**: Models, Applications, and Research Directions, Springer Science + Business Media, Inc.

Gupta AK and Sahay B. (2007), **Supply Chain Modeling and Solutions,** RagivBeri for Macmillan India, ltd.

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Lambert,Douglas M., James R. Stock, and Lisa M. Ellram, (1998) “**Fundamentals of Logistics Management”**, Boston, MA: Irwin/McGraw-Hill

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Mentzer John T. (2001, 2004), “**Fundamentals of Supply Chain Management**”, Saga Publications, New Delhi India.

Ray **Rajesh (2010)” Supply Chain Management for Retailing”,** Tata McGraw Hill Education Private Limited, New Delhi India.

Wisner E I.D., KeongLiong G.K, and Tan Kiah-Choon (2005) “**Principles of Supply Chain Management**: **A Balanced Approach”,** South Western publishing company, USA

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Chopra,Sunil, and Peter Meindl (2001) “***Supply Chain Management: Strategy, Planning,and Operations***” , Upper Saddle River, NJ: Prentice-Hall, Inc.

Frazelle Edward (2002), “**Supply Chain Strategy: The Logistics of Supply Chain Management”** The McGraw-Hill Companies, Inc., USA.

Ganeshan, Ram, and Terry P. Harrison (1995), **An Introduction to Supply Chain Management,**” Department of Management Sciences and Information Systems, 303 Beam Business Building, PennStateUniversity, University Park, PA).

GeunesJoseph ,PardalosPanos M., Romeijn H. Edwin , (2005) “**Supply Chain Management**: Models, Applications, and Research Directions, Springer Science + Business Media, Inc.

Gupta AK and Sahay B. (2007), **Supply Chain Modeling and Solutions,** RagivBeri for Macmillan India, ltd.

HugosMichael(2003), “**Essentials of Supply Chain Management”** : John Wiley & Sons, Inc., Canada.

Lambert,Douglas M., James R. Stock, and Lisa M. Ellram, (1998) “**Fundamentals of Logistics Management”**, Boston, MA: Irwin/McGraw-Hill

Langley Coyle, and Bardi., (2006), **“The Management of Business Logistics**: **A supply Chain Perspective”,** 7th edition, Tata Mcgraw Hill Eduction PLC, New Delhi India.

Mentzer John T. (2001, 2004), “**Fundamentals of Supply Chain Management**”, Saga Publications, New Delhi India.

Ray **Rajesh (2010)” Supply Chain Management for Retailing”,** Tata McGraw Hill Education Private Limited, New Delhi India.

Wisner E I.D., KeongLiong G.K, and Tan Kiah-Choon (2005) “**Principles of Supply Chain Management**: **A Balanced Approach”,** South Western publishing company, USA

**Course Title: Supply Chain Management Information system**

**Course code: LSCM 6052**

**Credit Hours: 2**

**Course Description**

The course provides for the logistics and supply chain management students how to interchange and track information online , and increase integration with supply chain partners’ and how to exchange information in the supply chain. Hence, the course emphasizes on the concept of supply chain information system, it is designed to familiarize logistics management students with basic concepts of facilitating the payment of invoices for goods/services received. Also, it includes information system that must be made with trading partners across the supply chain.

**Course objective**

Upon successful accomplishment of the course, students shall be able to:

* Describe different types of technologies that used e- business
* Identify the business models that of great help for e-procurement.
* Identify type of e-procurement, and discuss each of them
* Illustrate the e - auction process, and explain its benefit
* Explain benefit and challenges of implementing e-procurement and other e-business
* Discuss e-payment system and its process
* Explain e-security in e-commerce and e-procurement and how companies protect itself from being fraud and theft over the internet.
* Discuss the benefit of information sharing across supply chain partners
* Discuss how information is managed across supply chain

**Course Outline**

**Chapter 1 Supply Chain Information Systems**

* Supply Chain Management Using Internet Technologies
* Value Creation in the Supply Chain
* Increasing Supply Chain Efficiencies
* Using Materials-Tracking Technologies with EDI and Electronic Commerce
* Creating an Ultimate Consumer Orientation in the Supply Chain
* Building and Maintaining Trust in the Supply Chain
* Electronic Marketplaces and Portals
* Independent Industry Marketplaces
* Private Stores and Customer Portals

**Chapter 2: The Value of Information**

* The bullwhip effect
* Supply chain coordination structures
* Information sharing & incentives
* Information and supply chain trade-offs
* Centralized and decentralized decision making and performance impacts
* Learning organization principles and applications of the beer game
* Structure-process-event dependencies and system dynamics in the beer game

Chapter Three: Information Systems for Competitive Advantages

3.1 Competitive Strategies

3.2 Value chain

3.3 Business Ecosystems and Co-opetition (Competition & Cooperation)

3.4 Innovation Strategy

Chapter Four: Development of ERP and SCM

**Chapter four:Concepts of*E-procurement***

* Introduction
* What is e- procurement?
* Overview of e-procurement
* E-procurement tools
* Types of e- procurement
* E-procurement system
* Public e-procurement
* Benefits of e- procurement
* Challenge and risks of implanting e-procurement

