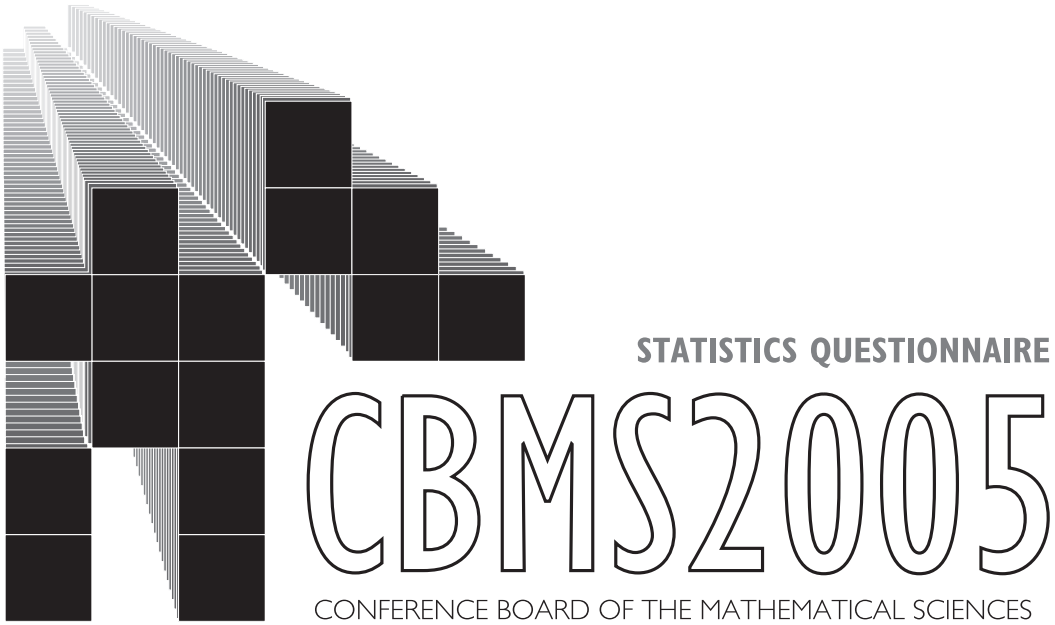
Appendix VI

Four-Year Statistics Questionnaire



SURVEY OF UNDERGRADUATE PROGRAMS IN THE MATHEMATICAL SCIENCES

General Information

Statistics Questionnaire

As part of a random sample, your department has been chosen to participate in the NSF-funded CBMS2005 National Survey of Undergraduate Mathematical and Statistical Sciences. Even though it is a very complicated survey, the presidents of all U.S. mathematical and statistical sciences organizations have endorsed it and ask for your cooperation.

We assure you that no individual departmental data, except the names of responding departments, will be released.

This survey provides data about the nation's undergraduate statistical effort that is available from no other source. You can see the results of a similar survey five years ago by going to www.ams.org/cbms where the CBMS 2000 report is available on-line.

This survey studies the undergraduate programs in universities and colleges that offer at least a bachelors degree. Many of the departments in our random sample also offer higher degrees in the statistical sciences.

We have classified your department as belonging to a university or four-year college. If this is not correct, please contact David Lutzer, Survey Director, at 757-221-4006 or at Lutzer@math.wm.edu.

If you have any questions while filling out this survey form, please call the Survey Director, David Lutzer, at 757-221-4006 or contact him by e-mail at Lutzer@math.wm.edu.

Please report on undergraduate programs in the broadly defined mathematical and statistical sciences including applied mathematics, statistics, operations research, and computer science that are under the direction of your department. Do not include data for other departments or for branches or campuses of your institution that are budgetarily separate from your own.

Please return your completed questionnaire by October 15, 2005 in the enclosed envelope to:

CBMS Survey
UNC-CH Survey Research Unit
730 Martin Luther King, Jr. Blvd
Suite 103, CB#2400, UNC-CH
Chapel Hill, NC 27599-2400

Please retain a copy of your responses to this questionnaire in case questions arise.

A. General Information

Statistics Questionnaire

PLEASE PRINT CLEARLY

A1. Name of your institution: _____

A2. Name of your department: _____

A3. We have classified your department as being part of a university or four-year college. Do you agree?

Yes..... ☐ (1) → If "Yes", go to A4 below.

