

Think About “Alignment”

<p>Course: MBA8150 Business Analytics</p> <p>Course-Level Objective(s):</p> <ol style="list-style-type: none"> 1. <i>Categorize data to construct appropriate tables and charts, and interpret data using Excel.</i> <p>Module-Level Objective(s): <i>WK01: Statistics Overview, Describing Data Graphically and Numerically</i></p> <p>To recall why knowledge of statistics is important. To differentiate between descriptive and inferential statistics. To recognize variables as qualitative or quantitative, and discrete or continuous. To distinguish between nominal, ordinal, interval, and ratio levels of measurement. To summarize qualitative and quantitative variables with frequency and relative frequency tables, bar and pie charts, histograms and frequency polygons using Excel. To compute and interpret the mean, the median, mode, weighted mean, geometric mean, range, variance, and standard deviation using Excel. To compute the mean and standard deviation of grouped data using Excel. To compute measures of position using Excel.</p> <p><i>WK08: Simple Linear Regression and Correlation</i></p> <p>To create scatter diagrams using Excel. To interpret the relationship between two variables and confidence and prediction intervals.</p>	<p>Standard 4, Resources and Materials:</p> <ul style="list-style-type: none"> • "Statistical Techniques in Business & Economics," 17th Ed., Douglas A. Lind, et. al. • Microsoft Excel, Instructor’s Excel-01 Model • Resources and Assignments Web Page • Instructional videos • Self-study Guides and Terms <p>Standard 5, Learning Engagement and Activities:</p> <p><u>Textbook Readings:</u></p> <ul style="list-style-type: none"> • Chapter 1: What is Statistics, Read entire chapter. • Chapter 2: Graphic Presentation, Read entire chapter. • Chapter 3: Numerical Measures, Read chapter, skip Geometric Mean. • Chapter 4: Exploring Data, Read chapter, skip Stem-and-Leaf Displays, and Contingency Tables • Chapter 13: Regression and Correlation, Read chapter, skip Transforming Data. <p><u>Instructional Videos to be Watched:</u></p> <ul style="list-style-type: none"> • Ch01 Lecture: What is Statistics? • Ch02 Lecture: Describing Data Graphically. • Excel Overview and Fundamentals • Ch02 Excel: Creating Graphs • Ch03 Lecture: Describing Data Numerically • Ch03 Excel: Descriptive Statistics • Ch04 Lecture: Other ways to describe data. • Ch04 Excel: Miscellaneous ways to describe data. • WK08 Lecture: Ch13, Correlation and Linear Regression. • WK08 Excel: Ch13, Correlation and Linear Regression. • WK01 Reinforcement Lecture • WK08 Reinforcement Lecture
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Specific Activities

- Review Instructor provided chapter PowerPoint outlines
- Review self-study guides for each chapter
- After completing readings, test your understanding with Concepts Self-Assessments. Redo/practice until you have achieved desired understanding
- Watch each instructor's Excel videos: Solve problems from the video. Then do Problems self-assessments using Excel. Redo/practice until you have achieved desired understanding.
- Watch each instructor's Reinforcement videos: Solve problems from this video as a review.
- Complete graphing assignment and submit your Excel graphs
- Bonus Activity: Create PivotTable for Ordinal data and submit your Excel file
- Prior to exam, repeat Concepts Self-Assessments and Problems Self-Assessment to prepare

Discussions

Review instructor's and student's posts in the following forums. Contribute your own as necessary.

- After completing the Excel graphing exercise, provide your thoughts about this exercise and about using Excel for graphing.
- WK01: Any Questions, Comments, or Observations Forum
- WK08: Any Questions, Comments, or Observations Forum

Standard 6, Course Technology:

Instructional Videos

Microsoft Excel

Moodle LMS

Standard 3, Assessment and Measurement:

(Ch01) Concepts Self-Assessment

(Ch02) Concepts Self-Assessment

(Ch02) Submit your Excel M&M data and graph

(Ch02) Thoughts on Graphing Data with Excel Forum

(Ch03) Concepts Self-Assessment

(Ch03) Problems Self-Assessment

(Ch04) Concepts Self-Assessment

(Ch13) Concepts Self-Assessment

(Ch13) Problems Self-Assessment

Exam1

<p>Course: MBA8150 Business Analytics</p> <p>Course-Level Objective(s):</p> <p>2. <i>Investigate decision alternatives in the face of uncertainty. To use decision tree diagrams.</i></p> <p>Module-Level Objective(s): <i>WK02: Decision Analysis and Decision Trees</i></p> <p>To create decision trees using Excel. To evaluate decision alternatives under uncertainty using Excel. To calculate the expected monetary value. To change decision variables for sensitivity analysis using Excel.</p> <p><i>WK10: Optimization and Simulation</i></p> <p>To list the advantages and disadvantages of modeling with simulation. To compare decisions using Excel simulation models. To apply sensitivity analysis to simulation models using Excel.</p>	<p>Standard 4, Resources and Materials:</p> <ul style="list-style-type: none"> • "Statistical Techniques in Business & Economics," 17th Ed., Douglas A. Lind, et. al. • Microsoft Excel, Instructor's Excel-02 Model and Excel-10 Model • Resources and Assignments Web Page • Instructional videos • Self-study Guides and Terms • TreePlan Add-in File
	<p>Standard 5, Learning Engagement and Activities:</p> <p><u>Textbook Readings:</u></p> <ul style="list-style-type: none"> • Decision Analysis and Decision Trees. Supplemental Readings: Lind Ch20 (from 16 Ed.), Bertsimas Ch.1 §1-3 • Supplemental Reading Chapter 5 Simulation Modeling. <p><u>Instructional Videos to be Watched:</u></p> <ul style="list-style-type: none"> • WK02 Decision Trees • WK02 Excel-Decision Trees • WK10: Optimization and Simulation • WK02 Reinforcement Lecture • WK10 Reinforcement Lecture <p><u>Specific Activities</u></p> <ul style="list-style-type: none"> • Review Instructor provided chapter PowerPoint outlines • Review self-study guides for each chapter • After completing readings, test your understanding with Concepts Self-Assessments. Redo/practice until you have achieved desired understanding • Watch each instructor's Excel videos: Solve problems from the video. Then do Problems Self-Assessments using Excel. Redo/practice until you have achieved desired understanding. • Watch each instructor's Reinforcement videos: Solve problems from this video as a review. • Use Conley Fisheries Simulation to simulate different scenarios and solve problems • Prior to exam, repeat Concepts Self-Assessments and Problems Self-Assessment to prepare <p><u>Discussions</u></p> <p>Review instructor's and student's posts in the following forums. Contribute your own as necessary.</p> <ul style="list-style-type: none"> • WK02: Any Questions, Comments, or Observations Forum • WK10: Any Questions, Comments, or Observations Forum
	<p>Standard 6, Course Technology:</p> <p>Instructional Videos</p> <p>Microsoft Excel</p>

	Moodle LMS
	Standard 3, Assessment and Measurement: WK02 Concepts Self-Assessment WK02 Problems Self-Assessment WK10 Simulation Self-Assessment Exam1

