

**JAIPURIA INSTITUTE OF MANAGEMENT NOIDA**

**PGDM (Service Management); TRIMESTER II; Academic Year: 2019-20**

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| --- | --- |
| Course Code and title | OM 202 Operations Management |
| Credits | 3 |
| Term and Year | II Term, 2019 -20 |
| Course Pre-requisite(s) | Basics Knowledge of Industries Operations |
| Course Requirement(s) | Knowledge of Basic Mathematics/Statistics Knowledge of Business Environment |
| Course Schedule (day and time of class) | As per Schedule |
| Classroom # (Location) | As per Schedule |
| Course Instructor | Dr. Ashwani Kumar/Dr. Prabhu K Aggrawal/**Prof. M.S. Kumar** |
| Course Instructor Email | ms.kumar@jaipuria.ac.in ; |
| Course Instructor Phone (Office) | Extension No. |
| Student Consultation Hours |  |
| Office location |  |

# 1. Course Overview

This course aims at making students aware of importance of Operations Management (OM) in the current business scenario in India. The latest concepts in OM, especially relevant to the post-liberalization and globalization era, have assumed importance. This course introduces OM to the students from the point of view of an entrepreneur to instill a spirit of entrepreneurship in them. The Indian domestic companies are facing a direct threat from the foreign MNCs. These companies have to evolve a strategic approach to their operations for growth and survival. This course, thus, introduces the students with the latest concepts in a localized environment. The course is designed to help the students to understand the emerging business issues facing management so that students can effectively manage operations in the organizations. The course aims to analyze how operations add value to the business, change the way work is done, remain in the core of all the activities and the structure of an organization.

The course starts with an introduction and overview of OM practices in India and its need in our management studies. Second module covers the various concepts relating to the product and process design and the importance of service sector, which is surpassing production sector by growing demand, activities and participation. The module on Demand Forecasting covers the importance of demand in various planning decisions. The module on Facility Location Planning gives emphasis on factors on facility location planning. Facility Capacity & Layout Planning shows how Strategic Capacity Planning is a Key to Competitiveness. It also discusses the models in service facility planning. Inventory Management module puts stress on calculation of marginal ordering and carrying costs of inventory. Module on Quality Management covers Quality aspects and Quality Control Tools and concept of six sigma. Just-in-time (JIT) and Lean manufacturing have become essential part of the Indian domestic companies and SCM is to develop understanding of supply chain and ways through which it can contribute to competitive advantage.

**2. Graduate Attributes(GAs), Key Differentiators (KDs), Programme Learning Outcomes (PLOs), and CLOs**

# Graduate Attributes (GAs)

GA 1: Self-initiative

GA 2: Deep Discipline knowledge

GA 3: Critical Thinking and Problem Solving

GA 4: Humanity, Team-Building and Leadership Skills

GA 5: Open and Clear Communication

GA 6: Global Outlook

GA 7: Ethical Competency and Sustainable Mindset

GA 8: Entrepreneurial and Innovative

# Key Differentiators

KD 1: Entrepreneurial Mindset

KD 2: Critical Thinking

KD 3: Sustainable Mindset

KD 4: Team-Player

# Programme Learning Outcomes (PLOs)

The graduates of PGDM at the end of the programme will be able to:

PLO 1: Communicate effectively and display inter-personnel skills

PLO 2: Demonstrate Leadership and Teamwork towards achievement of organizational goals

PLO 3: Apply relevant conceptual frameworks for effective decision-making

PLO 4: Develop an entrepreneurial mind set for optimal business solutions

PLO 5: Evaluate the relationship between business environment and organizations

PLO 6: Demonstrate sustainable and ethical business practices

PLO 7: Leverage technologies for business decisions

PLO 8: Demonstrate capability as an Independent learner

**Course Learning Outcomes (CLOs):**

At the end of the course, the students should be able to:

CLO 1: Explain concepts in Operations Management. **(K)**

CLO 2: Identify local and global challenges in Operations Management. **(K)**

CLO 3: Apply Operations Management tools and techniques to suggest viable solutions to Operations Management Problems. **(K&S)**