Chapter Five: Supply Chain Management Software Options

Chapter Six: Business Process Reengineering in Supply Chains

.Chapter Seven: System Selection

Chapter eight: Supply Chain Software Installation

**Evaluation:**

Journal Review-------------------------------20%

Practical Lab----------------------------------40%

Final Exam------------------------------------40%

**Required reference**

* A copy of electronic materials will print and given to the student because of unavailability of texts in the library as main reference.
* E. Lawrence. Corbitt, Fisher, Lawrence and Tidwell**, (2000). Internet commerce, 2nd edition,** John Wiley and Sons Australia, Ltd
* Mahony, D., Peirce, M., Tewari, H., (2001) **Electronic Payment Systems for E-Commerce,** Second Edition, Artech House, inc.
* Schneider, G P., (2011), **Electronic Commerce,** 9th edition, Course Technology, Cengage Learning

**Strategic Supply Chain Management**

**LSCM 6053**

**Credit hours 2**

**Course description**

Strategic Supply Chain Management- which deals with , SWOT Analysis, strategic formulation and Implementation with reference to supply chain management, determining the nature of material procurement, transportation of materials, manufacture of product or creation of service, distribution of product; specify consistency between customer priorities of competitive strategy and supply chain capabilities; designing efficient as well as responsive supply chain strategies and strategic fit with customer requirements.

The course covers the philosophies, issues, procedures and practices relating to strategic supply chain management within an organizational context. Topics included dealing with the essence of strategy and supply chain management, stakeholders and corporate governance, social responsibility and the roles of ethics in strategic management, environmental scanning and analysis, levels of strategies, formulation of strategies, strategy implementation and control.

**Course Objectives**

Up on completing this course, the students are able to:

* Establish a broader understanding of concepts and theories of strategic supply chain management
* Create opportunities for applying concepts and theories in dealing with strategic issues in the supply chain in the business
* Build a capability to think strategically about a firm, its business positions, how it can gain sustainable competitive advantage, and how its strategy can be implemented and executed successfully
* Equip them with the managerial skills associated with formulating and implementing company strategies

**Course Outline**

**Chapter One: Overview of Strategic Supply Chain Management**

* 1. Basic Concepts of Strategic Supply Chain Management
  2. Strategic Supply Chain Thinking
  3. Evolution and philosophy of strategic supply chain management
  4. The Nature of Strategic Supply Chain management
  5. The Importance of Strategic Supply Chain Management
  6. The Process of Strategic Supply Chain Management
  7. Levels of strategy
  8. Management of stakeholders and Corporate Governance
  9. Social Responsibility and Strategic Supply Chain Management
  10. Ethics and Strategic Supply Chain Management
  11. A dynamic framework for developing supply chain strategies

**Chapter Two: Supply Chain Environmental Analysis**

* 1. Introduction to Supply Chain Environmental Analysis
  2. Types of Supply chain Environmental Analysis
  3. Industry and competitive analysis
  4. Approaches to supply chain environmental analysis
  5. SWOT Analysis
  6. Value chain analysis
  7. Competitive Advantage
  8. Forecasting Trends and their implications

**Chapter Three: Supply Chain Strategy Formulation**

* 1. Levels of strategies
  2. Understanding Business Strategy
  3. Assessing the Extended Supply Chain
  4. Development considerations
  5. Corporate portfolio planning tools
  6. Evaluation and Selection of strategies
  7. Integrating supply chain strategy design with product and process development
  8. Challenges towards supply chain strategy development

**Chapter Four: Executing Supply Chain Strategy and Control**

* 1. Overview of Implementation and control
  2. Iterating the Cost-Benefit Evaluation Process
  3. The need for communication with partners
  4. Avoiding potential pitfalls
  5. Aligning the supply chain strategy with business strategy
  6. Supply chain Strategy evaluation and control
  7. Measures of supply chain strategy performance
  8. Challenges towards supply chain strategy execution

**Chapter Five: Strategic Supply Chain in the Global Environment**

5.1 Reasons for going into the global business

5.2 corporate level supply chain strategies in the global business environment

**Evaluation:**

Individual assignment------------------------------------------------ 10%

Group project work and defense----------------------------------- 30%

Article review -------------------------------------------------------- 20%

Final Examination--------------------------------------------------- 40%

**References**

Stanely E. Fawcett, Lisa M. Ellram& Jeffery A. Ogden; and Supply Chain Management: From Vision to Implementation; 2007; Pearson Prentice Hall

Collis and Montgomery; Corporate Strategy: Resources and the Scope of the Firm; 1997; McGraw-Hills

Joel D. Wisner, G. Keong Leong &Keah-Choon Tan; Principles of Supply Chain Management: A Balanced Approach; 2005; South-Western Publishing

Henry Mintzberg& James Brian Quinn; The Strategy Process: Contexts and Cases; 1993; Prentice-Hall, Inc.

