# JAIPURIA INSTITUTE OF MANAGEMENT

# PGDM(SM); TRIMESTER I; ACADEMIC YEAR 2018-19

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| Course Code and title | IT101 - Data Interpretation and Excel (DI&E) |
| Credits | 1.5 |
| Term and Year | I Term; Year: 2018-19 |
| Course Pre-requisite(s) | None |
| Course Requirement(s) | Basic Mathematics |
| Course Schedule (day and time of class) | As per time table released by PMC |
| Classroom # (Location) | Computer Lab /As per allotted by PMC |
| Course Instructor | Richa Misra |
| Course Instructor Email | As applicable |
| Course Instructor Phone (Office) | As applicable |
| Student Consultation Hours | 4:00 pm – 5:00 pm every Wednesday |
| Office location | Faculty room number |

**Course Overview:**

In the world of technology, companies collect tremendous amount of data with relative ease. Infact,both individuals and companies now have more data than they can handle. However, the data are usually meaningless until they are subject to transformation and interpretation. Understanding of data in way to be able to communicate and present the intended message is a challenge for any individual.The course aims at helping the student to understand the tenets of data through the most popular analysis tool – MS- Excel. The objective of the course is to make students at ease with MS-Excel so as to re-organize the data to draw meaningful interpretations and possible conclusions out of it. The course links the learning attained by the students in class Xth and take them to the next level of integrating the learning to business application. The learnings of this course will be useful for other courses of core functional areas like, Statistics, Economics, and Marketing. The students will use the tools and knowledge provided in this course to analyses and report the data they will get in upcoming courses.

**Programme Objectives (PO)**

PO 1. Communicate effectively and display inter-personal skills

PO2. Demonstrate leadership and teamwork towards achievement of organizational goals

PO 3. Apply relevant concepts for decision-making in service businesses.

PO 4. Develop innovative thinking for effective management of services.

PO 5. Demonstrate domain competency in a chosen sector of services industry.

PO 6. Appreciate sustainable and ethical business practices.

PO 7. Leverage technology for services management.

PO 8. Demonstrate capability as an independent learner.

# Course Learning Outcome (CLO)

At the end of the course, the students would be able to: - CLO 1: Distinguish between types of data.

CLO 2: Demonstrate use of spreadsheet.

CLO 3: Analyze the given data

CLO 4: Interpret data for meaningful output in business perspective.

**MAPPING OF CLOS WITH POS**

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| **CLO's** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** |
| **CLO 1** |  |  | **R\*** |  |  |  |  |  |
| **CLO 2** |  |  |  |  |  |  | **R\*** |  |
| **CLO 3** |  |  | **R\*** |  |  |  | **R\*** |  |
| **CLO 4** |  |  | **R** |  |  |  | **R** |  |

**MAPPING OF CLOS WITH GAS**

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| **CLOs/PLOs** | **GA1** | **GA2** | **GA3** | **GA4** | **GA5** | **GA6** | **GA7** | **GA8** |
|  | Self- initiative | Deep discipline knowledge | Critical thinking &  Problem solving | Humility, Team- Building and  Leadership Skills | Open and Clear Communication | Global outlook | Ethical competency &sustainable mindset | Entrepreneurial and innovative |
| **CLO1**  Distinguish between types of data |  | X |  |  |  |  |  |  |
| **CLO2**  Demonstrate use of spreadsheet |  |  | X |  |  |  |  |  |
| **CLO3**  Analyze the  given data |  |  | X |  |  |  |  |  |
| **CLO4**  Interpret data for meaningful output in business  perspective |  | X |  |  |  |  |  |  |

**REFERENCES**

Case/data problems

**SESSION PLANS:**

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| **S. No.** | **Topic /Sub topic** | **Session Details** | |
| 1. | **Module I: Overview of Excel and types of data** Understanding MS-Excel as spreadsheet  (Business Implications: Understanding spreadsheet and its business use)  Techniques learned: etc. navigation, sum, count) | Readings | Case Study 1: Data Dumps |
| Pedagogy | Ice breaking (15 min), discussion (15 min), demonstration (20 min) and experiential activity (20 min) |
| CLO | CLO 1 & 2 |
| SLO | Students would get familiar with working of MS-Excel and how it is associated with data handling  Students would able to collate data into manageable form though techniques like **sum, count,** etc. |
| 2. |  | Readings | Case Study 1: Data Dumps |