No..... ☐ (2) → If "No", please call David Lutzer, Survey Director, at 757-221-4006 before proceeding any further.

A4. Your institution is .....public ☐ (1) ; .....private ☐ (2)

A5. Which programs leading to the following degrees does your department offer? Please check at least one box in each row.

Program	None (1)	Baccalaureate Degree (2)	Masters Degree (3)	Doctoral Degree (4)
a) Mathematics				
b) Statistics				
c) Biostatistics				
d) Computer Science				
e) Other (please specify below)				

If you offer bachelors, masters, or doctoral degrees in a mathematical or statistical science other than those in A5-a, b, c, and d, please enter the name(s) of the field(s) here: _____

A6. Responses to this question will be used to project total enrollment in the current (2005-2006) academic year based on the pattern of your departmental enrollments in 2004-2005. Do NOT include any numbers from dual-enrollment courses[1] in answering question A6.

a) Previous fall (2004) total student enrollment in your department's undergraduate courses (remember: do not include dual-enrollment courses[1]): ..... ☐ (1)

b) Previous academic year (2004-2005) total enrollment in your department's undergraduate courses, excluding dual enrollments[1] and excluding enrollments in summer school 2005: ..... ☐ (2)

c) Total enrollment in your department's undergraduate courses in summer school 2005: ..... ☐ (3)

---

[1] *In this question, the term "dual-enrollment courses" is used to mean courses taught on a high school campus, by high school teachers, for which high school students may obtain high school credit and simultaneously college credit through your institution.*

A. General Information cont.

Statistics Questionnaire

A7. Which of the following best describes your institution's academic calendar? Check only one box.

a) Semester	
b) Trimester	
c) Quarter	
d) Other (please specify below)	

Academic calendar description if not a), b), or c): _____

A8. If your college or university does not recognize tenure, check the following box ☐ and follow the special instructions in subsequent sections for counting departmental faculty of various types.

A9. Contact person in your department:

A10. Contact person's e-mail address:

A11. Contact person's phone number including area code:

A12. Contact person's mailing address:

B. Dual Enrollment Courses

Statistics Questionnaire

In this questionnaire the term dual enrollment courses refers to courses conducted on a high school campus and taught by high school teachers, for which high school students may obtain high school credit and simultaneously college credit through your institution.

B1. Does your department participate in any dual enrollment programs of the type defined above?

Yes..... ☐ (1) ⟶ If "Yes", go to B2.

No..... ☐ (2) ⟶ If "No", go to B6.

B2. Please complete the following table concerning your dual enrollment program (as defined above) for the previous term (spring 2005) and the current fall term of 2005.

Course	Total Dual Enrollments Last Term =Spring 2005 (1)	Number of Dual-Enrollment Sections Last Term =Spring 2005 (2)	Total Dual Enrollments This Term =Fall 2005 (3)	Number of Dual-Enrollment Sections This Term =Fall 2005 (4)
a) Statistics				
b) Other				

B3. For the dual enrollment courses in B2, to what extent are the following the responsibility of your department?

	Never Our Responsibility (1)	Sometimes Our Responsibility (2)	Always Our Responsibility (3)
a) Choice of textbook			
b) Design/approval of syllabus			
c) Design of final exam			
d) Choice of instructor			

B4. Does your department have a teaching evaluation program in which your part-time department faculty are required to participate?

Yes..... ☐ (1) ⟶ If "Yes", go to B5.

No..... ☐ (2) ⟶ If "No", go to B6.

B5. Are instructors in the dual-enrollment courses reported in B2 required to participate in the teaching evaluation program for part-time departmental faculty described in B4?

Yes..... ☐ (1)

No..... ☐ (2)

B. Dual Enrollment Courses cont.

Statistics Questionnaire

B6. Does your department assign any of its own full-time or part-time faculty to teach courses conducted on a high school campus for which high school students may receive both high school and college credit (through your institution)?

Yes..... ☐ (1) → If "Yes", go to B7.

No..... ☐ (2) → If "No", go to Section C.

B7. How many students are enrolled in the courses conducted on a high school campus and taught by your full-time or part-time faculty and through which high school students may receive both high school and college credit (through your institution) in fall 2005? ..... ☐

C. Probability and Statistics Courses (Fall 2005)

The following instructions apply throughout sections C and D (pages 6-12).

