

# Jaipuria Institute of Management, Noida PGDM Batch 2017-19: Trimester III

**Course Title: Management Information Systems (MIS)** 

**Course Code: IM301** 

#### **Syllabi**

Management Information Systems (MIS) is the management of information and information systems of an organization for better decision making. MIS blends principles, theories, and practices of Management, Reporting and Systems to help create an effective decision making process. It is a dynamic concept which continuously interacts with internal and external environment of the business and provides a directive and corrective mechanism to the management.

The course addresses issues that arise in dealing with information as a business resource. It provides an indepth look at usage of information systems for managers in business organizations. It also helps the students to evaluate tools and technologies for sourcing information from databases to improve business performance & decision making and assess the role of data quality in the management issues.

The course further helps to design and create techniques that can be used for taking a better decision by managers.

### **Course Learning Outcomes (CLO):**

Upon completion of this course, students will be able to complete the following key tasks:

- 1. Understand and describe the concept of information, information technology & information systems and their impact on business environment.
- 2. Understand and apply technology driven techniques and processes for smoothing business operations
- 3. Analyze the role of database and database management systems in developing conceptual and practical models for business enterprise
- 4. Design and create techniques for supporting decision making by using intelligent systems.

	PLO1	PLO2	PLO3	PLO4	PLO5
PLEO1					
PLEO2	CLO1, CLO2, CLO3, CLO4			CLO1, CLO2, CLO3, CLO4	CLO4

<sup>\*</sup> For value addition, interested students would be offered Descriptive analytics certification from IBM whereas all students will be trained on IBM Cognos.

# **Overview of Course Outline:**

S.	Topic	Session Objective /	Reading/	Pedagogy	Assessment
1.	Module 1: Managing Information for Business Initiatives  Course overview Managing information for business initiatives Business process enhancement through IS & IT	Details  Students would be sensitized to disruptive technology and its effect in bringing about change in the business (CLO 1)	reference Introductory talk Text book Ch.1: pp. 7-11	Discussion/ Story- telling / Caselet	Quiz/ Assignment/ End Term
2.	Understanding organizational information  Data/information hierarchy Information processing need at levels of IS  Data quality issues Influence in building IS	Students get to learn to differentiate data, information, knowledge & wisdom needed to build levels of IS (TPS, MIS) (CLO 1)	Text book Ch6: pp. 237-239	Discussion/ Story- telling / Caselet	Quiz/ Assignment/ End Term
3.	<ul><li>Technology &amp; Decision Making</li><li>Types of decision</li><li>Reports and its role in decision making</li></ul>	Students learn importance of reports required at various levels of organization (CLO 2)	Text book Ch.12: pp. 463-465 pp. 470-483 Case 2: case /caselet	Discussion/ Story- telling / Caselet	Quiz/ Assignment/ End Term
4.	Technology & Decision Making  • Decision making and its effect on business intelligence	Students learn the role played by decision making components in supporting business activities (CLO 2)	Text book Ch.12: pp. 470-483 Case 2: case /caselet	Discussion/ Story- telling / Caselet	Quiz/ Assignment/ End Term
5.	Module 2: Managing Data Need for databases  DBMS vs RDBMS  Data warehousing RDBMS fundamentals	Students will be sensitized on data storage systems and its relevance in contemporary world (CLO 3)	Text book Ch 6: pp. 215-227 Case 3: case problem	Discussion/ Story- telling / Caselet	Quiz/ Assignment/ End Term
6.     7.	Understanding interrelationships between data  • Entity Relationship Diagram (ERD)  Building on ERD contd	Students learn to create entity relationships and graphically represent them through ERD (CLO 3) Students learn the	Text book Ch6: pp. 215-237 Case 3: case problem Text book	Discussion/ Story- telling / Caselet	Quiz/ Assignment/ End Term
7.	Dunding on EKD conta	Students learn the	Text book	Discussion/	Quiz/