**3. Mappings**

# Mapping of CLOs with GAs

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | GA 1 | GA 2 | GA 3 | GA 4 | GA 5 | GA 6 | GA 7 | GA 8 |
| CLO 1 |  | X |  |  |  |  |  |  |
| CLO 2 |  | X |  |  |  | X |  |  |
| CLO 3 |  | X | X |  |  |  |  |  |
| **Total** |  | **3** | **1** |  |  | **1** |  |  |

# Mapping of CLOs with Key Differentiators (KDs)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | KD 1  (Entrepreneurial  Mindset) | KD 2  (Critical Thinking) | KD 3  (Sustainability Mindset) | KD 4 (Team Player) |
| CLO 1 |  |  |  |  |
| CLO 2 |  |  |  |  |
| CLO 3 |  | X |  |  |
| **Total** |  | **1** |  |  |

**Mapping of CLOs with PLOs**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | PLO 1 | PLO 2 | PLO 3 | PLO 4 | PLO 5 | PLO 6 | PLO 7 | PLO 8 |
| CLO 1 |  |  |  |  |  |  |  |  |
| CLO 2 |  |  |  |  | X |  |  |  |
| CLO 3 |  |  | X |  |  |  |  |  |
| **Total** |  |  | **1** |  | **1** |  |  |  |

## 4. Books and References

|  |
| --- |
| **Text Book**  Operations & Supply Management, Chase R., Shankar R. and Jacobs F., TMH, New Delhi, 12th edition.  **References**   * Operations Management by Norman Gaither and Greg Frazier, CENGAGE Learning, Edition 9. * Operations Management along the supply chain by Russell and Taylor, Wiley India Edition, 2012. * Service Operations Management-Improving Service Delivery: Robert Johnston and Graham Clark, Pearson 2e. * Service Operations Management: James Fitzsimmons & Mona Fitzsimmons, TMH     Magazines: Business World, Business India, Economic Times    **On line resources**   * [http://nptel.iitk.ac.in,](http://nptel.iitk.ac.in/) * [http://learnerstv.com](http://learnerstv.com/) |

## 5. Prescribed VED framework

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module** | **Vital (prerequisite or basic knowledge or skills)** | | **Essential (Non-imperative yet significant)** | **Desirable**  **(adds substance, breadth, or interest to a subject or skill)** |
| **Module 1:**  ***Introduction &***  ***Overview*** |  | |  | | --- | | Basic knowledge of  Operations Management as a management discipline. | | Relevance and scope of OM  concepts    Changing Operations landscape | How does Operation Management as management function work in different industries, different types of organizations and across different countries? |
| Fundamentals of Operations Management.  Basic Concepts of Operations  Management, development of  Operations as a field of study |
| ***Module 2: Product and Service Operations***  ***Management*** |  | |  | | --- | | Basic information and understanding of product and  services | | Managing Services for business excellence    Process Analysis    Service Characteristics,  Service classification | Opportunity identification in service sector.    Failure and success analysis of service sector industries.    Product and service development trends in  various business sectors |
| Overview of manufacturing and service sector across the globe |
| ***Module 3: Demand Forecasting and capacity planning*** | Need of demand forecasting and its importance in  business decisions | | Understanding demand forecasting techniques based on past data. | Developing an understanding of how to estimate demand in different industrial sectors. |
| ***Module 4: Facility location and layout planning*** |  | |  | | --- | | Basic information and understanding of Location and Layout | | Understanding of different  layouts    Develop layout for service | Understanding of Location and Layout decisions in different production and service sectors. |
|  |

Importance of Location and and manufacturing layout decisions organizations Modern Location and