<p>Course: MBA8150 Business Analytics</p> <p>Course-Level Objective(s):</p> <p>3. <i>Define probability for an event and calculate probabilities and outcomes using rules of addition, multiplication, and counting.</i></p> <p>Module-Level Objective(s): <i>WK03: Decision-Making under Uncertainty; Probability Concepts and Counting</i></p> <p>To define the terms probability, experiment, event, and outcome. To recognize probabilities using a classical, empirical, or subjective approach. To calculate probabilities using the rules of addition and the rules of multiplication. To determine the number of outcomes using principles of counting: arrangements, permutations, and combinations using Excel.</p> <p><i>WK10: Optimization and Simulation</i></p> <p>To calculate probabilities using simulation.</p>	<p>Standard 4, Resources and Materials:</p> <ul style="list-style-type: none"> • "Statistical Techniques in Business & Economics," 17th Ed., Douglas A. Lind, et. al. • Microsoft Excel, Instructor's Excel-03 Model and Excel-10 Model • Resources and Assignments Web Page • Instructional videos • Self-study Guides and Terms
	<p>Standard 5, Learning Engagement and Activities:</p> <p><u>Textbook Readings:</u></p> <ul style="list-style-type: none"> • Chapter 5: Probability, Read chapter, skip Contingency Tables, and Baye's Theorem. • Supplemental Reading Heizer Chapter 5 Simulation Modeling. <p><u>Instructional Videos to be Watched:</u></p> <ul style="list-style-type: none"> • WK03 Lecture: Probability Concepts - Part 1 • WK03 Lecture: Probability Counting - Part 2 • WK03 Excel: Probability calculations. • WK10: Optimization and Simulation • WK03 Reinforcement Lecture • WK10 Reinforcement Lecture <p><u>Specific Activities</u></p> <ul style="list-style-type: none"> • Review Instructor provided chapter PowerPoint outlines • Review self-study guides for each chapter • After completing readings, test your understanding with Concepts Self-Assessments. Redo/practice until you have achieved desired understanding • Watch each instructor's Excel videos: Solve problems from the video. Then do Problems Self-Assessments using Excel. Redo/practice until you have achieved desired understanding. • Watch each instructor's Reinforcement videos: Solve problems from this video as a review. • Use Conley Fisheries Simulation to simulate different scenarios and solve problems • Prior to exam, repeat Concepts Self-Assessments and Problems Self-Assessment to prepare <p><u>Discussions</u></p> <p>Review instructor's and student's posts in the following forums. Contribute your own as necessary.</p> <ul style="list-style-type: none"> • WK03: Any Questions, Comments, or Observations Forum • WK10: Any Questions, Comments, or Observations Forum
	<p>Standard 6, Course Technology:</p> <p>Instructional Videos Microsoft Excel Moodle LMS</p>

	<p>Standard 3, Assessment and Measurement:</p> <p>WK03 (Ch05) Concepts Self-Assessment WK03 (Ch05) Problems Self-Assessment WK10 Simulation Self-Assessment Exam1</p>
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<p>Course: MBA8150 Business Analytics</p> <p>Course-Level Objective(s):</p> <p>4. <i>Distinguish different kinds of probability distributions. To calculate probabilities of events using Excel.</i></p> <p>Module-Level Objective(s):</p> <p><i>WK04: Discrete Probability Distributions</i></p> <p>To identify the characteristics of a probability distribution. To distinguish between discrete and continuous random variables. To compute the mean, variance, and standard deviation of a discrete probability distribution. To recognize the assumptions of the binomial distribution. To calculate probabilities for binomial distributions using Excel.</p> <p><i>WK05: Continuous Probability Distributions</i></p> <p>To recognize the features of the uniform probability distribution. To use the uniform probability distribution to calculate probabilities. To recognize the features and characteristics of the normal probability distribution. To recognize the standard normal probability distribution. To calculate probabilities for normal distributions using Excel.</p> <p><i>WK06: Sampling Methods, Estimating the Population Mean, and Confidence Intervals</i></p> <p>To explain why populations are sampled. To identify four methods to sample a population. To identify sampling error. To construct a sampling distribution of the sample mean using Excel. To calculate probabilities</p>	<p>Standard 4, Resources and Materials:</p> <ul style="list-style-type: none"> • "Statistical Techniques in Business & Economics," 17th Ed., Douglas A. Lind, et. al. • Microsoft Excel, Instructor's Excel-04 Model, Excel-05 Model, and Excel-06 Model, Excel-07 Model • Resources and Assignments Web Page • Instructional videos • Self-study Guides and Terms
	<p>Standard 5, Learning Engagement and Activities:</p> <p><u>Textbook Readings:</u></p> <ul style="list-style-type: none"> • Chapter 6: Discrete Distributions, Read chapter, skip Hypergeometric and Poisson Probability Distributions. • Chapter 7: Continuous Distributions, Read chapter, skip Normal Approximation to the Binomial, and The Family of Exponential Distributions. • Chapter 8: Sampling Methods, Read entire chapter. • Chapter 9: Estimations and Confidence Intervals. Read chapter. Skip Confidence Level for a Proportion, and Finite-Population Correction Factor. • Chapter 10: One-Sample Tests, Read chapter, skip Tests Concerning Proportions, Type II Error. • Chapter 11: Two-Sample Tests, Read chapter, skip Two-Sample Tests about Proportions, Two-Sample Tests of Hypothesis: Dependent Samples, and Comparing Dependent and Independent Samples. • Chapter 12: ANOVA, Chapter 12: Read from chapter beginning up to and including The ANOVA Test. • Supplemental Reading Heizer Chapter 5 Simulation Modeling. <p><u>Instructional Videos to be Watched:</u></p> <ul style="list-style-type: none"> • WK04 Discrete Probability Distributions • WK04 Excel: The Binomial Distribution model. • WK05 Lecture: Ch7, Continuous Distributions and The Normal Distribution. • WK05 Excel: Ch7, Using Excel for Normal Distribution Calculations • WK06 Lecture: Ch8, Sampling Methods and the Central Limit Theorem. • WK06 Excel: Ch8, Model for Sampling Methods and the Central Limit Theorem. • WK06 Lecture: Ch9, Confidence Limits. • WK06 Excel: Ch9, Confidence Limits. • WK07 Lecture: Ch10, Hypothesis Testing. • WK07 Excel: Ch10, Hypothesis Testing.