	• Simplifying ERD (normalization)	basic art of normalizing the ER model (CLO 3)	Ch6: pp. 215-237 Case 3: case problem	Story- telling / Caselet	Assignment/ End Term
8.	Building on ERD contd  • Simplifying ERD (normalization)	Students learn the basic art of normalizing the ER model (CLO 3)	Text book Ch6: pp. 215-237 Case 3: case problem	Discussion/ Story- telling / Caselet	Quiz/ Assignment/ End Term
9.	Building on ERD contd  Simplifying ERD (normalization)	Students learn the basic art of normalizing the ER model (CLO 3)	Text book Ch6: pp. 215-237 Case 3: case problem	Discussion/ Story- telling / Caselet	Quiz/ Assignment/ End Term
10.	Summary of modules	Students integrate the learnings of previous modules (CLO 1-3)		Discussion	Quiz/ Assignment/ End Term
11.	<ul> <li>Module 3: Building Systems</li> <li>Descriptive analytics through IBM Cognos</li> <li>Introduction to IBM Cognos</li> <li>Drag and drop files</li> </ul>	Students gets familiarized to descriptive analytics module through IBM Cognos (CLO 4)	Reference Material – 3	Lab Exercise	Quiz/ Assignment/ End Term
12.	<ul> <li>Perform guided import from the file and relational data source</li> <li>Restructuring the data</li> </ul>	Students gets familiarized to data structures (CLO 4)	Reference Material – 3	Lab Exercise	Quiz/ Assignment/ End Term
13.	Common Data structures, Star schema, cardinality	Students gets familiarized to data structures (CLO 4)	Reference Material – 3	Lab Exercise	Quiz/ Assignment/ End Term
14.	<ul> <li>Data Visualization         <ul> <li>(using chart types and options to choose optimal chart for the purpose)</li> </ul> </li> </ul>	Students learn concepts of visualization and presents data graphically (CLO 4)	Reference Material – 3	Lab Exercise	Quiz/ Assignment/ End Term
15.	<ul> <li>Presenting the data graphically, using nested columns</li> </ul>	Students learn inclusion of various widgets to create reports (CLO 4)	Reference Material – 3	Lab Exercise	Quiz/ Assignment/ End Term
16.	<ul> <li>Content Management by adding widgets in workspace.</li> </ul>	Students learn to refine reports (CLO 4)	Reference Material – 3	Lab Exercise	Quiz/ Assignment/ End Term
17.	<ul> <li>Applying the tab and action buttons in the workplace.</li> </ul>	Students make use of prompts to analyze data (CLO 4)	Reference Material – 3	Lab Exercise	Quiz/ Assignment/ End Term

18.	<ul> <li>Creating list reports, including header and footers, using filters.</li> </ul>				Quiz/ Assignment/ End Term
19.	Using prompts in the reports (analyzing data)				Quiz/ Assignment/ End Term
20.	Module 4: Technology Driven Networks Social computing & Business Networks  SMAC and its business relevance – Understanding S (Social), M (Mobile), A (Analytics) & C (Cloud)	Students get sensitized to the changes in value proposition and business models brought about by internet and its applications (CLO 2)	Reference material – 1 Case 1: case /caselet	Discussion/ Story- telling / Caselet	Quiz/ Assignment/ End Term
21.	SMAC contd.	Student gets sensitized to B2B models and new efficiencies and relationships (CLO 2)	Text book Ch.10: pp. 392-400 pp. 407-410 Case 1: case /caselet	Discussion/ Story- telling / Caselet	Quiz/ Assignment/ End Term
22.	<ul><li>E-Com Vs E-Bus</li><li>B2C models</li></ul>	Student gets sensitized to B2C models and new efficiencies and relationships (CLO 2)	Text book Ch.10: pp. 392-400 pp. 407-410 Case 1: case /caselet		Quiz/ Assignment/ End Term
23.	<ul><li>B2B models</li><li>Revenue models</li></ul>	Student gets sensitized to B2B models and new efficiencies and relationships (CLO 2)	Text book Ch.10: pp. 392-400 pp. 407-410 Case 1: case /caselet		Quiz/ Assignment/ End Term
24.	Summing up	Students learn to weave the learnings of course (CLO 1-4)		Discussion	Quiz/ Assignment/ End Term

## **Learning Material:**

#### Text Book

• Kenneth C. Laudon and Jane P. Laudon, Management Information Systems - Managing the Digital firm, Pearson, 12<sup>th</sup> Edition.

## References

- James A. O'Brien, Introduction to Information Systems, McGraw-Hill Companies, 14<sup>th</sup> Edition.
- Joshi, Management Information Systems, Oxford, 1<sup>st</sup> Edition, McGraw-Hill Companies.

• Jawadekar Waman, Management Information Systems – A digital firm perspective, Tata McGraw-Hill Education, 4<sup>th</sup> Edition.

#### **Assessment Scheme & Guidelines**

Quiz : 20%
 Assignment : 20%
 Discussion Forum : 05%
 Group Project : 15%
 End Term Examination : 40%

Total : 100 %

- 1. Quiz: There will be three quizzes. The best two quizzes would be considered for assessment. The quizzes would consist of multiple choice questions and/or fill in the blanks. The coverage of each quiz would be as per the modules of the course outline.
- 2. Assignment: There will be two assignments. Both the assignments would be considered for assessment. The student will be evaluated individually and/or in groups. The evaluation is based on how well students participate individually and/or in groups in the case assignment, case problem activities, class presentation, lab assignment or questions put up in the class.
- 3. Discussion Forum: The students would be evaluated individually based on their responses in the discussion initiated through discussion forum mode.
- 4. Group Project: The students will be required to complete a project as part of their group assessment component.
- 5. End Term Hall Examination: This will be held by examination cell on completion of the course. The end-term examination would be of two hours' duration comprising of questions based on full course. This will consist of case study/problem and/or application based questions wherein students will reflect and correlate their learning.