Layout trends in different business sectors

***Module 5:*** Role and importance of Inventory classification Inventory management

***Inventory*** inventory management in EOQ and other inventory practices in different

***Management*** business decisions models industrial sectors.

***Module 6: Quality*** Basic information and Quality management tools Modern trends in quality

***Management*** understanding of quality available and their use in management in different

different industries business sectors

Concept of total quality management in business

***Module 7: Supply*** Basic information and Contemporary SCM and Modern SCM trends in

***Chain and Lean*** understanding of Supply lean management practices different business sectors

## Management chain

Importance of supply chain and lean manufacturing in

business

Pre-class

In-class

Beyond class

### 6. Session Plan

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Topic/Sub Topic** |  | **Session Details** |
| **Module 1: *Introduction & Overview*** | | |  |
| 1 | Introduction  **(**Course overview, Need of the course,  Expectations, Evaluation),    Contemporary Issues in Operations  Management | **Text Book** | Chapter 1, Page 3 – 22 |
| **Pedagogy** | Agreement on learning and free flowing discussion on identification of Operations Management activities and contemporary issues |
| **CLO** | 1, 2 |
| **SLO** | At the end of the session the student will be able to identify the relevance of Operations Management in Business decisions. |
| **KSA VED** | Knowledge  Essential |
| 2. | Transformation Process | **Text Book** | Chapter 2, Page 28 – 52 |
| **Pedagogy** | Lecture and discussion |
| **CLO** | 1,2 |
| **SLO** | At the end of the session the student will be able to explain transformation processes and  Operations Strategy for Business Excellence. |
| **KSA VED** | Knowledge  Essential |
| 3 | Operation Strategy | **Text Book** | Chapter 2, Page 28 – 52 |
| **Pedagogy** | Lecture and discussion |
| **CLO** | 1,2 |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **SLO** | At the end of the session the student will be able to explain transformation processes and  Operations Strategy for Business Excellence. |
| **KSA VED** | Knowledge  Essential |
| ***Module 2: Product and Service Operations Management*** | | | |
| 4 | Product Design Process, Economic  Analysis of Product Development  Process | **Text Book** | Chapter 4, Page 107 – 142. |
| **Pedagogy** | Lecture and discussion |
| **CLO** | 1,2 |
| **SLO** | At the end of the session the student will be able to explain concepts and process of new product design and economic analysis. |
| **KSA VED** | Knowledge  ***Vital*** |
| 5 | Service Characteristics, Service  Classification, Service Capacity, Service Processes, Service Blueprinting. | **Text Book** | Chapter 6, Page 187 - 221 |
| **Pedagogy** | Lecture, discussion and class exercise. |
| **CLO** | 1,2. |
| **SLO** | At the end of the session student will be able to explain nuances of services, characteristics of services, blueprinting of services and capacity management in service sector. |
| **KSA VED** | Knowledge  Essential |
| 6 | Process Analysis    *Case: - Kristen’s Cookie Company (A) (Operations Management by Chase, Shankar, Jacobs, Aquilano, Edition 12, pp 219).*    *Or*    *Case: - Pizza USA: An Exercise in Translating Customer Requirements into Process Design Requirements***.**  *(Operations and Supply Chain*  *Management by Chase, Shankar and Jacobs. Edition 14e, pp. 268).* | **Text Book** | Chapter 6, page 187 – 221 and Chapter 8 page299 - 321 |
| **Pedagogy** | Case discussion |
| **CLO** | 1,2,3 |
| **SLO** | At the end of the session the student will be able to explain importance of process analysis in operations management and will be able to apply these concepts in real life situation. |
| **KSA VED** | Skill  Essential |
| ***Module 3: Demand Forecasting and Capacity Planning*** | | | |
| 7,8 | Demand Forecasting | **Text Book** | Chapter 18, page 544 – 596 |
| **Pedagogy** | Lecture and discussion |
| **CLO** | 1,3 |
| **SLO** | At the end of the session the student will be able to explain importance of demand forecasting in business decisions. |
| **KSA VED** | ***Vital***  Essential |
| 9 | Capacity Planning | **Text Book** | Chapter 5 and Chapter 5A, page 143 – 186. |
| **Pedagogy** | Lecture and class exercise |
| **CLO** | 1,3 |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **SLO** | At the end of the session the student will be able to apply capacity planning and learning curve concepts in business situations. |
| **KSA VED** | Knowledge, Skill ***Vital*** |
| ***Module 4: Facility Location and Layout Planning*** | | | |
| 10 | Facility Location Planning, Factor & Location Ratings along with numerical for Centroid Method and factor rating method. | **Text Book** | Chapter11, page 449 – 472. |
| **Pedagogy** | Lecture and class exercise |