- If your departmental course titles do not match exactly with the ones that we suggest, please use your best judgment to match them.
- Report distance-learning enrollments separately from other enrollments. A *distance-learning* section is one in which a majority of students receive the majority of their instruction by Internet, TV, correspondence courses, or other methods where the instructor is NOT physically present.
- Do NOT include any dual-enrollment sections or enrollments in these tables. (In this questionnaire, a *dual-enrollment* section is one that is conducted on a high-school campus, taught by a high-school teacher, and which allows students to receive high-school credit and simultaneously college credit from your institution for the course. These courses were reported in Section B.)
- Except in C1-2, please count any lecture course along with its associated recitation/problem/laboratory sessions as one section of the course. (Special instructions for C1-2 are given in a footnote.)
- In course C-1 below, we ask you to list those lecture sections with several recitation/problem/laboratory sessions separately from other sections of the course that do not have such recitation/problem/laboratory sessions.
- Report a section of a course as being taught by a *graduate teaching assistant (GTA)* if and only if that section is taught *independently* by the GTA, i.e., when it is the GTA's own course and the GTA is the instructor of record.
- If your institution does not recognize tenure, report sections taught by your permanent full-time faculty in column (5) and sections taught by other full-time faculty in columns (6) or (7) as appropriate.
- Full-time faculty teaching in your department and holding joint appointments with other departments should be counted in column (5) if they are tenured, tenure-eligible, or permanent in your department. Faculty who are not tenured, tenure-eligible, or permanent in your department and who teach more than 50% of their fall term teaching assignment in your department should be counted in column (6) or (7) depending upon their highest degree. Faculty who are not tenured, tenure-eligible, or permanent in your department and who teach in your department for at most half of their fall-term teaching assignment should be counted in column (8). (Example: If a tenured psychology professor with a joint appointment in your department teaches a total of two courses in fall 2005, with exactly one being in your department, then that person would be counted as part-time in your department.)
- Do not fill in any shaded rectangles.
- Any unshaded rectangle that is left blank will be interpreted as reporting a count of zero.
- Except where specifically stated to the contrary, the tables in Sections C and D deal with enrollments in fall term 2005.

C. Probability & Statistics Courses (Fall 2005)

◆**Cells left blank will be interpreted as zeros**

Name of Course (or equivalent)	Total distance-education enrollment[a]	Total enrollment NOT in Col (2) and NOT dual enrollments[b]	Number of sections corres-ponding to Column (3)	Of the number in Column 4, how many sections are taught by: Tenured or Tenure-eligible Faculty	Other Full-time Faculty with Ph.D.	Other Full-time Faculty without Ph.D.	Part-time Faculty	Graduate Teaching Assist.[c]	Of the number in Column 4, how many sections: Use graphing calculators	Include writing components such as reports or projects	Require computer assign-ments	Use on-line homework generating and grading packages	Assign group projects
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
PROBABILITY & STATISTICS													
ELEMENTARY LEVEL													
C1. Elementary Statistics (no calculus prerequisite):													
C1-1. Lecture with separately scheduled recitation/problem/laboratory sessions[d]													
C1-2. Number of recitation/problem/ laboratory sessions associated with courses reported in C1-1[e]													
C1-3. Other sections with enrollment of 30 or less													
C1-4. Other sections with enrollment above 30													

[a] A majority of students receive the majority of their instructor via Internet, TV, correspondence courses, or other methods where the instructor is NOT physically present.

[b] Do not include any dual-enrollments courses, i.e., courses taught on a high school campus by a high school instructor, for which high school students may obtain both high school credit and simultaneously college credit through your institution.

[c] Sections taught independently by GTAs.

[d] A class along with its recitation/problem/laboratory sessions is to be counted as one section in C1-1.

[e] Example: suppose your department offers four 100-student sections of a course and that each is divided into five 20-student discussion sessions that meet separately from the lectures. Report 4*5=20 recitation/problem/laboratory sessions associated with the course, even if each discussion meets several times per week.

