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| ULAB Logo  *sdfsdfsdfsdfsdfs-01.png* |  | AC041 |
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**Part A: Introduction**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Course Code | BUS 2102 | | | | | | |
| Course Title | Business Statistics I | | | | | | |
| Course Type | 🗹Lecture/Tutorial | Labs/Studio | | Workplace/Industrial | | | Others |
| Level/Term | Level 2/ Term 1 | | | | | | |
| Academic Session/Year | Spring /2021 | | 🗹Summer/2021 | | Fall/2021 | | |
| Course Instructor | ………………………… | | | | | | |
| Course Prerequisites (if any) | BUS1201 | | | | | | |
| Credit Value | 3 | | | | | | |
| Contact Hours | Monday (9:30 am -11:30 am)  Wednesday (9:30 am – 11:30 am) | | | | | | |
| Marks | Total Marks: 100 | | | CIE Marks: 70 | | SEE Marks: 30 | |

**Course Summary and Objectives**

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| The course gives an introduction to business statistics which lays the foundation for advanced statistics course(s). Students will learn how to collect, analyze and represent data in efficient forms enabling data users to make prudent business decisions. After successful completion of the course, students are expected to understand introductory basic concepts of statistics, relate theories with practical examples, and apply spreadsheet techniques for effective and efficient representation, and interpretation of sample data. |

**Course Learning Outcomes (CLO)**

|  |  |
| --- | --- |
| KNOWLEDGE | **CL01:** Understand basic statistical concepts covered in the course. These concepts are sample, population, frequency distribution, central tendency, dispersion, probability and probability distribution. |
| **CL02:** Understand practicality of statistical techniques in business context. |
| **CL03:** Understand reliability of sample data and its significance in relation to inference about the population. |
| SKILLS | **CL04**: Statistical Data presentation skill (verbal and technical: Excel, Google sheets etc). for effective communication with intended audience/users. |
| **CL05:** Analytical skill/problem solving skill: Interpretation of sample data |
| **CL06:** Decision making skill: Judgment based on interpreted data. |
| ATTITUDE | **CL07:** Logic/Analysis based approach to business problems. |
| **CL08:** Critical thinking of possible scenarios, probability of different scenarios and their interpretations. |
| **CL09:** Teamwork, Cooperation, respect for others. |

**Mapping/Alignment of CLOs with Program Learning Outcomes (PLO)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **PLO1** | **PLO2** | **PLO3** | **PLO4** | **PLO5** | **PLO6** | **PLO7** |
| **CLO1** |  |  | **2** | **2** |  |  |  |
| **CLO2** |  |  | **2** | **2** |  |  |  |
| **CLO3** |  |  | **3** | **2** |  |  |  |
| **CLO4** | **3** |  |  |  |  | **3** |  |
| **CLO5** |  |  | **3** |  |  |  |  |
| **CLO6** |  |  | **3** |  |  |  |  |
| **CLO7** |  |  | **3** |  |  |  |  |
| **CLO8** |  |  | **2** |  |  |  | **2** |
| **CLO9** |  | **2** |  |  | **2** |  |  |

Note:

3-Strong Correlation 2-Medium Correlation 1-Low Correlation

**Part B - Course Content**

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| **Sl. No.** | **Topic** | **Number of Sessions** | **CLO Covered** |
| 1 | Statistics: Introduction, definition, Types of variables | 1 | CLO1 |
| 2 | Frequency distributions and graphic presentations | 2 | CL01, CL2, CL04 |
| 3 | Measures of central tendency: mean, median, and mode | 3 | CL01, CL02, CL04, CL05 |
| 4 | Dispersion: measurements, interpretations, and uses, Skewness | 3 | CL01, CL02, CL04, CL05 |
| 5 | Introduction to Probability | 2 | CL01, CL02, CL04, CL05 |
|  | Mid Term Assessment |  |  |
| 6 | Probability concepts | 3 | CL01, CL02, CL04, CL05 |
| 7 | Discrete, Continuous and Normal probability distributions | 5 | CL01, CL02, CL03, CL05, CL06, CL07, CL08 |
|  | Presentation and Final Assignment/Report | 2 | CL01, CL02, CL04, CL05, CL09 |
|  | Final Assessment |  |  |
|  | **Total** | 21 |  |

**Teaching & Learning Strategies**

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| Lecture  Examples/ Case studies  Group activity  Class Participation/ Discussion  Presentation& Term paper  Mid-term and Final Exams |

