

Assessment: Course Four Column



Courses (MATH) - Statistics

STAT 152: Intro to Statistics

Course Outcomes	Assessment Measures	Results	Actions
<p>Graphical, tabular, and numerical summaries of the distributions of variables in a data set - Select and produce appropriate graphical, tabular, and numerical summaries of the distributions of variables in a data set. Summarize such information into verbal and numeric descriptions.</p> <p>Course Outcome Status: Active Next Assessment: 2020-2021 Start Date: 09/19/2016</p>	<p>Exam - Chapter 2, Chapter 3 quizzes Midterm exam #7: Obtaining frequency and relative-frequency distributions, and construct pie and bar charts. Midterm exam #8: Obtaining the mean, median and mode. Midterm exam #9: Determining the range and standard deviation of a data set. Midterm exam #10: Describe measures of center and variation. Criterion: Quiz average of 70% or higher 70% of students get #7, 8, 9 and 10 correct on midterm exam</p>	<p>Reporting Period: 2015-2016 Criterion Met: Yes Overall achievement was satisfactory. The average grades of Chapter 2 and Chapter 3 quiz were 90.3% and 86.0% respectively. 100, 100, 93, 93 % of students got correct on the midterm #7, 8, 9 and 10 respectively (09/19/2016)</p>	
<p>Bivariate data using graphical, tabular, and numerical methods - Summarize relationships in bivariate data using graphical, tabular, and numerical methods including scatter plots, box plots, two-way tables, correlation coefficients, and linear regression</p> <p>Course Outcome Status: Active Next Assessment: 2020-2021 Start Date: 09/19/2016</p>	<p>Assignment - Written - Chapter 14 quiz, homework assignments on Chapter 14 Criterion: Homework assignments average of 70% Quiz average of 70% or higher</p>	<p>Reporting Period: 2015-2016 Criterion Met: Yes Students learned the concept well on this item. Student dedicated their time on the homework assignments and Chapter 14 quiz. The average grades of the homework assignments 14.1, 14.2, 14.3, and 14.4 were 100, 94.7, 96.3, and 92 % respectively. The average grades for the Chapter 14 quiz was 77.8% (09/19/2016)</p>	