Pearce ll and Robinson ,**Strategic Management :Strategy Formulation and implementation**,3rd ed, Irwin,2005

Pitts and Lei, **Strategic Management :Building and Sustaining Competitive Advantage**, South Western college publishing,2003

Hitt,Ireland, and Hoskisson , **Strategic Management,: Competitiveness and Globalization** ,3 rded, South Western college publishing,1999

Kazmi, Azhar, **Business Policy and Strategic Management**, Mc-Graw Hill publishing co Ltd,2002

Any related book with these topics

**Operations Management**

**LSCM** 6055

**Credit hours 2**

**Course Description**

This is a course designed to help understand the Toyota production system of Just in Time manufacturing philosophy, contribution of quality gurus in managing quality, the total quality management concept vis a- vis BPR, ISO standards in maintaining quality, Quality maintenance and effective failure mode analysis, theory of constraint and the weak link concept, Six Sigma practice at GE, Motorola and product perfection). Besides the course will enable students to make an industrial visit (Service, manufacturing, construction, mining, etc.) in Ethiopia augment their theoretical knowledge of operations management in Ethiopian Industries.

**Course Objectives**

Upon completion of the course, learners are be able to:

1. Describe operations management, its scope and activities
2. Develop the decisions involved in designing and controlling the operation system
3. Analyze and apply selected quantitative tools, and models in the analysis of decisions for the design, planning and controlling of operation systems

**Course Outline:**

**Unit 1-Introduction**

* 1. Related Issues Of Operations Management
  2. Difference Between Production And Productivity
  3. Operations Function In Organizations
     1. Manufacturing Operations Vs Service Operations
     2. Historical Background Of Production And Operations Management
     3. Types Of Production System
  4. Role Of Models In Operations Management
  5. Operation Strategy: Using Quality, cost and service

**Unit Two**

**Strategic Decisions**

2.1 Designing and Developing Products and Services

2.1.1 Different Design Approaches

2.2 Process Planning and Design

2.3 LongRange Capacity Planning

2.4 Facility Location

2.5 Facility Layout

2.6 Assembly Line Balancing Problems

**Unit Three**

**Operating Decisions**

3.1 Production Planning Systems

3.1.1 Aggregate Production Planning

3.1.2 Master Production Scheduling

3.1.3 Materials Requirement Planning (MRP)

3.1.4 Manufacturing Resources Planning (MRP\_II)

3.1.5 Enterprise Resource Planning (ERP)

3.2 Shop floor Planning and Control

3.2.1 Routing or Sequencing

3.2.2 Loading or Assignment

3.2.3 Scheduling

3.2 Project Management

**Unit Four: Quality Management**

4.1 Introduction about Quality

4.2 Dimensions of Quality for Service and Product

4.3 Inspection

4.4 Statistical Quality Control

4.5 Total Quality Management vs BPR

4.6 Maintenance Management and Reliability

**Unit Five: Six Sigma**

5.1 Striving for Perfection in an Imperfect World

5.2 The Meaning of Six Sigma

5.3 The customer’s point of view

5.4. Outside-in thinking

5.5. The Nature of Quality

5.6. Product and Service Defects

5.7. Improving Process Systems

5.8. Striving for Consistency

5.9. Exceptions and Rules

**Unit Six: Just in Time (JIT) Manufacturing Approach and Lean System**

6.1Introduction

6.2 The Kanaban Control

6.3 Key Successful JIT Implementation

6.4 The seven Wastes in JIT

6.5 Value Added Manufacturing and Continuous Improvement

6.6 Goals of JIT Manufacturing

6.7 Theories of Constraint (TOC)

**Unit Seven: Mechanization, Automation and Productivity**

7.1 Introduction

**7.2** Assembly Line

7.2.1 History of the Assembly Line

7.2.2 History of Moving Assembly Line

7.2.3 Pre Industrial Revolution

7.2.4 Industrial Robot

7.2.5 Postal Mechanization/Early Automation

7.2.6 The Age of Automation

7.2.6.1 Social Issues of Automation

7.2.6.2 The Automated Workplace

**7.3** Productivity Improvement Stories

**Unit Eight: The Future of Operations Management**

8.1 The Challenge of Global Growth

8.2 Globalization and service operations

8.3 The role of operations in corporate expansion

8.4 The impact of globalization on operations management

8.5 Investment in global operations

8.6 The Chinese challenge

8.7 The challenge of the Internet

8.8 Transparency

8.9 What comes after leanness and agility?

8.10 The challenge of the environment

8.11 Standards

8.12 The environmental manager

8.13 Recycling

8.14 The supply chain

**Evaluation**

Article/Journal Review------------------------------------20%

Project work (Empirical Case/industry type)-----------15%

Book Review------------------------------------------------15%

Final Exam---------------------------------------------------50%

**References**

Brookings Institution (2002) Corporate Social Responsibility: Partners for Progress.Business Week, 28 October 2002.Business Week, 22 September 2003.