of sampled data. To interpret a point estimate and confidence interval for a population mean. To calculate a point estimate and a confidence interval for a population mean using Excel. To calculate the required sample size to estimate a population mean using Excel.

WK07: Hypothesis Testing: One-Sample Tests. Two-Sample Tests and ANOVA

To apply the testing hypothesis procedures in Excel for both one sample and two samples. To recognize what a one-tailed and a two-tailed test of hypothesis should be used. To use a test of a hypothesis about a population mean for one sample by computing and interpreting p-values. To use the t-statistic to test a hypothesis. To evaluate a hypothesis that two independent population means are equal, assuming that the population standard deviations are known and equal, and with unknown population standard deviations using Excel. To apply the F distribution and test a hypothesis that two population variances are equal using Excel.

WK10: Optimization and Simulation

To calculate probabilities using simulation.

- WK07 Two-Sample Tests
- WK07 Excel: Two-Sample Tests
- WK10: Optimization and Simulation
- WK04 Reinforcement Lecture
- WK05 Reinforcement Lecture
- WK06 Reinforcement Lecture
- WK07 Reinforcement Lecture
- WK10 Reinforcement Lecture

Specific Activities

- Review Instructor provided chapter PowerPoint outlines
- Review self-study guides for each chapter
- After completing readings, test your understanding with Concepts Self-Assessments. Redo/practice until you have achieved desired understanding
- Watch each instructor's Excel videos: Solve problems from the video. Then do Problems Self-Assessments using Excel. Redo/practice until you have achieved desired understanding.
- Watch each instructor's Reinforcement videos: Solve problems from this video as a review.
- Use Conley Fisheries Simulation to simulate different scenarios and solve problems
- Prior to exam, repeat Concepts Self-Assessments and Problems Self-Assessment to prepare

Discussions

Review instructor's and student's posts in the following forums. Contribute your own as necessary.

- WK04: Any Questions, Comments, or Observations Forum
- WK05: Any Questions, Comments, or Observations Forum
- WK06: Any Questions, Comments, or Observations Forum
- WK07: Any Questions, Comments, or Observations Forum
- WK10: Any Questions, Comments, or Observations Forum

Standard 6, Course Technology:

Instructional Videos
Microsoft Excel
Moodle LMS

Standard 3, Assessment and Measurement:

WK04 (Ch06) Concepts Self-Assessment
WK04 (Ch06) Problems Self-Assessment
WK05 (Ch07) Concepts Self-Assessment