C. Probability & Statistics Courses (Fall 2005) cont.

◆**Cells left blank will be interpreted as zeros**

Name of Course (or equivalent) (1)	Total distance-education enrollment[a] (2)	Total enrollment NOT in Col (2) and NOT dual enrollments[b] (3)	Number of sections corresponding to Column (3) (4)	Of the number in Column 4, how many sections are taught by: Tenured or Tenure-eligible Faculty (5)	Other Full-time Faculty with Ph.D. (6)	Other Full-time Faculty without Ph.D. (7)	Part-time Faculty (8)	Graduate Teaching Assist.[c] (9)
PROBABILITY & STATISTCS								
ELEMENTARY LEVEL CONT.								
C2. Probability and statistics (no calculus prerequisite)								
C3. Statistical Literacy/Statistics and Society								
C4. Statistics for pre-service elementary or middle grades teachers								
C5. Statistics for pre-service high school teachers								
C6. All other elementary-level statistics courses								

[a] A majority of students receive the majority of their instruction via Internet, TV, correspondence courses, or other method where the instructor is NOT physically present.

[b] Do not include any dual-enrollments courses, i.e., courses taught on a high school campus by a high school instructor, for which high school students may obtain both high school credit and simultaneously college credit through your institution.

[c] Sections taught independently by GTAs.

C. Probability & Statistics Courses (Fall 2005) cont.

◆Cells left blank will be interpreted as zeros

Name of Course (or equivalent) (1)	Total enrollment Fall 2005 (2)	Number of sections corresponding to Column (2) (3)	Number of sections corresponding to Column (3) taught by Tenured or Tenure-eligible Faculty (4)	Was this course taught in ANY term of the previous academic year? Y(es) / N(o) (5)	Will this course be offered in the next term (Spring 2006)? Y(es) / N(o) (6)
PROBABILITY & STATISTICS					
INTERMEDIATE AND ADVANCED LEVEL					
C7. Mathematical Statistics (calculus prerequisite)					
C8. Probability (calculus prerequisite)					
C9. Combined Probability & Statistics (calculus prerequisite)					
C10. Stochastic Processes					
C11. Applied Statistical Analysis					
C12. Design & Analysis of Experiments					
C13. Regression (and Correlation)					
C14. Biostatistics					
C15. Nonparametric Statistics					
C16. Categorical Data Analysis					
C17. Sample Survey Design & Analysis					
C18. Statistical Software & Computing					
C19. Data Management					
C20. Senior Seminar/ Independent Studies					
C21. All other upper level Probability & Statistics courses					

D. Computer Science Courses (Fall 2005)

- Please refer to the course reporting instructions at the beginning of Section C.
- In December 2001, a joint IEEE Computer Society/ACM Task Force issued its recommendations on "Model Curricula for Computing." That report replaced the curricular recommendations published by ACM in 1991 and is available from http://www.computer.org/education/cc2001/. Course numbers and, to the degree possible, course names in the table below are taken from the detailed course outlines in the appendices of that CC2001 report.

D. Does your department offer any Computer Sciences courses?

Yes..... ☐ (1) → If "Yes", go to D1, below.

No..... ☐ (2) → If "No", go to Section E

◆Cells left blank will be interpreted as zeros

Name of Course (or equivalent) (1)	Total distance-education enrollment[a] (2)	Total enrollment NOT in Col (2) and NOT dual enrollments[b] (3)	Number of sections corresponding to Column (3) (4)	Of the number in Column 4, how many sections are taught by: Tenured or Tenure-eligible Faculty (5)	Other Full-time Faculty with Ph.D. (6)	Other Full-time Faculty without Ph.D. (7)	Part-time Faculty (8)	Graduate Teaching Assist.[c] (9)
COMPUTER SCIENCE								
GENERAL EDUCATION COURSES								
D1. Computers and Society, Issues in CS								
D2. Intro. to Software Packages								
D3. Other CS General Education Courses								

[a] A majority of students receive the majority of their instruction via Internet, TV, correspondence courses, or other method where the instructor is NOT physically present.

[b] Do not include any dual-enrollments (see Section B).

[c] Sections taught independently by GTAs.

D. Computer Science Courses (Fall 2005) cont.

◆**Cells left blank will be interpreted as zeros**

Name of Course (or equivalent) (1)	Total distance-education enrollment[a] (2)	Total enrollment NOT in Col (2) and NOT dual enrollments[b] (3)	Number of sections corresponding to Column (3) (4)	Of the number in Column 4, how many sections are taught by: Tenured or Tenure-eligible Faculty (5)	Other Full-time Faculty with Ph.D. (6)	Other Full-time Faculty without Ph.D. (7)	Part-time Faculty (8)	Graduate Teaching Assist.[c] (9)
COMPUTER SCIENCE								
INTRODUCTORY CS COURSES								
D4. Computer Programming I (CS101 or 111)[d]								
D5. Computer Programming II (CS102 or 112 and 113)[d]								
D6. Discrete Structures for CS (CS105, 106, or 115)[d],								
D7. All other introductory Level CS courses								
INTERMEDIATE LEVEL								
D8. Algorithm Design and Analysis (CS210)[d]								
D9. Computer Architecture (CS220, 221, or 222)[d]								
D10. Operating Systems (CS225, 226)[d]								

[a] A majority of students receive the majority of their instruction via Internet, TV, correspondence courses, or other method where the instructor is NOT physically present.