**Brownet al.,(2001)**Operations Management, Policy, practice and performance

Improvement

Porter A.(2009),Operations Management, Albert Porter and Ventus Publishing

Ram Naresh Roy (2005), A Modern Approach to Production Management, New Age International Publishers

Thomsett Michael C (2005) Getting Started in to Six Sigma

**DIRE DAWA UNIVERSITY**

**FACULTY OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF Logistics and Supply Chain Management**

***Course Code: LSCM6054***

***Course Title:*** Strategic Procurement Management

***Instructor:***

**Course Description:**

In today's increasingly competitive and globalized world, firms are increasingly trying to find ways to improve their performance and differentiate themselves from their rivals. Clearly, suppliers can have great impact on a firm’s total cost and help in this differentiation process. Increased levels of outsourcing and off shoring make correct selection of suppliers and their quality, along with development of relationships between suppliers and producers, more crucial than ever.

**Course objective:**

This course aims to provide students with an understanding of the impact that sourcing and supply relationship management has on the success and profitability of firms in today’s business environment. We will look at some of the factors that need to be considered when making sourcing and supplier management decisions and discuss the influence that sourcing and supply management have on other functional activities. In this course, we introduce the student to the foundational theories, strategies and Methods used to build and manage supplier relationships for mutual success.

Specifically, this course has the following learning objectives:

* Successfully acquire equipment and services which add organizational value;
* Demonstrate an understanding of the make-or-buy decision –making process;
* To provide the student with exposure to the concept of Supplier Relationship Management as an emerging business discipline of crucial importance.
* To demonstrate how the student can use systematic approaches, such as the SRM model to assess and improve a supplier relationship.
* To enable the student to actually build a supplier relationship management process using best practices.
* To provide a hands-on role-play exercise for the student on managing supplier

**Course description**

Strategic sourcing enhances efficiency and value, ultimately impacting the profitability of your entire organization. In this essential course, you’ll learn how to develop and implement a procurement strategy that aligns with your overall competitive strategy

Strategic Sourcing is the cross-functional process of critically analyzing how the organization can most effectively secure outside goods and services. This process is rooted in gaining a deep understanding of the overall value chain for the good of service of interest, and the business case behind a mutually beneficial and sustainable relationship between the buyer and supplier(s). This course teaches: analytical tools such as spend analyses (what is bought where?) and cost modeling (what drives cost?) to inform business case development: how to negotiate with suppliers using market-based (competitive bid) or multi-party (negotiation) mechanisms; and ways of structuring relationships and contracts to track results, drive sustainable performance, and mitigate risk.

Strategic procurement enables businesses to develop and implement strategies to manage portfolios, assets and resources. Strategic Procurement will equip you with the specialist skills and market-driven theory to successfully deliver procurement strategies and supply chain outcomes.   
**Objectives**

**Upon completion of this course, learners will be equipped with:**

* An understanding of how to delineate between what is considered “tactical” and what is genuinely “strategic” when sourcing.
* The tools with which to develop a sourcing process that factors in complexity around supply market and the relevant category.
* Confidence to develop strategy that will inform the approach to the supply market, factoring in the external environment and internal issues.
* Techniques to analyse external and internal environments and then develop and informed interpretations and recommendations based on said analysis
* Evaluate how the strategies in place are delivering quantifiable value to the organisation.
* The ability to define the end-to-end sourcing process and explore the relation of value to each of those areas.
* The skills with which to identify where the sourcing process may have become too rigid and irrelevant, and may have delivered an undesirable outcome, and then how best to combat that

#### Unit 1: Introduction to Strategic Sourcing and Supply Management

* Evolution, objectives and responsibilities of supply management
* Trends and pressures affecting supply management
* How to determine the right supply chain for your product

#### UNIT2: The P2P Process, Purchasing Organization, and Commodity Strategy Development

* Best practices for the procure-to-pay process (P2P)
* Role and structure of purchasing departments and where they fit in the organizational structure
* 7-step process to develop your commodity strategy

#### UNIT 3: Supplier Evaluation and Selection and the Analytic Hierarchy Process

* How to define important supplier characteristics and evaluation criteria
* Strategies for evaluating your suppliers
* Ways to improve your evaluation and selection process

#### UNIT 4: Supplier Performance Management, Quality Management and Supply Base Integration

* Strategies, tools and techniques for measuring and managing supplier performance
* How to apply quality management concepts to manage supplier quality issues
* Understanding of enterprise resource planning (ERP) systems
* The value of quality buyer-supplier relationships and developing your suppliers

#### UNIT 5: Global Sourcing and Outsourcing

* How to analyze global trading partner data
* The role of international purchasing offices (IPO)
* When and how to enlist third party support
* Global trends and research on outsourcing