	WK05 (Ch07) Problems Self-Assessment WK06 (Ch08) Concepts Self-Assessment WK06 (Ch08) Problems Self-Assessment WK06 (Ch09) Concepts Self-Assessment WK06 (Ch09) Problems Self-Assessment WK07 (Ch10) Concepts Self-Assessment WK07 (Ch10) Problems Self-Assessment WK07 (Ch11) Concepts Self-Assessment WK07 (Ch12) Concepts Self-Assessment WK07 (Ch11/12) Problems Self-Assessment WK10 Simulation Self-Assessment Exam1 Exam2
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<p>Course: MBA8150 Business Analytics</p> <p>Course-Level Objective(s):</p> <p>5. Calculate probabilities and p-values to evaluate hypotheses about sample data to support decisions using Excel.</p> <p>Module-Level Objective(s):</p> <p><i>WK06: Sampling Methods, Estimating the Population Mean, and Confidence Intervals</i></p> <p>To explain why populations are sampled. To identify four methods to sample a population. To identify sampling error. To construct a sampling distribution of the sample mean using Excel. To calculate probabilities of sampled data. To interpret a point estimate and confidence interval for a population mean. To calculate a point estimate and a confidence interval for a population mean using Excel. To calculate the required sample size to estimate a population mean using Excel.</p> <p><i>WK07: Hypothesis Testing: One-Sample Tests. Two-Sample Tests and ANOVA</i></p> <p>To apply the testing hypothesis procedures in Excel for both one sample and two samples. To recognize what a one-tailed and a two-tailed test of hypothesis should be used. To use a test of a hypothesis about a population mean for one sample by computing and interpreting p-values. To use the t-statistic to test a hypothesis. To evaluate a hypothesis that two independent population means are equal, assuming that the population standard deviations are known and equal, and with unknown population standard deviations using Excel. To</p>	<p>Standard 4, Resources and Materials:</p> <ul style="list-style-type: none"> • "Statistical Techniques in Business & Economics," 17th Ed., Douglas A. Lind, et. al. • Microsoft Excel, Instructor's Excel-06 Model, Excel-07 Model • Resources and Assignments Web Page • Instructional videos • Self-study Guides and Terms <p>Standard 5, Learning Engagement and Activities:</p> <p><u>Textbook Readings:</u></p> <ul style="list-style-type: none"> • Chapter 8: Sampling Methods, Read entire chapter. • Chapter 9: Estimations and Confidence Intervals. Read chapter. Skip Confidence Level for a Proportion, and Finite-Population Correction Factor. • Chapter 10: One-Sample Tests, Read chapter, skip Tests Concerning Proportions, Type II Error. • Chapter 11: Two-Sample Tests, Read chapter, skip Two-Sample Tests about Proportions, Two-Sample Tests of Hypothesis: Dependent Samples, and Comparing Dependent and Independent Samples. • Chapter 12: ANOVA, Chapter 12: Read from chapter beginning up to and including The ANOVA Test. • Supplemental Reading Heizer Chapter 5 Simulation Modeling. <p><u>Instructional Videos to be Watched:</u></p> <ul style="list-style-type: none"> • WK06 Lecture: Ch8, Sampling Methods and the Central Limit Theorem. • WK06 Excel: Ch8, Model for Sampling Methods and the Central Limit Theorem. • WK06 Lecture: Ch9, Confidence Limits. • WK06 Excel: Ch9, Confidence Limits. • WK07 Lecture: Ch10, Hypothesis Testing. • WK07 Excel: Ch10, Hypothesis Testing. • WK07 Two-Sample Tests • WK07 Excel: Two-Sample Tests • Making Chocolate Chip Cookies • WK06 Reinforcement Lecture • WK07 Reinforcement Lecture <p><u>Specific Activities</u></p> <ul style="list-style-type: none"> • Review Instructor provided chapter PowerPoint outlines • Review self-study guides for each chapter
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<p>apply the F distribution and test a hypothesis that two population variances are equal using Excel.</p>	<ul style="list-style-type: none"> • After completing readings, test your understanding with Concepts Self-Assessments. Redo/practice until you have achieved desired understanding • Watch each instructor's Excel videos: Solve problems from the video. Then do Problems Self-Assessments using Excel. Redo/practice until you have achieved desired understanding. • Watch each instructor's Reinforcement videos: Solve problems from this video as a review. • Prior to exam, repeat Concepts Self-Assessments and Problems Self-Assessment to prepare <p><u>Discussions</u> Review instructor's and student's posts in the following forums. Contribute your own as necessary.</p> <ul style="list-style-type: none"> • WK06: Any Questions, Comments, or Observations Forum • WK07: Any Questions, Comments, or Observations Forum
	<p>Standard 6, Course Technology: Instructional Videos Microsoft Excel Moodle LMS</p>
	<p>Standard 3, Assessment and Measurement: WK06 (Ch08) Concepts Self-Assessment WK06 (Ch08) Problems Self-Assessment WK06 (Ch09) Concepts Self-Assessment WK06 (Ch09) Problems Self-Assessment WK07 (Ch10) Concepts Self-Assessment WK07 (Ch10) Problems Self-Assessment WK07 (Ch11) Concepts Self-Assessment WK07 (Ch12) Concepts Self-Assessment WK07 (Ch11/12) Problems Self-Assessment Exam2</p>

