FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—COURSE CHANGE REQUEST

UGPC APPROVAL _____
UFS APPROVAL _____
SCNS SUBMITTAL _____
CONFIRMED _____
BANNER POSTED _____
ONLINE _____
MISC _____

DEPARTMENT NAME:	COLLEGE OF:
MATHEMATICAL SCIENCES	CHARLES E. SCHMIDT COLLEG E OF SCIENCE
COURSE PREFIX & NUMBER:	**CURRENT COURSE TITLE:**
STA 5195	BIOSTATISTICS 1

CHANGE(S) REQUESTED

SHOW "X" IN FRONT OF OPTION	SHOW "X" IN FRONT OF OPTION
CHANGE CREDITS FROM TO:	CHANGE PREFIX FROM TO:
CHANGE GRADING FROM TO:	CHANGE COURSE NO. FROM TO:
CHANGE PREREQUISITES TO: STA 4234 APPLIED STATISTICS 1 (MINIMUM GRADE C)	CHANGE TITLE TO: BIOSTATISTICS
CHANGE MINIMUM GRADE TO:	CHANGE DESCRIPTION TO: .
CHANGE COREQUISITES TO:	
CHANGE OTHER REGISTRATION CONTROLS TO:	
OTHER	

CHANGES TO BE EFFECTIVE (*TERM*)**:**	Attach syllabus for **ANY** changes to current course information**.**
Will the requested change(s) cause this course to overlap any other FAU course(s)? If yes, please list course(s). YES NO X	Any other departments and/or colleges that might be affected by the change(s) must be consulted. List entities that have been consulted and attach written comments from each. Physics

TERMINATE COURSE, EFFECTIVE (*GIVE LAST TERM COURSE IS TO BE ACTIVE***):**

Faculty Contact, Email, Complete Phone Number:
Lianfen Qian, lqian@fau.edu, (561) 297-2486

SIGNATURES **SUPPORTING MATERIALS**

Approved by:	***Date:***	
Department Chair: _____	_____	**Syllabus—**must include all criteria as detailed in UGPC Guidelines.
College Curriculum Chair: _____	_____	Go to: *http://graduate.fau.edu/gpc/* to access Guidelines and to download this form.
College Dean: _____	_____	
UGPC Chair: _____	_____	**Written Consent—**required from all departments affected.
Dean of the Graduate College: _____	_____	

Email this form and syllabus to diamond@fau.edu and *eqirjo@fau.edu* one week ***before*** the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website by committee members prior to the meeting.

Course Syllabus for Biostatistics

1. **Course title/number, number of credit hours**
   Biostatistics, STA 5195, 3 credit hours

2. **Course prerequisites**
   a. STA 4234 Applied Statistics 1 (Minimum Grade C)

3. **Course logistics**
   a. Term – Fall 2010
   b. Notation if online course – N/A
   c. Class location and time (if classroom-based course) – To be determined

4. **Instructor contact information**
   a. Instructor's name – Lianfen Qian
   b. Office address – Science & Engineering Bldg, SE43, Room 244
   c. Office hours – To be determined
   d. Contact telephone number – office (561) 297-2486, fax (561) 297-2436
   e. E-mail address – lqian@fau.edu

5. **TA contact information (if applicable)**
   N/A

6. **Course description**
   An introduction to statistical tools used routinely for inference and data analysis in the health sciences. Topics include biostatistical design of medical studies, measure of disease occurrence and association, methods for rates and proportions, ROC analysis for screening and diagnosis, discrimination and classification, principal component analysis and factor analysis, log-linear models and survival analysis.

7. **Course objectives/student learning outcomes**
   Generalized Linear Models have become a central tool for Biostatistics and are also widely applied in other statistical areas. The course is a mixture of theory and applications and includes Statistical Laboratory Sessions featuring various computing tools for the implementation of Generalized Linear Models and related methods.

8. **Course evaluation method**
   There will be graded homework assignments accounting for 30% of the student's cumulative performance, a midterm exam, accounting for 30% of the student's cumulative performance, and a final exam (or project) that accounts for 40% of the cumulative performance. The overall grade in the course is derived from the cumulative performance according to the following table.

9. **Course grading scale (optional)**

Cumulative Performance	Grade
>94%	A
>90% - 94%	A-
>87% - 90%	B+
>83% - 87%	B
>80% - 83%	B-
>75% - 80%	C+
>65% - 75%	C
>60% - 65%	C-

>57% - 60%	D+
>53% - 57%	D
>50% - 53%	D-
<50%	F

10. Policy on makeup tests, late work, and incompletes

If a student cannot attend an exam or hand in a homework project on time due to circumstances beyond their control then the instructor may assign appropriate make-up work. Students will not be penalized for absences due to participation in University-approved activities, including athletic or scholastics teams, musical and theatrical performances, and debate activities. These students will be allowed to make up missed work without any reduction in the student's final course grade. Reasonable accommodation will also be made for students participating in a religious observance. Also, note that grades of Incomplete ("I") are reserved for students who are passing a course but have not completed all the required work because of exceptional circumstances. A grade of "I" will only be given under certain conditions and in accordance with the academic policies and regulations put forward in FAU's University Catalog. The student must show exceptional circumstances why requirements cannot be met. A request for an incomplete grade has to be made in writing with supporting documentation, where appropriate.

Extra credit work is not possible.

11. Special course requirements (if applicable)

N/A

12. Classroom etiquette policy (if applicable)

University policy on the use of electronic devices states: "In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular telephones and pagers, are to be disabled in class sessions."

13. Disability policy statement

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) -- in Boca Raton, SU 133 (561-297-3880); in Davie, MOD 1 (954-236-1222); in Jupiter, SR 117 (561-799-8585); or at the Treasure Coast, CO 128 (772-873-3305) – and follow all OSD procedures.

14. Honor Code policy statement

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001 at http://www.fau.edu/regulations/chapter4/4.001 Honor_Code.pdf.

15. Required texts/readings

An Introduction to Generalized Linear Models by A. J. Dobson and A. Barnett, 2008.

16. Supplementary/recommended readings

a. P. McCullagh, D. Nelder (1999). *Generalized Linear Models*. Second edition. Chapman and Hall. : Note: This is the classical and still most important text on GLMs.
b. Collett, D. (2003). *Modeling binary data*. Second edition. Chapman and Hall.
c. J. Faraway (2006). *Extending the linear model with R. Chapman and Hall*.
d. Fahmeir, L., Tutz, G. (2003). *Multivariate statistical modelling based on generalized linear models*. Second edition. Springer.

17. Course topical outline

Lecture Schedule

- Generalized Linear Models (ca. 2 weeks)
- Smoothing Methods (ca. 2 weeks)
- Binomial Regression (ca. 2 weeks)
- Case-control Studies (ca. 1 week)
- Dose-response Relations (ca. 1 week)
- Poisson Regression (ca. 1 week)
- Gamma regression (ca. 2 weeks)
- Quasi-likelihood and Estimation Equations (ca. 2 weeks)
- Additive Models (ca. 2 weeks)
- Functional Predictors (ca. 1 week)