SYLLABUS PART I
EDISON STATE COMMUNITY COLLEGE
FIN 220S BUSINESS ANALYTICS
3 CREDITS

COURSE DESCRIPTION
Introduces the lifecycle of data science questions and communication. Starting from business goals or objectives, students develop the framework to turn those goals into specific questions that can be answered with data. Students will explore how data is turned into stories that can be understood by a nontechnical audience using visualization tools. Students will work extensively in Excel and Excel analytical add-ons, honing their skills in this critical business application. Prerequisite: ACC 121S and CIS 102S. Lab fee.

COURSE GOALS

The student will:

Bloom's Level		Program Outcomes
1	1. Describe key concepts in business and data analytics.	1, 2, 7
2	2. Explain how business analytics differs from business intelligence and data mining.	1, 2, 7
2	3. Explain why organizations are actively adopting business analytics for strategic advantage.	1, 2, 3, 4, 5, 7
2	4. Differentiate between information, insight, and knowledge.	1, 3
2	5. Explain the application capabilities of visualization-focused platforms (Tableau, Power BI, Click, Excel, etc.).	1, 2, 6
3	6. Apply appropriate statistical (basic analytics) concepts using analytic software.	1, 4, 6, 7, 8
3	7. Use data mining techniques, using Excel and Excel add-ins (Power Pivot, Data Analysis), on large data sets to answer business problems.	1, 2, 3, 4, 6, 7 ,8
4	8. Analyze output from statistical and data mining procedures.	1, 2, 6, 7, 8
5	9. Interpret and make recommendations based on relevant statistical and data mining output to help managers make intelligent decisions.	1, 2, 3, 6, 7, 8
2	10. Identify the specific ethical issues that arise when utilizing statistical and data mining techniques.	1, 2, 3, 4, 5, 7, 8

CORE VALUES
The Core Values are a set of principles that guide Edison State in creating its educational programs and environment. They will be reflected in every aspect of the College. Students' educational experiences will incorporate the Core Values at all levels, so that a student who completes a degree program at Edison State will not only have been introduced to each value but will have had them reinforced and refined at every opportunity.

TOPIC OUTLINE
1. Introducing business analytics with data
2. Reviewing Excel
3. Entering and managing data
4. Formatting worksheets
5. Introducing data visualization
6. Introducing pivot tables and pivot charts
7. Using mathematical outputs for analytics (formulas and financial functions)

8. Using loan, lease, and investment scenarios
9. Applying exception analytics (logical functions and lookup functions)
10. Summarizing exception analytics (statistical IF & IFS functions)
11. Applying the data analytics framework
12. Using pivot tables to audit data
13. Analyzing the data
14. Summarizing big datasets in custom reports
15. Establishing internal data controls
16. Creating charts, and chart types, for presentations and data visualization
17. Formatting enhancements for charts
18. Using charts in PowerPoint and Word
19. Using a scatter chart and motion data visualization
20. Completing real-world predictive analytics cases