[b] Do not include any dual-enrollments (see Section B).

[c] Sections taught independently by GTAs.

[d] Course numbers from CC2001.

D. Computer Science Courses (Fall 2005) cont.

◆**Cells left blank will be interpreted as zeros**

Name of Course (or equivalent) (1)	Total distance-education enrollment[a] (2)	Total enrollment NOT in Col (2) and NOT dual enrollments[b] (3)	Number of sections corresponding to Column (3) (4)	Of the number in Column 4, how many sections are taught by: Tenured or Tenure-eligible Faculty (5)	Other Full-time Faculty with Ph.D. (6)	Other Full-time Faculty without Ph.D. (7)	Part-time Faculty (8)	Graduate Teaching Assist.[c] (9)
COMPUTER SCIENCE								
INTERMEDIATE LEVEL CONT.								
D11. Net-centric Computing (CS230)[d]								
D12. Programming Language Translation (CS240)[d]								
D13. Human-Computer Interaction (CS250)[d]								
D14. Artificial Intelligence (CS260, 261, 262)[d]								
D15. Databases (CS270, 271)[d]								
D16. Social and Professional Issues in Computing (CS280)[d]								
D17. Software Development (CS290, 291, 292)[d]								
D18. All other intermediate Level CS courses								
UPPER LEVEL								
D19. All upper level CS Courses (numbered 300 or above in CC2001)								

[a] A majority of students receive the majority of their instruction via Internet, TV, correspondence courses, or other method where the instructor is NOT physically present.
[b] Do not include any dual-enrollments (see Section B).
[c] Sections taught independently by GTAs.
[d] Course numbers from CC2001.

E. Faculty Profile (Fall 2005)

Statistics Questionnaire

E1. Number of faculty in your department in fall 2005

NOTES for E1:

- In responding to questions in this section, use the same rules for distinguishing between full-time and part-time faculty that you used in sections C and D. Often, one easy way to distinguish between full-time and part-time faculty is to ask whether a given faculty member participates in the same kind of insurance and retirement programs as does your department chair. Part-time faculty are often paid by the course and do not receive the same insurance and retirement benefits as does the department chair.

- If your institution does not recognize tenure, please report departmental faculty who are permanent on line E1-(a) and report all other faculty on lines E1-(c), (d), or (e) as appropriate.

(a) Number of full-time tenured faculty (not including visitors or those on leave) in fall 2005 ..... (1)

(b) Number of full-time tenure-eligible-but-not-tenured faculty (not including visitors or those on leave) in fall 2005 ..... (2)

(c) Number of tenured or tenure-eligible faculty on leave in fall 2005 ..... (3)

(d) Number of post-docs in your department in fall 2005 (where a postdoctoral appointment is a temporary position primarily intended to provide an opportunity to extend graduate training or to further research) ..... (4)

(e) Number of full-time faculty in your department in fall 2005 not included in (a), (b), (c), or (d) and who hold visiting appointments ..... (5)

(f) Number of full-time faculty in your department in fall 2005 who are not in (a), (b), (c), (d), or (e) (6)

(g) Number of part-time faculty in your department in fall 2005 ..... (7)

E2. What is the expected (or average) teaching assignment for the tenured and tenure-eligible faculty reported in E1-(a), (b)? (If your institution does not recognize tenure, report on those faculty who are "permanent full-time.")

(a) Expected classroom contact hours per week for tenured and tenure-eligible faculty in fall 2005 ..... (1)

(b) Expected classroom contact hours per week for tenured and tenure-eligible faculty last year in winter/spring term 2005 ..... (2)

E. Faculty Profile (Fall 2005) cont.

Statistics Questionnaire

E3. During fall 2005, how many faculty members are teaching the undergraduate statistics courses that you reported in Section C, above? ..... (1)

E4. Of the faculty members reported in E3, how many had a masters degree or a doctoral degree in statistics or biostatistics as of 01 September, 2005?

