STAT - STATISTICS

STAT 0996A Support for Elementary Statistics (0-6-3)
This Learning Support course provides corequisite support for students enrolled in STAT 1401 – Elementary Statistics. Topics will parallel topics being studied in STAT 1401 and the course will provide support for the essential skills needed to be successful in STAT 1401. Taken with STAT 1401, topics to be covered will include descriptive statistics, probability theory, confidence intervals, hypothesis testing, and other selected statistics topics.
Prerequisite(s): STAT 1401 (may be taken concurrently)

STAT 0996B Support for Elementary Statistics (0-4-2)
This Learning Support course provides corequisite support for students enrolled in STAT 1401 – Elementary Statistics. Topics will parallel topics being studied in STAT 1401 and the course will provide support for the essential skills needed to be successful in STAT 1401. Taken with STAT 1401, topics to be covered will include descriptive statistics, probability theory, confidence intervals, hypothesis testing, and other selected statistics topics.
Prerequisite(s): STAT 1401 (may be taken concurrently)

STAT 0996C Support for Elementary Statistics (0-2-1)
This Learning Support course provides corequisite support for students enrolled in STAT 1401 – Elementary Statistics. Topics will parallel topics being studied in STAT 1401 and the course will provide support for the essential skills needed to be successful in STAT 1401. Taken with STAT 1401, topics to be covered will include descriptive statistics, probability theory, confidence intervals, hypothesis testing, and other selected statistics topics.
Prerequisite(s): STAT 1401 (may be taken concurrently)

STAT 1401 Elementary Statistics (3-0-3)
This is a non-calculus based introduction to statistics. Course content includes descriptive statistics, probability theory, confidence intervals, hypothesis testing, and other selected statistical topics.

STAT 3127 Statistical Computing (3-0-3)
Prerequisite: STAT 1401, or BUSA 3115, or CRJU 3107 with a minimum grade of C. The goal of this course is to provide students with an introduction to statistical programming for data management, analysis, and reporting, and familiarize students with practical issues related to the exploration of actual data sets. This course introduces the most commonly used features of one of several popular statistical packages, especially in examining, transforming, and analyzing data (linear regression, ANOVA, and dummy variable regression).
Prerequisite(s): STAT 1401 with a minimum grade of C or BUSA 3115 with a minimum grade of C or CRJU 3107 with a minimum grade of C or STAT 1127H with a minimum grade of C or STAT 1127 with a minimum grade of C or MATH 1401 with a minimum grade of C or STAT 1401H with a minimum grade of C or MATH 1127 with a minimum grade of C
Repeatability: Repeatable for credit up to 99 times or 3 hours.

STAT 5117U Applied Multivariate Analysis (3-0-3)
Prerequisites: STAT 3127 with a grade of C or better. Applied multivariate methods, sample correlations, multivariate date plots, eigenvalues and eigenvectors, principle components analysis, factor analysis, discriminant analysis, logistic regression methods, cluster analysis, mean vectors and variance-covariance matrices, multivariate analysis of variance, prediction models.
Prerequisite(s): STAT 3127 with a minimum grade of C

STAT 5118U Applied Nonparametric Methods (3-0-3)
Prerequisites: STAT 1127 and MATH 3175. Rank tests of comparing two treatments, comparing two treatments or attributes in a population model, blocked comparisons for two treatments, paired comparisons in a population model and the one-sample problem, the comparison of more than two treatments, randomized complete blocks, tests of randomness and independence.
Prerequisite(s): STAT 3127 with a minimum grade of C

STAT 5119U Applied Categorical Data Analysis (3-0-3)
Prerequisites: STAT 3127 with a grade of C or better. Sampling distributions, two by two contingence tables, Simpson's paradox and 2? 3 Tables, Goodman's full rank interaction analyzed for two way tables, further examples and extensions, conditional independence models for two-way tables, further topics.
Prerequisite(s): STAT 3127 with a minimum grade of C

STAT 5176G Statistical Design and Analysis of Experiments (3-0-3)
Completely randomized designs, treatment comparisons, diagnosing agreement between the data and the model, experiments to study variances, factorial treatment design and applications. Appropriate statistical software will be used.
Prerequisite(s): STAT 3127 with a minimum grade of C
Restriction(s):
Enrollment is limited to Graduate Level level students.

STAT 5176U Statistical Design and Analysis of Experiments (3-0-3)
Prerequisite: STAT 3127 with a grade of C or better in both courses. Completely randomized designs, treatment comparisons, diagnosing agreement between the data and the model, experiments to study variances, factorial treatment design and applications. Appropriate statistical software will be used.
Prerequisite(s): STAT 3127 with a minimum grade of C

STAT 5177G Applied Regression Analysis (3-0-3)
Simple and multiple regression, transformation of variables, diagnostic procedures, analysis of variance and residuals, comparison of two multiple regression models, calibration and regulation for linear regression, linear splines, subset analysis and variable selection, nonlinear regression. Appropriate statistical software will be used.
Prerequisite(s): STAT 3127 with a minimum grade of C
Restriction(s):
Enrollment is limited to Graduate Level level students.

STAT 5177U Applied Regression Analysis (3-0-3)
Prerequisite: STAT 3127 with a grade of C or better. Simple and multiple regression, transformation of variables, diagnostic procedures, analysis of variance and residuals, comparison of two multiple regression models, calibration and regulation for linear regression, linear splines, subset analysis and variable selection, nonlinear regression. Appropriate statistical software will be used.
Prerequisite(s): STAT 3127 with a minimum grade of C

STAT 5555G Selected Topics in Statistics (3-0-3)
Logistic and Probit analyses in problems of assay. Count data analysis. Methods of survival analysis. Analysis of contingency tables, Analysis of variance for balanced data, unbalanced data, repeated measures data, binomial data. Some additional homeworks and projects will be given.
Prerequisite(s): STAT 3127 with a minimum grade of C
Restriction(s):
Enrollment is limited to Graduate Level level students.

STAT 5555U Selected Topics in Statistics (3-0-3)
Prerequisite: STAT 3127 with a grade of C or better. Logistic and Probit analyses in problems of assay. Count data analysis. Methods of survival analysis. Analysis of contingency tables, Analysis of variance for balanced data, unbalanced data, repeated measures data, binomial data.
Prerequisite(s): STAT 3127 with a minimum grade of C