STATISTICS (STAT)

**STAT 235 – Introduction to Statistics for Social Sciences**  
3 credit hours  
An introduction to statistics for educational and sociological research. The course will include descriptive statistics, normal distribution and an introduction to correlation and hypothesis testing.  
Prerequisite: Completion of MATH 101 or MATH 102 or MATH 115 or MATH 123 or Math ACT score of 20 or greater. Students may not enroll in STAT 235 after earning credit for STAT 241.

**STAT 241 – Elementary Statistics**  
3 credit hours  
An introduction to statistics for sciences and business. The course will include graphing techniques, descriptive statistics, elementary probability models, estimation and hypothesis testing, and an introduction to correlation and regression.  
Prerequisite: MATH 101 or MATH 102 or MATH 123 or MATH 115 or ACT Math score of 20 or greater.

**STAT 345 – Applied Statistics I**  
3 credit hours  
Descriptive statistics; statistical inference using the binomial, normal, F and Chi Square distributions; and analysis of variance topics. Recommended for departmental majors as the beginning applied statistics course.  
Prerequisite: MATH 115 or MATH 123.

**STAT 399 – Internship**  
1-4 credit hours  
On the job experience designed to complement the major. Internships are available only in selected areas. Consult with departmental advisor.  
(Credit/No Credit)  
Total Credits Allowed: 4.00  
Prerequisite: MATH 115 or MATH 123.

**STAT 441 – Probability and Statistics**  
3 credit hours  
The mathematical development of discrete and continuous probability distributions including multivariate distributions, moments and moment generating functions, the special discrete and continuous probability distributions, the normal distribution, sampling distributions, and hypothesis testing.  
Prerequisite: MATH 260.

**STAT 442 – Mathematical Statistics**  
3 credit hours  
A continuation of STAT 441. The further mathematical development of special probability densities, functions of random variables, sampling distributions, decision theory, point and interval estimators, hypotheses testing, and covariance.  
Prerequisite: STAT 441.

**STAT 495 – Independent Study in Statistics**  
1-3 credit hours  
An individual investigation by the student of topics not included in the normal statistics offerings.  
Department Consent Required  
Total Credits Allowed: 3.00