**Assessment Technique for each Course Topic**

|  |  |  |
| --- | --- | --- |
| **SN** | **Topic** | **Assessment Technique** |
| **1** | Statistics: Introduction, definition, Types of variables | AR2, AR3, AR6: Class participation, Mid & Final exam, Quiz |
| **2** | Frequency distributions and graphic presentations | AR2, AR3, AR6: Class participation, Mid & Final exam, Quiz |
| **3** | Measures of central tendency: mean, median, and mode | AR2, AR3, AR6: Class participation, Mid & Final exam, Quiz |
| **4** | Dispersion: measurements, interpretations, and uses, Skewness | AR2, AR3: Class participation, Mid & Final exam |
| **5** | Introduction to Probability | AR2, AR3, AR6: Class participation, Final exam, Quiz |
| **6** | Probability concepts | AR2, AR3, AR6: Class participation, Final exam, Quiz |
| **7** | Discrete, Continuous and Normal probability distributions | AR2, AR3: Class participation, Final exam |
|  | \*Presentation & Final Assignment/ Report (topic no. 1- 4) | AR7, AR8, AR9: Presentation, Assignment, Report |

**Part C- Assessment and Evaluation**

**Assessment Technique Weightage**

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| --- | --- |
| **Assessment Strategy** | **Percentage (%)** |
| Mid-term Assessment / Exam | 25 |
| Final Assessment / Exam | 30 |
| Participation | 10 |
| Report/ Assignment and Presentation | 15 |
| Quizzes | 20 |
| **Total** | **100** |

**Assessment Pattern:**

CIE-Continuous Internal Evaluation (Number of Marks 70)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Bloom’s Category | Mid-term Exam | Participation | Presentation and Assignment/Report | Quizzes |
| Remember | 🗹 | 🗹 |  | 🗹 |
| Understand | 🗹 | 🗹 | 🗹 | 🗹 |
| Apply | 🗹 | 🗹 | 🗹 | 🗹 |
| Analyze | 🗹 | 🗹 | 🗹 | 🗹 |
| Evaluate |  |  |  |  |
| Create |  |  |  |  |

SEE-Semester End Evaluation (Number of Marks 30)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Bloom’s Category | Final Exam |  |  |  |  |
| Remember | 🗹 |  |  |  |  |
| Understand | 🗹 |  |  |  |  |
| Apply | 🗹 |  |  |  |  |
| Analyze | 🗹 |  |  |  |  |
| Evaluate |  |  |  |  |  |
| Create |  |  |  |  |  |

**Evaluation Policy (Grading System)**

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| A relative or bell-curve grading system will be followed, so that the majority will receive a middle grade, and only a few will get A/A-, or F. The course teacher will assign mark ranges to each letter grade, taking into account the assessment components and assigned weights, difficulty level, average academic ability of the class, etc. |

**Course Policies and Procedures (including Makeup Class)**

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| **Class attendance:** Regular attendance in lectures is mandatory and absence in 6 or more lectures shall result in an ‘F’ grade automatically. Late arrival in lectures by 20 minutes or more will be considered as absent.  **Textbook and course equipment:** Students must bring the course text-book and other necessary equipment (i.e. Scientific Calculator etc.) in every lecture and tutorial session.  **Use of email**: Students must use their respective email account provided by ULAB for communication. Course related resources and some of the assignment tasks shall be distributed through Moodle/ Google classroom. Students are instructed to keep their email active and regularly checked.  **Use of cell phones:** Use of cell phones or any other such devices during the lectures, exams or any other course activities are strictly prohibited. Students are instructed to keep their cell phones etc. switched off during these activities if not mentioned otherwise.  **Makeup for quiz and/or term-exam:** Make-up for quizzes is not allowed. For term-exams, make-ups may be arranged for valid cases which are subjected to the verification and permission from the competent authority.  **Make-up Classes:**  Make-up classes will be arranged if the faculty misses any class(es). The faculty will communicate new schedule for the make-up class with the students.  **Late submission of tasks/assignments:** Late submission will be subjected to marks penalty or non-acceptance; course students are insisted upon to maintain deadlines.  **Unfair means /plagiarism:** Plagiarism is strictly prohibited and will result in zero marks for the task and further actions, if deemed necessary. Any unfair means shall be treated under the university policy. |

**Part D- Learning Resources**

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| Text Books | Statistical Techniques in Business and Economics, Lind, Marchal and Wathen, 17th edition or higher |
| Reference Books (Text Books) | Levin, R. I., & Rubin D. S., Statistics for Management,7 Edition or higher, Prentice Hall, New Jersey or higher |
| Other Resources (Online Resources or others) | Will be uploaded on Learning Management System (Moodle/Google classroom) |

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| Course Coordinator/ Teacher |  | Head of the Department |
| Date: |  | Date: |