STATISTICS (STAT)

STAT 1089 Statistical Analysis with Corequisite — 5 credits
This course is a co-requisite course. This means that in addition to learning statistical concepts four days a week, a fifth day of course contact is designed to help students refresh and strengthen mathematical concepts and problem-solving skills for use within the context of statistics. With regard to statistical content, the course includes the following: introduction to fundamental uses and misuses of statistics; exploratory data analysis, regression and correlation, uncertainty and randomness, intuitive probability, one- and two-sample inference, one-way analysis of variance, interpretation and communication of results. Use of computers integrated throughout course. Offered every semester. Credit is given for only one of the following courses: ECON 1080, ECON 1090, HLTH 1090, STAT 1089, STAT 1090, or PSYC 1090.

STAT 1090 Statistical Analysis — 4 credits
This course is an introduction to fundamental uses and misuses of statistics. Exploratory data analysis, regression and correlation, uncertainty and randomness, intuitive probability, one- and two-sample inference, one-way analysis of variance, interpretation and communication of results are all involved. Use of computers is integrated throughout course. Offered every semester. Offered in the College for Women. Credit is given for only one of the following courses: ECON 1080, ECON 1090, HLTH 1090, STAT 1089, STAT 1090, or PSYC 1090.

STAT 2090 Statistical Modeling — 4 credits
This course is focused on using technology to perform statistical analyses. The techniques covered in this course will include linear and logistic regression, classification analysis, bootstrapping and resampling methods, multivariate model selection, clustering, and unsupervised machine learning. The course will also have an emphasis in data processing and visualization in the statistical programming language R.
Prerequisite: STAT 1090 or equivalent. Offered in the College for Women.

STAT 2994 Topics — 4 credits
The subject matter of the course is announced in the annual schedule of classes. Content varies from year to year but does not duplicate existing courses. Offered in the College for Women.

STAT 3090 Predictive Analysis — 4 credits
This course is focused on using technology to perform statistical analyses. The techniques covered in this course will include linear and logistic regression, classification analysis, bootstrapping and resampling methods, multivariate model selection, clustering, and unsupervised machine learning. The course will also have an emphasis in data processing and visualization in the statistical programming language R.
Prerequisite: STAT 1090 or equivalent. Offered in the College for Women.

STAT 4602 Internship — 2 credits
Structured out-of-class learning experience that takes place on or off campus and includes a substantial work component. An internship involves students in a particular profession in an exploratory way to test career interests and potential. To initiate an internship experience, meet with the internship coordinator in the Career Development Office.
Prerequisites: Faculty sponsorship and approval by department chair.

STAT 4684 Directed Study — 4 credits
Directed study is provided for students whose unusual circumstances prohibit taking a regularly scheduled course but who need the material of that course to satisfy a requirement. Availability of this faculty-directed learning experience depends on faculty time and may be limited in any given term and restricted to certain courses.
Prerequisites: Faculty, department chair and dean approval.

STAT 4914 Research Practicum — 4 credits
Research-based learning experience designed in collaboration with a faculty member.
Prerequisites: Faculty and department chair approval.

STAT 4994 Topics — 4 credits
The subject matter of the course is announced in the annual schedule of classes. Content varies from year to year but does not duplicate existing courses. Offered in the College for Women.