#### UNIT 6: Electronic Procurement and Strategic Cost Management

* Objectives, benefits and challenges of e-procurement
* E-procurement tools that yield the greatest benefits
* Cost management across the entire supply chain
* Value engineering, value analysis, cost analysis, and price analysis techniques

#### UNIT 7: Negotiations, Law and Contract Management

* Four principles for getting to yes
* Effective negotiation tactics and methods
* Laws of agency and buyer’s personal liability
* Fundamentals of contract law and the Uniform Commercial Code (UCC)

#### UNIT 8: Ethics and Green Procurement

* How your firm can promote ethical behavior
* Drivers of environmental sourcing and sustainability
* Generally recognized environmental standards and certifications

**Course Objectives**

* Development of skills in a strategic process of procurement
* Improvement of procurement management to delivery VFM
* Building skills on how to undertake the process
* Assesment of collaborative forms of working: partnering, alliances and joint ventures
* Evaluation of project contraints and the management of risk

#### Chapter one

#### Introduction to Strategic Sourcing and Supply Management

* Evolution, objectives and responsibilities of supply management
* Trends and pressures affecting supply management
* How to determine the right supply chain for your product

#### Chapter two

#### The P2P Process, Purchasing Organization, and Commodity Strategy Development

* Best practices for the procure-to-pay process (P2P)
* Role and structure of purchasing departments and where they fit in the organizational structure
* 7-step process to develop your commodity strategy

#### Chapter three

#### Supplier Evaluation and Selection and the Analytic Hierarchy Process

* How to define important supplier characteristics and evaluation criteria
* Strategies for evaluating your suppliers
* Ways to improve your evaluation and selection process

#### Chapter four

#### Supplier Performance Management, Quality Management and Supply Base Integration

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* How to apply quality management concepts to manage supplier quality issues
* Understanding of enterprise resource planning (ERP) systems
* The value of quality buyer-supplier relationships and developing your suppliers

#### Chapter five

#### Global Sourcing and Outsourcing

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* The role of international purchasing offices (IPO)
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#### Chapter six

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* E-procurement tools that yield the greatest benefits
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* Fundamentals of contract law and the Uniform Commercial Code (UCC)

#### Chapter eight

#### Ethics and Green Procurement

* How your firm can promote ethical behavior
* Drivers of environmental sourcing and sustainability
* Generally recognized environmental standards and certifications

**Chapter Nine. Procurement Planning**

Planning the Procurement

Contents of the Procurement Plan

Steps in Procurement Planning

**Chapter Ten . The Procurement of Equipment, service and work**

Features of Capital Equipment Procurement

Capital Equipment Procurement Procedure

Procurement of Used Equipment and parts

Procurement of Leased Equipment

The Statements of Work

Selecting Service Contractors

Pricing Service Contracts

Service Contract Administration

Construction Services

Procurement of works

Unique nature of procurement of works

Statements of requirements

Suppliers’ prequalification

Standard procedures for procurement of works (the case of Ethiopia)

**CHAPTER ELLEVEN . Outsourcing: To Make or to Buy**

Strategic Issues under Outsourcing

Horizontal Integration

Tactical Decisions

Factors influencing make-or-Buy Decisions

Administration Make-or –Buy Decisions

Other issues in Make-or-Buy Decisions

**CHAPTER THIRTY. Foreign Purchasing/International Procurement**

The Global Market Environment

Considerations Affecting Decisions in Foreign Buying and Global Marketing

The responsibility of the buyer in negotiations with foreign vendors

Role of Middlemen in Foreign Buying

Preparing for an International Buying Trip

Other issues associated with foreign buying: travel costs, quality control, and delivery time and contact of sources

**Method of assessment**

Individual Assignment …………..…….…………………………………………….…… 20%

Group assignment………………………………….…………………….………….. 20%

Mid Exam ……………………………………………………………………….…...….. 20 %

Final Examination…………………………….…………………………….…...…… 40%

Total………………………………………….................................................................. **100%**

**COURSE POLICY**

All students are expected to:.

* No student is allowed to enter in to the class after the class begins.
* Moving chairs, talking with friends and making any disturbance during class is completely forbidden.
* A student who is not feeling right (health problem) can go out of the class without disturbing others.
* Be active participants in class discussion, in doing assignments and in presenting assignments and group works.
* Attend classes regularly. A student who failed to attend more than 15% of the allotted class for the course will not sit for final exam.
* Switch off or make it silent of cell phones when joining the class.
* Be active in reading all materials since they will be part of either exams or assignments.
* Follow instructions in doing every activity provided accordingly.