<p>Course: MBA8150 Business Analytics</p> <p>Course-Level Objective(s):</p> <p>6. Calculate relationships between two or more sets of data using regression analysis in Excel.</p> <p>Module-Level Objective(s):</p> <p><i>WK08: Simple Linear Regression and Correlation</i></p> <p>To recognize the purpose of correlation analysis. To create scatter diagrams using Excel. To interpret the relationship between two variables and confidence and prediction intervals. To calculate a correlation coefficient to test the relationship between two variables using Excel. To apply regression analysis to estimate the linear relationship between two variables, including the slope of the regression equation using Excel. To evaluate a regression equation's ability to predict dependent values. To calculate confidence and prediction intervals using Excel.</p> <p><i>WK09: Multiple Regression</i></p> <p>To use multiple regression analysis to describe a relationship between several independent variables and a dependent variable using Excel. To evaluate how well a multiple regression equation fits the data using Excel. To evaluate hypotheses about the relationships inferred by a multiple regression model. To evaluate the assumptions of multiple regression using Excel. To use a qualitative, dummy variable in multiple regression. To interpret an interaction effect in multiple regression analysis using Excel.</p>	<p>Standard 4, Resources and Materials:</p> <ul style="list-style-type: none"> • "Statistical Techniques in Business & Economics," 17th Ed., Douglas A. Lind, et. al. • Microsoft Excel, Instructor's Excel-08 Model, Excel-09 Model • Resources and Assignments Web Page • Instructional videos • Self-study Guides and Terms
	<p>Standard 5, Learning Engagement and Activities:</p> <p><u>Textbook Readings:</u></p> <ul style="list-style-type: none"> • Chapter 13: Regression and Correlation, Read chapter, skip Transforming Data. • Chapter 14: Multiple Regression, Read chapter, skip Stepwise Regression. <p><u>Instructional Videos to be Watched:</u></p> <ul style="list-style-type: none"> • WK08 Lecture: Ch13, Correlation and Linear Regression. • WK08 Excel: Ch13, Correlation and Linear Regression. • WK09 Lecture: Ch14, Multiple Regression. • WK09 Excel: Ch14, Multiple Regression. • WK08 Reinforcement Lecture • WK09 Reinforcement Lecture <p><u>Specific Activities</u></p> <ul style="list-style-type: none"> • Review Instructor provided chapter PowerPoint outlines • Review self-study guides for each chapter • After completing readings, test your understanding with Concepts Self-Assessments. Redo/practice until you have achieved desired understanding • Watch each instructor's Excel videos: Solve problems from the video. Then do Problems Self-Assessments using Excel. Redo/practice until you have achieved desired understanding. • Watch each instructor's Reinforcement videos: Solve problems from this video as a review. • Prior to exam, repeat Concepts Self-Assessments and Problems Self-Assessment to prepare <p><u>Discussions</u></p> <p>Review instructor's and student's posts in the following forums. Contribute your own as necessary.</p> <ul style="list-style-type: none"> • WK08: Any Questions, Comments, or Observations Forum • WK09: Any Questions, Comments, or Observations Forum
	<p>Standard 6, Course Technology:</p> <p>Instructional Videos Microsoft Excel Moodle LMS</p>

	Standard 3, Assessment and Measurement:
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WK08 (Ch13) Concepts Self-Assessment

