## Graduate Programs—COURSE CHANGE REQUEST

<table>
<thead>
<tr>
<th>DEPARTMENT NAME:</th>
<th>COLLEGE OF:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATHEMATICAL SCIENCES</td>
<td>CHARLES E. SCHMIDT COLLEGE OF SCIENCE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSE PREFIX &amp; NUMBER:</th>
<th>CURRENT COURSE TITLE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>STA 5195</td>
<td>BIOSTATISTICS 1</td>
</tr>
</tbody>
</table>

### Change(s) Requested

**Show "X" in front of option**

- **Change Credits From**
- **Change Grading From**
- **Change Prerequisites To:**
  - STA 4234 APPLIED STATISTICS 1 (MINIMUM GRADE C)
- **Change Minimum Grade To:**
- **Change Corequisites To:**
- **Change Other Registration Controls To:**
- **Other**

**Change Prefix From**

**Change Course No. From**

**Change Title To:**

**Change Description To:**

### 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**

**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

**Approved by:**

Department Chair: ____________________________

College Curriculum Chair: ____________________________

College Dean: ____________________________

UGPC Chair: ____________________________

Dean of the Graduate College: ____________________________

**Date:**

**Syllabus**—must include all criteria as detailed in UGPC Guidelines.

Go to: [http://graduate.fau.edu/gpc/](http://graduate.fau.edu/gpc/) to access Guidelines and to download this form.

**Written Consent**—required from all departments affected.

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.

FAUchangeGrad—Revised January 2010
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)
<table>
<thead>
<tr>
<th>Cumulative Performance</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;94%</td>
<td>A</td>
</tr>
<tr>
<td>&gt;90% - 94%</td>
<td>A-</td>
</tr>
<tr>
<td>&gt;87% - 90%</td>
<td>B+</td>
</tr>
<tr>
<td>&gt;83% - 87%</td>
<td>B</td>
</tr>
<tr>
<td>&gt;80% - 83%</td>
<td>B-</td>
</tr>
<tr>
<td>&gt;75% - 80%</td>
<td>C+</td>
</tr>
<tr>
<td>&gt;65% - 75%</td>
<td>C</td>
</tr>
<tr>
<td>&gt;60% - 65%</td>
<td>C-</td>
</tr>
</tbody>
</table>
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


16. Supplementary/recommended readings

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)