Number with a doctoral degree in statistics/biostatistics..... (1)

Number with a master's degree, but not a doctoral degree, in statistics/biostatistics .... (2)

E5. For the faculty members teaching statistics courses (number given in E3), what are the major fields of study for their highest earned degree? Complete the following table by showing the number of faculty belonging to each box.

HIGHEST DEGREE	Statistics (1)	Biostatistics (2)	Mathematics (3)	Mathematics Education (4)	Computer Science (5)	Social Science (6)	Education (7)	Other (8)
Doctorate (1)								
Masters (2)								
Other (3)								

F. Undergraduate Program (Fall 2005)

Statistics Questionnaire

F1. Please report the total number of your departmental majors who received their bachelors degrees from your institution between 01 July 2004 and 30 June 2005. Include joint majors and double majors[1] ..... ☐ (1)

F2. Of the undergraduate degrees described in F1, please report the number who majored in each of the following categories. Each student should be reported only once. Include all double and joint majors[1] in your totals. Use "Other" category for a major in your department who does not fit into one of the earlier categories.

Area of Major	Male (1)	Female (2)
a) Statistics		
b) Biostatistics		
c) Actuarial Science		
d) Computer Science		
e) Joint[1] Statistics and Mathematics		
f) Joint[1] Statistics and (Business or Economics)		
g) Statistics Education		
h) Other		

F3. Does your department teach any upper division Computer Science courses?

Yes..... ☐ (1)

No..... ☐ (2)

F4. Can a major in your department count some upper division Computer Science course(s) from some other department toward the upper division credit hour requirement for your departmental major?

Yes..... ☐ (1)

No..... ☐ (2)

F5. Can a major in your department count some upper division Mathematics course(s) from some other department toward the upper division credit hour requirement for your departmental major?

Yes..... ☐ (1)

No..... ☐ (2)

---

[1] *A "double major" a student who completes the degree requirements of two separate majors, one in statistics and a second in another program or department. A "joint major" is a student who completes a single major in your department that integrates courses from statistics and some other program or department and typically requires fewer credit hours than the sum of the credit hours required by the two separate majors.*

F. Undergraduate Program (Fall 2005) cont.

F6. To what extent must majors in your department complete the following? Check one box in each row.

	Required of all majors (1)	**Required of some but not all majors** (2)	**Not required of any major** (3)
a) Calculus I			
b) Calculus II			
c) Multivariable Calculus			
d) Linear Algebra/Matrix Theory			
e) at least one Computer Science course			
f) at least one applied mathematics course (not including a, b, c, d above)			
g) a capstone experience (e.g., a senior project, a senior thesis, a senior seminar, or an internship)			
h) an exit exam (written or oral)			

F7. Many departments today use a spectrum of program-assessment methods. Please check all that apply to your department's undergraduate program-assessment efforts during the last six years.

(a) We conducted a review of our undergraduate program that included one or more reviewers from outside of our institution ..... ☐ (1)

(b) We asked graduates of our undergraduate program to comment on and suggest changes in our undergraduate program ..... ☐ (2)

(c) Other departments at our institution were invited to comment on the preparation that their students received in our courses ..... ☐ (3)

(d) Data on our students' progress in subsequent statistics courses were gathered and analyzed ..... ☐ (4)

(e) We have a placement system for first-year students and we gathered and analyzed data on its effectiveness ..... ☐ (5)

(f) Our department's program assessment activities led to changes in our undergraduate program ..... ☐ (6)

F. Undergraduate Program (Fall 2005) cont.

Statistics Questionnaire

F8. General Education Courses: Does your institution require all bachelors graduates to have credit for a quantitative literacy course as part of their general education requirements? Choose one of the following.

(a) Yes, all bachelors graduates must have such credit ☐ (1) → if (a), go to F9.

(b) Not (a), but all students in the academic unit to which our department belongs must have such credit[1] ☐ (2) → if (b), go to F9.

(c) neither (a) nor (b) ☐ (3) → if (c), go to F12.

F9. If you chose (a) or (b) in F8, is it true that all students (to whom the quantitative requirement applies) must fulfill it by taking a course in your department?

Yes..... ☐ (1)

No..... ☐ (2)

F10. Which courses in your department can be used to fulfill the general education quantitative requirement in F8?