**Reference:-**

* *Burt N. David, Donald W. Dobler and Stephen L. Starling (2003). World Class Supply Management: TheKey to Supply Chain Management. 7th Ed. Tata McGraw-Hill pub. Co., Delhi*
* *Nair N K, 2003. Purchasing and Materials Management. 2nd Ed. Vikas Publishing House, New Delhi,*
* *Leanders, Johnson and Flynntearon (2008). Purchasing and supply management 13th edition McGraw-hill international edition.*
* *Baily, Farmer, Jessop and jones (2005). Purchasing principle and management 9th edition prentice hall.*
* *Arjan J. van weele 2005 purchasing and supply chain management 4th edition. Eindhoven University of technology, Netherlands.*
* *Dobbler, Donald W. and Lamer Lee Jr (1996). Purchasing and Materials Management: Text and Cases. 6th Ed. Tata McGraw-Hill pub. Co., Delhi,*
* *Heinritz, Stuart et al(1991). Purchasing Principles and Application. 8thed. Prentice-Hall Inc., Englewood Cliffs, N.J.*
* *Arjan J. van weele 2010 purchasing and supply chain management 5th edition. Eindhoven University of technology, Netherlands.*
* *THE PURCHASING HANDBOOK A Guide for the Purchasing and Supply Professional SIXTH EDITION*
* *Others relate purchasing book and website.*

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| --- | --- | --- | --- | --- | --- |
| Module number | | **06** | | | |
| Module name | | ***Research methods and its application*** | | | |
| Module code | | **LSCM-M6061** | | | |
| Total ECTS | |  | | | |
| Module description | | The basic aim of the module is designed to help students understand and apply essential research methods using standard research techniques and procedures. The course covers qualitative, quantitative, and mixed research designs with the objective of enabling students to select and follow the most appropriate approach given the nature of the research problem they have identified. The course also covers internal and external validity to help students understand how they should go about in ensuring that their inquiry is devoid of validity threats. The course also includes tutorial on statistical packages used for data analysis. | | | |
| Objective of the module | | This module is designed to equip the learners to:   * acquire skills in undertaking a scientific inquiry using quantitative, qualitative or mixed approaches; * Identify and develop a research problem and discuss its relevance; * Identify the purpose of a scientific enquiry and develop appropriate research questions/ hypotheses; * Describe the elements of a literature review and conduct an annotated bibliography on a specific research topic; * Identify the combination of research skills that are relevant to a specific research topic; * Develop a research proposal; and * Analyze and report research findings | | | |
| Module competence | | * Identify different research methodology * Evaluate the analysis methods * Select best analysis method | | | |
| COURSES IN THE MODULE | | | | | |
| **Course number** | **Course Name** | | Credit hours | **ECTS (CP)** |
|
|
| 06 | **Research Methods**  **Econometrics theory and application** | | 2 | 3 |

**Research Methods (LSCM*6061)***

**Credit hours: 2**

This course is designed to help students understand and apply essential research methods using standard research techniques and procedures. The course covers qualitative, quantitative, and mixed research designs with the objective of enabling students to select and follow the most appropriate approach given the nature of the research problem they have identified. The course also covers internal and external validity to help students understand how they should go about in ensuring that their inquiry is devoid of validity threats. The course also includes tutorial on statistical packages used for data analysis.

***Course Objectives:***

After completing the course, students are expected to:

* acquire skills in undertaking a scientific inquiry using quantitative, qualitative or mixed approaches;
* Identify and develop a research problem and discuss its relevance;
* Identify the purpose of a scientific enquiry and develop appropriate research questions/ hypotheses;
* Describe the elements of a literature review and conduct an annotated bibliography on a specific research topic;
* Identify the combination of research skills that are relevant to a specific research topic;
* Develop a research proposal; and
* Analyze and report research findings

**Unit I: INTRODUCTION TO RESEARCH METHODOLOGY**

* Importance of Research in Decision Making
* Defining Research Problem and Formulation of Hypothesis
* Experimental Designs

**Unit II DATA COLLECTION AND MEASUREMENT**

* Methods and Techniques of Data Collection
* Sampling and Sampling Designs
* Attitude Measurement and Scales

**Unit III DATA PRESENTATION AND ANALYSIS**

* Data Processing
* Statistical Analysis and Interpretation of Data
* Multivariate Analysis of Data
* Model Building and Decision Making

**Unit IV REPORT WRITING AND PRESENTATION**

* Substance of Reports
* Report Writing and Presentation
* Presentation of a Report

**Unit VI Tutorial on Statistical Package for Social Sciences (SPSS)**

* SPSS-the interface
* Data entry
* Data validity check
* Data transformation
* Data analysis
* Building charts and graphs using SPSS
* Output generation

**V. Method of Assessment**

In this course, participants will be assessed through individual and group assignments and presentation in the following fashion:

1. Article review and summary (individual)
2. Thesis evaluation (individual)
3. Formulating a research proposal (group)
4. Research(Group)

**VI. Learning Activities**

1. **Article review**

Students are expected to find an article from peer-reviewed journals and submit a three-page report of its review. A more detailed guide to article review will be supplied by the instructor.

1. **Theses Review**

The purpose of this assignment is to give you an idea about what a Master’s thesis looks like and to begin to identify and explore questions around research methodologies and methods.