WK08 (Ch13) Problems Self-Assessment

WK09 (Ch14) Concepts Self-Assessment

WK09 (Ch14) Problems Self-Assessment

Exam2

<p>Course: MBA8150 Business Analytics</p> <p>Course-Level Objective(s):</p> <p>7. <i>Determine the best decision using optimization techniques and models in Excel.</i></p> <p>Module-Level Objective(s):</p> <p><i>WK10: Optimization and Simulation</i></p> <p>To formulate a linear programming model, including an objective function and constraints, using Excel. To solve a linear programming model using Excel's Solver add-in. To use number manipulation, sliders, what-if data tables, and Goal Seek tools in Excel for optimization. To list the advantages and disadvantages of modeling with simulation. To compare decisions using Excel simulation models. To apply sensitivity analysis to simulation models using Excel.</p>	<p>Standard 4, Resources and Materials:</p> <ul style="list-style-type: none"> • "Statistical Techniques in Business & Economics," 17th Ed., Douglas A. Lind, et. al. • Microsoft Excel, Instructor's Excel-10 • Resources and Assignments Web Page • Instructional videos • Self-study Guides and Terms
	<p>Standard 5, Learning Engagement and Activities:</p> <p><u>Textbook Readings:</u></p> <ul style="list-style-type: none"> • Optimizations and Simulation. Supplemental Readings: Heizer Chapter 19 Linear Programming. <p><u>Instructional Videos to be Watched:</u></p> <ul style="list-style-type: none"> • WK10: Optimization and Simulation • WK10: Transportation Model • WK10: Excel Transportation Model <p><u>Specific Activities</u></p> <ul style="list-style-type: none"> • Review Instructor provided chapter PowerPoint outlines • Review self-study guides for each chapter • After completing readings, test your understanding with Concepts Self-Assessments. Redo/practice until you have achieved desired understanding • Watch each instructor's Excel videos: Solve problems from the video. Then do Problems Self-Assessments using Excel. Redo/practice until you have achieved desired understanding. • Watch each instructor's Reinforcement videos: Solve problems from this video as a review. • Prior to exam, repeat Concepts Self-Assessments and Problems Self-Assessment to prepare <p><u>Discussions</u></p> <p>Review instructor's and student's posts in the following forums. Contribute your own as necessary.</p> <ul style="list-style-type: none"> • WK10: Any Questions, Comments, or Observations Forum
	<p>Standard 6, Course Technology:</p> <p>Instructional Videos</p> <p>Microsoft Excel</p> <p>Moodle LMS</p>
	<p>Standard 3, Assessment and Measurement:</p> <p>WK10 Transportation Problem Self-Assessment</p> <p>Exam2</p>

<p>Course: MBA8150 Business Analytics</p> <p>Course-Level Objective(s):</p> <p>8. <i>Use simulation modeling techniques in Excel to evaluate uncertain business environments.</i></p> <p>Module-Level Objective(s):</p> <p><i>WK10: Optimization and Simulation</i></p> <p>To list the advantages and disadvantages of modeling with simulation. To compare decisions using Excel simulation models. To apply sensitivity analysis to simulation models using Excel.</p>	<p>Standard 4, Resources and Materials:</p> <ul style="list-style-type: none"> • "Statistical Techniques in Business & Economics," 17th Ed., Douglas A. Lind, et. al. • Microsoft Excel, Instructor's Excel-10 • Resources and Assignments Web Page • Instructional videos • Self-study Guides and Terms
	<p>Standard 5, Learning Engagement and Activities:</p> <p><u>Textbook Readings:</u></p> <ul style="list-style-type: none"> • Optimizations and Simulation. Supplemental Readings: Bertsimas Chapter 5 Simulation Modeling. <p><u>Instructional Videos to be Watched:</u></p> <ul style="list-style-type: none"> • WK10: Optimization and Simulation <p><u>Specific Activities</u></p> <ul style="list-style-type: none"> • Review Instructor provided chapter PowerPoint outlines • Review self-study guides for each chapter • After completing readings, test your understanding with Concepts Self-Assessments. Redo/practice until you have achieved desired understanding • Watch each instructor's Excel videos: Solve problems from the video. Then do Problems Self-Assessments using Excel. Redo/practice until you have achieved desired understanding. • Watch each instructor's Reinforcement videos: Solve problems from this video as a review. • Prior to exam, repeat Concepts Self-Assessments and Problems Self-Assessment to prepare <p><u>Discussions</u></p> <p>Review instructor's and student's posts in the following forums. Contribute your own as necessary.</p> <p>WK10: Any Questions, Comments, or Observations Forum</p>
	<p>Standard 6, Course Technology:</p> <p>Instructional Videos Microsoft Excel Moodle LMS</p>
	<p>Standard 3, Assessment and Measurement:</p> <p>WK10 Simulation Self-Assessment</p>