(a) Any freshman course in our department ☐ (1) → go to F12.

(b) Only certain courses in our department ☐ (2) → go to F11.

F11. If you chose F10(b), which of the following departmental courses can be used to fulfill the general education quantitative requirement? Check all that apply.

Course	Can be used
a) Elementary Statistics (no calculus prerequisite)	
b) Probability and Statistics (no calculus prerequisite)	
c) Statistical Literacy/Statistics and Society	
d) a special general education course in our department not listed above	
e) some other course(s) in our department not listed above	

F12. Does your department or institution operate a statistics lab or tutoring center intended to give students out-of-class help with statistics problems?

Yes..... ☐ (1) → If "Yes", go to F13.

No..... ☐ (2) → If "No", go to F14.

[1] *For example, you would check F8(b) if students in the College of Fine Arts do not have a quantitative literacy requirement, and yet all students in the College of Science (to which our department belongs) must complete a quantitative literacy requirement.*

F. Undergraduate Program (Fall 2005) cont.

Statistics Questionnaire

F13. Please check all services available through the statistics lab or tutoring center mentioned in F12.

(a) Computer-aided instruction ☐ (1)

(b) Computer software such as computer algebra systems or statistical packages ☐ (2)

(c) Media such as video tapes, CDs, or DVDs ☐ (3)

(d) Tutoring by students ☐ (4)

(e) Tutoring by paraprofessional staff ☐ (5)

(f) Tutoring by part-time statistics faculty ☐ (6)

(g) Tutoring by full-time statistics faculty ☐ (7)

(h) Internet resources ☐ (8)

F14. Please check all of the opportunities available to your undergraduate statistics students.

(a) Honors sections of departmental courses ☐ (1)

(b) An undergraduate Statistics Club ☐ (2)

(c) Special statistics programs to encourage women ☐ (3)

(d) Special statistics programs to encourage minorities ☐ (4)

(e) Opportunities to participate in statistics contests ☐ (5)

(f) Special statistics lectures/colloquia not part of a statistics club ☐ (6)

(g) Outreach opportunities in local K-12 schools ☐ (7)

(h) Undergraduate research opportunities in statistics ☐ (8)

(i) Independent study opportunities in statistics ☐ (9)

(j) Assigned faculty advisers in statistics ☐ (10)

(k) Opportunity to write a senior thesis in statistics ☐ (11)

(l) A career day for statistics majors ☐ (12)

(m) Special advising about graduate school opportunities in statistical sciences ☐ (13)

(n) Opportunity for an internship experience ☐ (14)

(o) Opportunity to participate in a senior seminar ☐ (15)

F. Undergraduate Program (Fall 2005) cont.

Statistics Questionnaire

F15. Please give your best estimate of the percentage of your department's graduating majors from the previous academic year (2004-2005) in each of the following categories:

(a) who went into pre-college teaching ..... ☐ % (1)

(b) who went to graduate school in the statistical sciences ..... ☐ % (2)

(c) who went to professional school or to graduate school outside of the statistical sciences ..... ☐ % (3)

(d) who took jobs in business, industry, government, etc. ..... ☐ % (4)

(e) who had other post-graduation plans known to the department ..... ☐ % (5)

(f) whose plans are not known to the department ..... ☐ % (6)

F16. For fall 2005, how many students received credit for an introductory course in your department as a result of their score on the AP statistics examination?

Number receiving credit based on AP statistics exam ..... ☐

F17. During the last five years, has your department introduced any new courses or course options as a result of the statistics AP examination?

Yes..... ☐ (1)

No..... ☐ (2)

G. Pre-service Teacher Education in Statistics and Mathematics

Statistics Questionnaire

G1. Does your institution offer a program or major leading to certification in some or all of grades K-8?

Yes..... ☐ (1) → If "Yes", go to G2.

No..... ☐ (2) → If "No", go to G14.

G2. Do members of your department serve on a committee that determines what statistics and mathematics courses are part of that certification program?

Yes..... ☐ (1)

No..... ☐ (2)

G3. Does your department offer a course or course-sequence that is designed specifically for the pre-service K-8 teacher certification program?

Yes..... ☐ (1) → If "Yes", go to G4.

No..... ☐ (2) → If "No", go to G9.

G4. Are you offering more than one section of the special course for pre-service K-8 teachers in fall 2005?

Yes..... ☐ (1) → If "Yes", go to G5.