You will select a Master’s thesis in your field from the library and conduct a review about whether and to what extent the research problem, objectives, methodology, findings, conclusions and recommendation are interlinked. Prepare a paper that briefly summarizes and reviews the thesis chosen. Specifically, for the thesis,

* briefly describe the research problem the thesis purports to address
* assess the validity of the research questions in light of the stated research problem
* examine suitability of research design, type of data collected and data collection method elected, the sample selected, method of data analysis.
* Evaluate whether or not findings are framed in accordance with the research questions established and that the conclusions follow findings and that recommendation are based on conclusions drawn.
* Identify the weaknesses and strengths of the thesis;
* Identify the lessons you have drawn from the review exercise.

The paper should be between 8-10 pages in length and is due by the end of the class lecture but before commencement of tutorial on SPSS.

1. **Research proposal**

This assignment is intended to provide you with the opportunity to try out a research methodology in a fairly concise manner. You should identify a topic area you are interested in researching. You are expected to form a group of two, select a topic and let the instructor know in the fifth day of the course. The research proposal should contain:

* a clear statement of the problem or question to be researched;
* the purpose and utility of the research;
* the research design (including the methodology, data collection and analytic techniques to be used);
* a rationale for the methodology chosen;
* an analysis of the merits and limitations of the research design, including a discussion of issues of rigor, reliability, etc.
* review of extant literature in such a manner that it justifies the proposed study.

Proposals should be 10 -15 pages in length.

1. **Research**

Students are required to conduct a research on a topic of their choice in the area of accounting, auditing, finance, or taxation and write a concise report about their findings. The research report should be 20 to 25 pages.

***Textbooks***

* Creswell, J.W. 2009. ‘***Research design: Qualitative, quantitative, and mixed methods approaches’***,(3rd ed.). Thousand Oaks, CA: Sage Publications
* Cooper DR & Schindler PS(2006) ***Business Research Methods***, 9thed, McGraw–Hill: New York.
* Taylor, Gordon. 2009. [***A student's writing guide: how to plan and write successful essays***](http://0-dx.doi.org.oasis.unisa.ac.za/10.1017/CBO9780511609749)***.*** Cambridge: Cambridge University Press.
* C.R. Kothari, ‘’ ***Research methodology-methods and Techniques’’***, new age international(P)limited, publishers

***References;***

1. Blaxter et al (2006) How to research, 3rd ed., Open University press, England, pp. 99-130
2. Murray N. and Hughes, G. 2008. [***Writing up your university assignments and research projects: practical handbook***](http://0-site.ebrary.com.oasis.unisa.ac.za/lib/unisa1/Doc?id=10229834)/.Maidenhead, England : Open University Press.
3. Leedy P &Ormrod J (2005), Practical Research: Planning and Design 8thed, New Jersey Prentice Hall.
4. Janet M. Ruane (2005) Essentials of Research Methods: a guide to social science research, Blackwell Publishing, Victoria.
5. Judith Bell(2005), Doing your research: a guide for first-time researchers in education, health and social sciences, 4thed, Open University Press, UK.
6. Loraine B.,Christina H., and Malcolm T.(2006) How to research, 3rded, McGraw Hill education, Berkshire.
7. Margarete S. and Julie B.(2007) Handbook for synthesizing qualitative research ,Springer Publishing Company,New York.
8. McKerchar, M (2008) Philosophical Paradigms, Inquiry strategies and knowledge Claims: Applying the principles of research design and conduct to Taxation, e-Journal of tax research, 6(1) 5:22.
9. Willian G. zikmund, “***Business Research Methods’’***, the Dryden press, Harcourt Brace college publishers

**Course title: Econometrics Theory and Application**

**Course code: Econ 6062**

**Number of Credits:** 2

1. **Course Description**

Social scientists are often interested in quantifying relationships between different variables. The objective of Econometrics is thus to quantify such relationships using available data and statistical techniques to interpret and use the resulting outcomes. So, Econometrics is the application of statistical and mathematical methods to the analysis of economic data, with the purpose of giving empirical content to economic theories and then verifying or refuting them. Bridging the gap between theory and policy analysis requires acquiring the practice of applying the concepts, theories and methods of Economics to policy analysis. This Econometrics course is designed to confront this challenge by providing insights on how the three elements of Econometrics namely: economic theory, mathematical economics and statistical procedures can be combined, to provide useful information to policy analysts and decision makers. In addition, the course will give insight the application of software packages like STATA, EVIEWS and PCGIVE.

NB. This course will have a total of 32 lecture hours and 16 laboratory hours of delivery.

1. **Course Objectives**

The objective of the course is to equip students with the knowledge and skill of econometrics and able to read, analyze and conduct empirical investigations in the field of economics. Therefore, the objectives of the course are to:

* Develop an understanding of the theory and application of Econometrics to quantifying economic relationships and testing economic theories;
* Enable students to translate results from econometric analysis based on economic principles into useful and reliable policy reasoning;
* Equip students to read, evaluate and understand empirical papers in professional journals; and
* Provide students with practical experience of using econometric computer software to fit economic models.