| **CLO** | 1,2,3 |
| **SLO** | At the end of the session the student will explain importance of location decisions and will be able to apply concepts in business situations. |
| **KSA VED** | Knowledge, Skill Essential |
| 11 | Product Layout – Production Line Balancing. | **Text Book** | Chapter 7A, page 261- 298. |
| **Pedagogy** | Lecture and class exercise |
| **CLO** | 1,2,3 |
| **SLO** | At the end of the session the student will explain importance of layout decisions and will be able to apply concepts in business situations in manufacturing organizations. |
| **KSA VED** | Knowledge, Skill Essential |
| 12 | Service Layout: Process Layouts    ***Case: - Soteriou’s Souvlaki***  *(Operations Management by Chase,*  *Shankar, Jacobs, Aquilano, Edition 12, pp.*  *295)* | **Text Book** | Chapter 7A, page 261 – 298. |
| **Pedagogy** | Lecture and Discussion |
| **CLO** | 2,3 |
| **SLO** | At the end of the session the student will explain importance of layout decisions and will be able to apply concepts in business situations in service organizations. |
| **KSA VED** | Knowledge, Skill ***Vital*** |
| 13 | **Guest Session / Review session/ Industry Visit** | **Text Book** | NA |
| **Pedagogy** | Discussion |
| **CLO** | 1,2,3 |
| **SLO** | Review and assimilation of learnings in earlier sessions. |
| **KSA VED** | Knowledge, Attitude Essential |
| 14 | Operations scheduling in  Manufacturing and Service Industry. | **Text Book** | Chapter 18, page 687 – 724. |
| **Pedagogy** | Lecture and class exercise. |
| **CLO** | 1,3 |
| **SLO** | At the end of the session the student will explain the importance of scheduling in operations management. |
| **KSA VED** | Knowledge, Skill ***Vital*** |
| ***Module 5: Inventory Management*** | | | |
| 15 |  | **Text Book** | Chapter 17, page 639 – 686. |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Introduction to Inventory management, Types of inventory, Selective Inventory Control: ABC, VED, FSN Analysis.    Q and P Models  Economic Order Quantity model with safety stock calculations. |  |  |
| **Pedagogy** | Lecture and class exercise. |
| **CLO** | 1,3 |
| **SLO** | At the end of the session the student will explain importance of inventory management in business operations. |
| **KSA VED** | Knowledge, Skill ***Vital*** |
| 16 | Inventory Management Practices    ***Case: - Green Garden Products***  *(Operations Management by Norman*  *Gaither and Greg Frazier, pp 578)* | **Text Book** | Chapter 17, page 639 – 686. |
| **Pedagogy** | Case discussion |
| **CLO** | 1,3 |
| **SLO** | At the end of the session the student will be able to calculate inventory levels and will be able to take inventory decisions in business situations. |
| **KSA VED** | Knowledge, Skill Essential |
| 17 | **Guest Session / Review session / Industry Visit** | **Text Book** | NA |
| **Pedagogy** | Discussion |
| **CLO** | 1,2,3 |
| **SLO** | Review and assimilation of learnings in earlier sessions. |
| **KSA VED** | Knowledge, Attitude Essential |
| ***Module 6: Quality Management*** | | | |
| 18 | Various Dimensions of Quality, Quality and Costs in manufacturing  and service industries | **Text Book** | Chapter 9, page 355 –416. |
| **Pedagogy** | Class discussion and student presentations |
| **CLO** | 1 |
| **SLO** | At the end of the session the student will be able to explain importance of quality management in business. |
| **KSA VED** | Knowledge  ***Vital*** |
| 19 | Quality improvement techniques, Kaizen, Six sigma, 5 “S”, QC Circles, Seven QC tools etc. | **Text Book** | Chapter 9, page 355 –416. |
| **Pedagogy** | Class discussion and student presentations |
| **CLO** | 1 |
| **SLO** | At the end of the session the student will be able to explain importance of quality management in business. |
| **KSA VED** | Knowledge  ***Vital*** |
| ***Module 7: Supply Chain and Lean Management*** | | | |
| 20 | Supply Chain Management    *Case: E-Choupal: Transforming the Rural India.* | **Text Book** | Chapter 10, page 417 – 448. |
| **Pedagogy** | Class discussion and student presentations |
| **CLO** | 1,3 |
|  | *Operations and Supply Chain Management by Chase, Shankar and*  *Jacobs. Edition 14e, pp. 492* | **SLO** | At the end of the session the student will be able to explain importance of Supply Chain Management in business. |
| **KSA VED** | Knowledge  ***Vital*** |
| 21 | Lean Manufacturing (JIT) | **Text Book** | Chapter 12, page 473 – 497. |
| **Pedagogy** | Class discussion and student presentations |
| **CLO** | 1,2 |
| **SLO** | At the end of the session the student will be able to explain importance of Supply Chain Management in business management. |
| **KSA VED** | Knowledge  Essential |
| 22,23,24 | Project Presentations by Student  Groups | **Text Book** | NA |
| **Pedagogy** | Discussion |
| **CLO** | 2,3 |
| **SLO** | Review and assimilation of learnings in earlier sessions. |
| **KSA VED** | Skill  Essential |