No..... ☐ (2) → If "No", go to G8.

G5. Is there a designated departmental coordinator for your multiple sections of the special course for pre-service K-8 teachers in fall 2005?

Yes..... ☐ (1) → If "Yes", go to G6.

No..... ☐ (2) → If "No", go to G8.

G6. Please choose the box that best describes the coordinator mentioned in G5.

(a) tenured or tenure-eligible ..... ☐ (1)

(b) a postdoc[1] ..... ☐ (2)

(c) a full-time faculty member not in (b) who holds a *visiting* appointment in your department ... ☐ (3)

(d) a full-time faculty member *without* a doctorate who is not in (a), (b), or (c) ..... ☐ (4)

(e) a full-time faculty member *with* a doctorate who is not in (a), (b), (c), or (d) ..... ☐ (5)

(f) a part-time faculty member ..... ☐ (6)

(g) a graduate teaching assistant ..... ☐ (7)

---

[1] *A postdoctoral appointment is a temporary position primarily intended to provide an opportunity to extend graduate education or to further research.*

G. Pre-service Teacher Education in Statistics and Mathematics cont.

Statistics Questionnaire

G7. Given that you offer multiple sections of the special course for pre-service K-8 teachers in fall 2005, is it true that all sections of that course use the same textbook?

Yes..... ☐ (1)

No..... ☐ (2)

G8. During which year of their college careers are your pre-service K-8 teachers most likely to take your department's special course for pre-service K-8 teachers? If you have two such courses, consider only the first in responding to this question. Please check just one box.

a) Freshman	
b) Sophomore	
c) Junior	
d) Senior	

G9. Are there any sections of other courses in your department (i.e., other than the special course for K-8 teachers mentioned in G3) that are restricted to or designated for pre-service K-8 teachers?

Yes..... ☐ (1)

No..... ☐ (2)

Special instructions for questions G10, G11, G12, and G13: Many institutions have different certification requirements for pre-service elementary teachers preparing for early grades and those preparing for later grades. However, there is no nationwide agreement on which grades are "early grades" and which are "later grades" except that grades 1 and 2 are "early" and grades 6 and above are usually considered "later grades", and that is how we use the terms in the next four questions.

G10. Does your K-8 pre-service program have different requirements for students preparing to teach early grades and for those planning to teach later grades?

Yes..... ☐ (1) → If "Yes", go to G12.

No..... ☐ (2) → If "No", go to G11.

G11. Given that your pre-service K-8 teacher education program *does not* distinguish between preparing for certification in early and later grades, how many courses are all pre-service elementary teachers required to take in your department (including general education requirements, if any)?

☐ Now go to G13 and put all of your answers into column (3).

G12. Given that your pre-service K-8 teacher education program *does* distinguish between preparing for certification to teach early grades and later grades, how many courses are pre-service K-8 teachers required to take in your department (including general education requirements, if any)?

(a) Number of courses required for early grade certification ..... ☐ (1)

(b) Number of courses required for later grade certification ..... ☐ (2)

Now go to G13 and put all of your answers into columns (1) and (2).

G. Pre-service Teacher Education in Statistics and Mathematics cont.

G13. In your judgement, which three of the following courses in your department are most likely to be taken by pre-service K-8 teachers? If your program does NOT distinguish between early and later grades, please use the column (3) for your answers and check a total of only three boxes. If your program DOES distinguish between early and later grades, check exactly three boxes in each of columns (1) and (2) and ignore column (3).

Courses	Three most likely for early grade certification (1)	Three most likely for later grade certification (2)	Three most likely given that we do not distinguish between early & later grade (3)
a) A multiple-term course designed for K-8 teachers			
b) A single-term course designed for K-8 teachers			
c) Introductory Statistics (in line C1, above)			
d) Probability and Statistics (in line C2, above)			
e) Statistical Literacy/Statistics and Society (in line C3, above)			

G14. Does your department offer any courses that are part of a graduate degree in mathematics/statistics education?

(a) No ..... ☐ (1)

(b) Yes, and the degree is granted through our department ..... ☐ (2)

(c) Yes, and the degree is granted through some other department or unit in our institution ..... ☐ (3)

Thank you for completing this questionnaire. We know it was a time-consuming process and we hope that the resulting survey report, which we hope to publish in spring 2007, will be of use to you and your department. Please retain a copy of this questionnaire in case questions arise.