**Course Contents for Lecture:**

1. **Introduction (4 hours)**

Definition and Scope of Econometrics, Models: Economic models and Econometric models, Methodology of Econometrics,The Sources, Types and Nature of Data

**2. Simple Linear Regression (17 hours)**

Concept of Regression Function, Method of Moments & Method of Least Squares, Residuals and Goodness-of-fit,Properties of OLS Estimates and Gauss-Markov TheoremConfidence Intervals and Hypothesis Testing, Predictions using Simple Linear Regression Model

**3. Multiple Linear Regressions (13 hours)**

Method of Ordinary Least Squares revised, Partial Correlation Coefficients & their Interpretation, Coefficient of Multiple Determinations,Properties of Least Squares and Gauss-Markov Theorem,Hypothesis Testing in Multiple Linear Regressions,Predictions using Multiple Linear Regression

**4. Violations of the Assumptions of the Classical Model (14 hours)**

Multicollinearity, Heteroscedasticity,Autocorrelation,Specification Errors: Omission of Variables

**5. Regression Analysis with Qualitative Information: Binary (Dummy Variables) (15 hours)**

Describing Qualitative Information,Dummy as Independent Variables,Dummy as Dependent Variable,The Linear Probability Model (LPM),The Logit, Probitand Tobit Models,Interpreting the Probit and Logit Model Estimates

**6. Introduction to Basic Regression Analysis with Time Series Data (16 hours)**

The nature of Time Series Data,Stationary and non-stationary stochastic Processes, Trend Stationary and Difference Stationary Stochastic Processes,Integrated Stochastic Process Tests of Stationarity: The Unit Root Test

**7. Introduction to Panel Data Regression Models (7 hours)**

Introduction, Estimation of Panel Data Regression Model: The Fixed Effects Approach Estimation of Panel Data Regression Model: The Random Effects Approach

**Contents for Computer Lab.:**

**1. Introduction to STATA (1 hours)**

**2. Data Management using STATA (5 hours)**

**3. Simple Linear Regression using STATA (2 hours)**

* Method of least squares
* ANOVA and Estimation of R2
* Hypothesis testing and confidence intervals

**4. Multiple Linear Regression (MLR) using STATA (2 hours)**

* Method of ordinary least squares revised to MLR
* Coefficient of multiple determination, Linear restrictions and hypothesis testing

**5. Testing for Violations of the Assumptions of the Classical Model using STATA (5 hours)**

* Multicollinearity and Heteroscedasticity

**6. Introductory Time Series Regression using STATA/EViews/PcGive (3 hours)**

* Tests of Stationarity: the Unit Root Test
* Estimation of Stationary time series
* Autocorrelation
* Estimation of Non-stationary time series

**7. Introductory Panel Data Regression Models (5 hours)**

* Fixed Effects Model
* Random Effects Model

**Assessment Scheme**:

Written continuous assessment tests …………………………20%

Written practical tests …………………………………………...30%

Written final exam …………………………………………………50%

**Reference:**

* Verbeek, M. (2008). **A Guide to Modern Econometrics** (3nded.). John Wiley and Sons Ltd.
* *Wooldridge ()* **Introductory Econometrics***; 2nd ed.*
* Damodar Gujarati, (2001), **Basic Econometrics**, Mc-Graw Hill, Tokyo
* Greene, William, H .(2000)**EconometricAnalysis**(Fourth Edition), Prentice Hall International.

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| --- | --- | --- | --- | --- | --- |
| Module number | | **05** | | | |
| Module name | | **Thesis** | | | |
| Module code | | **LSCM-M6051** | | | |
| Total ECTS | |  | | | |
| Module description | | The master thesis is a major undertaking that is a demonstration of mastery of a field of study and an original contribution to the field. This course is designed to guide and govern the conduct of the thesis for the master level students though the thesis process. It is the last course, students take in finishing their masters' degrees. | | | |
| Objective of the module | | This module is designed to equip the learners to:   * Apply theoretical research knowledge and principles, to their final paper work, journal review, seminar preparation. | | | |
| Module competence | | * Produce quality research in the area of supply chain management and related business area. | | | |
| COURSES IN THE MODULE | | | | | |
| **Course number** | **Course Name** | | Credit hours | **ECTS(CP)** |
|
|
| LSCM 1071 | Thesis | | 6 |  |

**Thesis**

**LSCM1061**

**Credit hours: 6**

The master thesis is a major undertaking that is a demonstration of mastery of a field of study and an original contribution to the field. This course is designed to guide and govern the conduct of the thesis for the master level students though the thesis process. It is the last course, students take in finishing their masters' degrees. Students select a topic for original research and conduct and write up their research in the course of the class. Students are encouraged to select a topic that will be useful in the workplace and that can be part of their professional portfolio. Graduation is subject to approval of the thesis by the thesis committee and completion of a successful defense. Students are encouraged to enter the class with a clear idea of what they would like to research.