### 7. Assessment Tasks

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessment Component** | **Description** | **Weight** | **CLOs** |
| Quizzes | There will be Two Quizzes.  Third Quiz is optional, in which case, two best quizzes shall be considered. | 20 Marks | CLO 1, CLO 2 |
| Class Participation  and Case Discussion | Class Participation  Students in Groups will be required to make presentation on analysis of cases/case-lets. | 10 Marks | CLO3 |
| Project Report & Presentation | It will be on group basis (group of 4 to 6 students). Project will involve application of course contents on topics like Process analysis, Location decision, Layout designing, Manpower scheduling, TQM, Supply Chain Management etc. A live project s suggested for students. | 15 + 15 = 30  Marks | CLO3 |
| End Term Examination | It will be based on the total course. This will consist of case study, application-based situation questions along with conceptual review. | 40 Marks | CLO3 |

**8. Rubrics for Assessment Tasks**

## Rubrics for CLOs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CRITERIA** | **LEVEL 1 BEGINING** | **LEVEL 2 AVERAGE** | **LEVEL 3**  **ACCOMPLISHED** | **LEVEL 4**  **EXCELLENT** |
| **CLO 1**:  Explain concepts in operations management. **(K)** | Know the concepts of operations  management used in business | Understand importance of operations management in business. | Able to assess connect of operations management concepts with business | Able to link operations  management  concepts for given business situation |
| **CLO 2:**  Identify local and global challenges in operations management. **(K)** | Know the global challenges in operations management area | Understand the importance of  operations management concepts. | Able to different alternatives for  operations management challenges | Able to evaluate alternatives and suggest most appropriate alternative |
| **CLO 3:**  Apply tools and techniques to suggest viable, sustainable solutions to operations management problems. **(S)** | Know the  available tool/ technique for business problem in operations management area | Know advantages and limitations for each operations management tool/technique. | Able to suggest a suitable operations management  tool/technique for business improvement | Able to apply selected tool/ technique for given business problem identified. |

## Rubrics for Quiz

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Poor**  **Below 30%** | **Fair**  **30 – 60%** | **Good**  **60 – 80%** | **Excellent**  **80% and Above** |
| Clarity of  Concepts and  ability to apply  them | Only up to 30% answers are correct. Most of the concepts are not clear and student is unable to understand the same. | Between 30 – 60% answers are correct. Many of the concepts are clear and understood by student. | Between 60 – 80% answers are correct. Majority of concepts are clear and understood by student. | 80% or more answers are correct. Most of concepts are clear and understood by the student. |

## Rubrics for Class Participation & Case studies

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Poor**  **Below 30%** | **Fair**  **30%-60%** | **Good**  **60%-80%** | **Excellent**  **80% and Above** |
| Initiative and Identification of the relevant issues and information  pertaining to OM area | Issues inadequately explained. Incomplete information identified | Issues explained, but some finer points are missing. Information identified up to average extent | Issues well explained, Relevant appropriate information identified | Issues are well explained and appropriate information is analysed |
| (**40%)** |  |  |  |  |
| Analysis of information as per the identified issues.  **(60%)** | No analysis on the presented information | Basic analysis performed on available information | Basic & advanced data analysis on available information | Complete and appropriate Analysis of available information with Interpretation for decision making |