<i>Course Outcomes</i>	<i>Assessment Measures</i>	<i>Results</i>	<i>Actions</i>
<p>Normal distribution to interpret z-scores - Use the normal distribution to interpret z-scores and compute probabilities.</p> <p>Course Outcome Status: Active</p> <p>Next Assessment: 2020-2021</p> <p>Start Date: 09/19/2016</p>	<p>Exam - Chapter 6 quiz, homework assignments on Chapter 6.</p> <p>Midterm exam #21: Determining the percentage for a normally distributed variable from an area under the normal curve.</p> <p>Midterm exam #22: Determine an area under the standard normal curve.</p> <p>Criterion: Homework assignments average of 70%</p> <p>Quiz average of 70% or higher</p> <p>70% of students get #21 and 22 correct on midterm exam</p>	<p>Reporting Period: 2015-2016</p> <p>Criterion Met: Yes</p> <p>Overall achievement was satisfactory.</p> <p>Homework 6.1, 6.2, 6.3 and 6.4 average grades were 98.1, 87.8, 78.9 and 99.3 % respectively. The overall homework average is 91%</p> <p>Quiz Chapter 6 average was 80.9%</p> <p>86 and 53% of students got #21 and 22 correct on the midterm respectively (09/19/2016)</p>	<p>Action: Although the overall achievement was satisfactory, the identified weaknesses were in determining an area under the standard normal curve and obtaining z-scores. More class time needs to be spent on these topics.</p> <p>Better strategy for the conceptual understanding needs to be developed. (09/19/2016)</p>
<p>Construct a model for a random phenomenon - Construct a model for a random phenomenon using outcomes, events, and the assignment of probabilities.</p> <p>Course Outcome Status: Active</p> <p>Next Assessment: 2020-2021</p> <p>Start Date: 09/19/2016</p>	<p>Exam - Chapter 4, Chapter 5 quizzes, homework assignments on Chapter 4 and 5.</p> <p>Criterion: Homework average of 70% or higher</p> <p>Quiz average of 70% or higher</p>	<p>Reporting Period: 2015-2016</p> <p>Criterion Met: Yes</p> <p>Overall achievement was satisfactory.</p> <p>Homework 4.1, 4.2,4.3, 4.4, 4.5, 4.6, and 4.8 average grades were 96.5, 96.5, 98.3, 99.4, 94.4, 93.8 and 94.7 % respectively. The overall average was 96.2%.</p> <p>Homework 5.1, 5.2, and 5.3 average grades were 94.7, 87.8, and 85.4% respectively.</p> <p>The achievement for the Chapter 4 and 5 quizzes were 87.6 and 83.1% respectively. (09/19/2016)</p>	
<p>Apply the concept of a sampling distribution - Apply the concept of a sampling distribution and discuss the distribution of the sample proportion under repeated sampling (Central Limit Theorem).</p> <p>Course Outcome Status: Active</p> <p>Next Assessment: 2020-2021</p> <p>Start Date: 09/19/2016</p>	<p>Exam - Chapter 7 quiz, homework assignments on Chapter 7</p> <p>Criterion: Homework average of 70% or higher</p> <p>Quiz average of 70% or higher</p>	<p>Reporting Period: 2015-2016</p> <p>Criterion Met: Yes</p> <p>Overall achievement was satisfactory.</p> <p>Homework 7.1, 7.2, and 7.3 average grades were 92.8, 89.5, and 92.5 respectively. The overall average was 91.6 %.</p> <p>The Chapter 7 quiz average was 86.4% (09/19/2016)</p>	
<p>Dependence of margin of error - Understand the dependence of margin of error on sample size and confidence level.</p> <p>Course Outcome Status: Active</p> <p>Next Assessment: 2020-2021</p>	<p>Exam - Chapter 8 quiz, homework assignments on Chapter 8</p> <p>Criterion: Homework average of 70% or higher</p> <p>Quiz average of 70% or higher</p>	<p>Reporting Period: 2015-2016</p> <p>Criterion Met: Yes</p> <p>Overall achievement was satisfactory.</p> <p>Homeowrk 8.1, 8.2, 8.3, 8.4 average grades were 97.8, 92.8, 91.7, and 88.7% respectively. The overall average was</p>	

Course Outcomes	Assessment Measures	Results	Actions
<p>Start Date: 09/26/2016</p>		<p>92.8%. The Chapter 8 quiz average was 83.8% (09/27/2016)</p>	
<p>Hypothesis testing - Apply methods of hypothesis testing to carry out a hypothesis about population means and population proportions and interpret the conclusion. Course Outcome Status: Active Next Assessment: 2020-2021 Start Date: 09/26/2016</p>	<p>Exam - Chapter 9 quiz, homework assignments on Chapter 9 and Chapter 10 Final exam #5: Applying concepts of Type I and Type II errors. Final exam #6: Use a graph to identify hypothesis testing terms. Criterion: Homework average of 70% or higher Quiz average of 70% or higher 70% of students get #5 and 6 correct on midterm exam</p>	<p>Reporting Period: 2015-2016 Criterion Met: Yes Overall achievement was satisfactory. Homework 9.1, 9.2, 9.3, 9.4, and 9.5 average grades were 98.1, 92.3, 97.9, 88.9, and 89.4% respectively. Homework 10.1, 10.2, 10.3, and 10.5 average grades were 93.4, 88.9, 83.7, and 75.8% respectively. The Chapter 9 quiz average was 74.9%. 71 and 100% of students got correct or partially correct on the midterm #5 and 6 respectivel (09/27/2016)</p>	<p>Action: Although this class showed overall satisfactory performance on all learning outcomes with chapter quizzes, homework assignments and exams, students showed relatively lower achievement on Learning outcome # 6: "Understand the dependence of margin of error on sample size and confidence level." Also, lower scores showed on Learning outcome # 3: "Use the normal distribution to interpret z-scores and compute probabilities; determining z-scores, interpreting contingency tables, and finding the mean and standard deviation of a discrete random variable." A better strategy for students' conceptual understanding needs to be developed on these topics. Students struggled with the time limit while trying to go through all the problems on the final exam. For upcoming semesters of the statistics class, the final exam needs to be reviewed. (09/27/2016)</p>