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|  | Overview… Understanding data and its types  (Quantitative and qualitative data) | Pedagogy | Discussion (15 min), demonstration (20 min) and experiential activity (40 min) |
| CLO | CLO 1 |
| SLO | Students would be able to understand types of data and its usage for a given business situation. |
| (Business Implications: Differentiating data into quantitative and qualitative basket) |  |  |
| Techniques learned: sum, count) |  |  |
| 3. | **Module II: Data description & interpretation and Excel:**  Interpreting central tendency for business situations  (Business Implications: finding out central point and most preferred; | Readings | Case 2: Boxing Data |
| Pedagogy | Discussion (15 min), demonstration (20 min) and experiential activity (40 min) |
| CLO | CLO 1, 2, 3 & 4 |
| SLO | Students would be able to process data into meaningful form using methods of s ummation, averaging, median, mode and interpret them for business situation. |
|  | Techniques learned: average, median, mode, frequency, range creation – max-min) |  |  |
| 4. | Data description…: Interpreting dispersion in data for business situations  (Business Implications: able to understand spread of data;  Techniques learned: standard deviation, variance and coefficient of variation) | Readings | Case 2: Boxing Data |
| Pedagogy | Discussion (15 min), demonstration (20 min) and experiential activity (40 min) |
| CLO | CLO 1, 2, 3 & 4 |
| SLO | Students would be able to understand concept of dispersion and use it to interpret data |
| 5. | Data description…: Discovering relationship between data sets | Readings | Case 2: Boxing Data |
| Pedagogy | Discussion (15 min), demonstration (20 min) and experiential activity (40 min) |
|  | (Business Implications: able to understand association between data;  Techniques learned: covariance, correlation, Analysis tool pack, sum, product, division etc) | CLO | CLO 1, 2, 3 & 4 |
| SLO | Students would be able to discover relationships hidden in the data and use it in business.  Students gets familiarized with A nalysis tool pack. |
| 6. | Review and Exercises – I (based on session 1-6) | Readings | Exercises |
| Pedagogy | Exercises |
| CLO | CLO 1, 2 & 3 |
| SLO | At the end of the session, the student will be able to apply the concepts and tools learnt in session 1-5. |
| 7. | **Module III: Data query & interpretation and Excel:** | Readings | Case 3: Store Database |
| Pedagogy | Discussion (15 min), demonstration (20 min) and experiential activity (40) |

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|  | Arranging the data for a situation  (Business implications: extracting top/bottom performers;  Techniques learned: sorting and filtering to arrange data) |  |  |
| CLO | CLO 1, 2, 3 & 4 |
| SLO | Students would learn the art of querying the data through sorting  and filtering enabling them to use it for business situation like extracting top performers. |
| 8. | Data query … Extracting data  (Business Implications: extracting associated information;  Techniques learned:  VLOOKUP) | Readings | Case 3: Store Database |
| Pedagogy | Discussion (15 min), demonstration (20 min) and experiential activity (40) |
| CLO | CLO 1, 2, 3 & 4 |
| SLO | Students would be able to extract relevant business information based on a criteria and use the same for a given situation. |
| 9. | Data query … Summarizing data  (Business Implications: Grouping data based on condition;  Techniques learned: I F(),  SUMIFS(), COUNTIFS(),  AVERAGEIFS()) | Readings | Case 4: Store Database |
| Pedagogy | Discussion (15 min), demonstration (20 min) and experiential activity (40 min) |
| CLO | CLO 1, 2, 3 & 4 |
| SLO | Students would be able to query data based on conditions given for a situation |
| 10. | Data query … Data Presentation  (Business Implications: presenting data in a meaningful manner;  Techniques learned: charting) | Readings | Case 4: Store Database |
| Pedagogy | Discussion (15 min), demonstration (20 min) and experiential activity (40 min) |
| CLO | CLO 1, 2, 3 & 4 |
| SLO | Students would be able to present data through charts (column,  line, |
| 11. | Review and Exercises – II (based on session 7-10) | Readings | Exercises |
| Pedagogy | Exercises |
| CLO | CLO 2 & 3 |
| SLO | At the end of the session, the student will be able to apply the concepts and tools learnt in session 7-10. |
| 12. | Review and Exercises – III  (based on session 1-11)  Summing up the course | Readings | -- |
| Pedagogy | Discussion |
| CLO | CLO 2 & 3 |
| SLO | The session weaves and winds up the whole course. |

**TIME BUDGETING IN COURSE PLANNING:**

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| **Activity** | **Description** | **Time Budgeted** |
| Classes | 2-3 hours per week for 6 weeks | 15 hours |
| Reading | Prescribed readings and making notes | 15 hours |
| Preparation of set questions, exercises and  problems | Including shared and group exercises | 7.5 hours |
| Preparation of assignment | Reading and writing | 7.5 hours |
| Study and revision for test and end of  Trimester examination | Self-preparations | 7.5 hours |

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| **TOTAL** |  | 52.5 hours |

**ASSESSMENT COMPONENTS**

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| **S. No.** | **Assessment Task** | **Assessment Description** | **Weightage** | **CLO Measured** |
| 1. | Quiz | There will be t hree announced 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 quiz will be based on application of class learning through phrases / caselets / excerpts. | 30% | Q1: CLO 1  Q2: CLO 1  Q3: CLO 1 |
| 2. | Assignment | There will be t hree announced assignments. The  best two assignments would be considered for assessment. Students will be evaluated individually and/or in groups. Assignment will be based on how well students participate individually/in groups in the datasets/caselet/lab analysis activities or questions put up in the class/forum. | 30% | A1: CLO 2 & 3  A2: CLO 2 & 3  A3: CLO 2 & 3 |
| 3. | End-term Lab | The examination would be held in computer lab. | 40% | Ques1: CLO 3 & 4 |
|  | Examination |  |  | Ques2: CLO 3 & 4 |
|  |  |  |  | Ques3: CLO 3 & 4 |
|  |  |  |  | Ques4: CLO 3 & 4 |

**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 Internet – YouTube, TED talks, and readings available at websites like course era, etc.

**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 include classes, required reading and practices, the 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.

**LATE SUBMISSION**

Not applicable as student would have to complete and submit assignment in the class.

**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 applicable section of 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 student can demonstrate the work is their own and they took reasonable care to safeguard against copying.

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