## Rubrics for Project Report

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Poor**  **Below 30%** | **Fair**  **30%-60%** | **Good**  **60%-80%** | **Excellent**  **80% and Above** |
| Identification of relevant objectives and collection or summarisation of information  **(30%)** | Objectives inadequately defined, incomplete information identification | Objectives defined but some finer points missing  Information identified up to average extent | Objectives well defined, Relevant and appropriate information identified | Objectives well defined, Appropriate information collection from different sources  Additional information identified |
| Analysis of information as  per the identified  objectives  **(40%)** | No analysis only presenting the information | Basic analysis performed on available information | Basic & advanced data analysis on available information | Complete and appropriate Analysis done for the available information  Able to use  Interpretation for decision making |
| Assignment  Report structure  **(30%)** | Language is poor, formatting is poor,    Observations, conclusions and recommendations are not there | Language is occasionally poor, occasionally format is not good  Results are there but no  recommendations | Is adequately Impressive and format is followed    Results & recommendations are also given | Recommendations  are relevant, contemporary and feasible. |
|  |  |  |  |  |

## Rubrics for Project Presentation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Poor**  **Below 30%** | **Fair**  **30%-60%** | **Good**  **60%-80%** | **Excellent**  **80% and Above** |
| Quality of presentation | Most group members could not convey clearly what they had to  share  No demonstrated coordination  The group was not able to clearly defend the presentation. | Group members conveyed in not  proper manner      The group explained the components of presentation to a  limited extent; members appeared disjointed and clear reasoning missing | Group members conveyed clearly  The arguments were not well  developed    The group explained the components of presentation to a  limited extent; members appeared disjointed and clear reasoning missing | Group members  conveyed clearly  The arguments were well developed    The group was able to clearly defend all the components and the justifications offered were satisfactory. |

***Rubrics for End Term Exam.***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Poor Below 30%** | **Fair**  **30%-60%** | **Good 60%-80%** | **Excellent**  **80% and Above** |
| Clarity of concepts  and  ability to apply them | Only up to 30% answers are correct. Most of the concepts are not clear and student is unable to understand the same. | Between 30 – 60% answers are correct. Many of the concepts are clear and understood by student and able to solve the problems given | Between 60 – 80% answers are correct. Majority of concepts are clear and understood by student and also provide the answers in business language. | 80% or more answers are correct. Most of concepts are clear and understood by the student, provide answers in business language and may also be able to indicate the additional information required for better decision making |

1. **Time Budgeting in Course Planning:**

|  |  |  |
| --- | --- | --- |
| **Activity** | **Description** | **Time Budgeted** |
| Classes | 2-3 hours per week for 12 weeks | 30 hours |
| Reading | Prescribed readings and making notes | 20 hours |
| Preparation of set questions, exercises and problems | Including shared and group exercises | 20 hours |
| Preparation of assignment | Reading and writing | 20 hours |
| Study and revision for test and end of Trimester examination | Self-preparations | 15 hours |
| **TOTAL** |  | 105 hours |

**Instructions:**

Students will be expected to maintain a daily log of their learning and make an action plan. The continuous evaluation tools would be implemented as per schedule and collected for evaluation. Students are encouraged to visit videos available on Impartus, you tube on TED talks, and readings available at websites like course era, etc.

1. **Academic Conduct**

# Institute’s Policy Statements

It is the responsibility of every student to be aware of the requirements for this course, and understand the specific details included in this document. It is emphasized that this course requires a significant commitment outside of formal class contact. The learning tasks in this course may include classes (lectures or seminars), required reading, preparation of answers to set questions, exercises and problems, and self-study. In addition, students may be required to complete an assignment, test or examination.

# LMS-Moodle/Impartus

LMS-Moodle/Impartus is used to host course resources for all courses. Students can download lectures, additional reading materials, and tutorial notes to support class participation.

# Late Submission

Assessment tasks submitted after the due date, without prior approval/arrangement, will be not be accepted. Requests for extension of time must be made with the faculty member concerned and based on Special Consideration guidelines.

**Plagiarism**:

Plagiarism is looked at as the presentation of the expressed thought or work of another person as though it is one's own without properly acknowledging that person.

Cases of plagiarism will be dealt with according to Plagiarism Policy of the institute. It is advisable that students should read the Student Handbook for detailed guidelines. It is also advisable that students must not allow other students to copy their work and must take care to safeguard against this happening. In cases of copying, normally all students involved will be penalized equally; an exception will be if the students can demonstrate that the work is their own and they took reasonable care to safeguard against copying.