

P10-176



THE FACULTY SENATE

October 15, 2007

MEMORANDUM

TO: Dr. Eddie J. Davis, Interim President

FROM: Angie Hill Price, Speaker *AHP*

SUBJECT: Approval of Graduate Council Item (FS.25.52)

At its regular meeting on October 8, 2007, the Faculty Senate approved the following curriculum item from the Graduate Council. The Faculty Senate submits it for your approval. Attached is a copy of the material sent to our Senators.

Graduate Council approved the College of Science, Department of Statistics proposal for a graduate certificate in Applied Statistics.

Thank you for your time and consideration. Please inform me of your action on this matter.

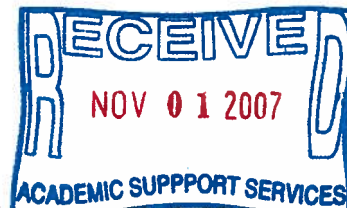
Attachment

cc: Jerry Strawser
 Karan Watson
 Paul Meyer
 Sandra Williams
 Robert Webb
 Joseph Newton

Approved:

Dr. Eddie J. Davis, Interim President

10/31/07
Date



RECEIVED

JUL 30 2007

GRADUATE STUDIES

Proposal

for a

Graduate Certificate in Applied Statistics

in the

Department of Statistics

College of Science

UCC/GC _____ AUG 30 2007
FS _____ OCT 08 2007
Pres. App _____ OCT 31 2007
SIMS _____
Catalog _____

July 2007



TEXAS A&M UNIVERSITY
College of Science
Office of the Dean

July 9, 2007

MEMORANDUM

TO: J. Richard Giardino
Dean of Graduate Studies

FROM: Mark Zoran, Associate Dean for Graduate Studies
College of Science

Two handwritten signatures in blue ink. The top signature is larger and more legible, while the bottom one is smaller and more stylized.

SUBJECT: Proposal for Graduate Certificate in Applied Statistics

The Department of Statistics and the College of Science at Texas A&M University seeks approval to offer a transcribed graduate certificate program in Applied Statistics. The certificate program would require 12 credit hours of course work offered to both campus and distance students. Specifics of the program can be found in the attached documentation.

I submit this proposal on behalf the Department of Statistics and request that you initiate the approval process of the Office of Graduate Studies and initiate the process of Graduate Council review and approval.



TEXAS A&M UNIVERSITY
Department of Statistics

MEMORANDUM

July 9, 2007

TO: Mark Zoran
Associate Dean for Graduate Studies, College of Science

FROM: Simon J. Sheather
Professor & Head, Department of Statistics *Simon Sheather*

SUBJECT: **Certification Program in Applied Statistics**

Below, please find information on the Department of Statistics Certification Program in Applied Statistics. This program was approved unanimously at a faculty meeting on April 19th, 2007. The attached provides detailed information about this request.

Certification in Applied Statistics: The Department of Statistics at Texas A&M University offers a Certification in Applied Statistics. This certification can be transcribed and meets the requirements of the University and the Texas Higher Education Coordinating Board (Chapter 5, §5.48). This certificate is 12 semester credit hours and is designed to meet the needs of students and the workforce. This program is available to both on campus and distance students. The students must 1) be admitted to the university and 2) take 12 semester credit hours from the list of graduate courses in Statistics. The specific four courses will be chosen by the student, in consultation with the Graduate Director and/or the Director of On-Line Learning, as to best meet the student's career goals.

In an effort to meet the next university deadline for publication in the university catalog, we would like to ask that our request be given priority and moved forward in an expedient manner.

**Proposed Graduate Certificate in Applied Statistics
Department of Statistics**

Proposed catalog description

Certification in Applied Statistics: The Department of Statistics at Texas A&M University offers a Certification in Applied Statistics. This certification can be transcribed and meets the requirements of the University and the Texas Higher Education Coordinating Board (Chapter 5, §5.48). This certificate is 12 semester credit hours and is designed to meet the needs of students and the workforce. This program is available to both on campus and distance students. The students must 1) be admitted to the university and 2) take 12 semester credit hours from the list of graduate courses in Statistics. The specific four courses will be chosen by the student, in consultation with the Graduate Director and/or the Director of On-Line Learning, as to best meet the student's career goals.

Background

The primary purpose of the proposed certificate is to provide a significant amount of training in applied statistical techniques for students that are not currently enrolled in the graduate program in the Department of Statistics. The intended audience is composed of students that are graduate students in other departments on campus and professionals working in the private sector.

The increasing demand for more quantitative training in scientific fields and the workplace will ensure no shortage of interest in the proposed certificate program. The recently approved online Masters program in applied statistics has generated a tremendous amount of interest among potential distance students with little to no advertisement. The popularity of statistics among on campus graduate students is illustrated by the high enrollments in graduate service statistics courses taught by the department.

Departmental support

The certification in applied statistics received unanimous approval from the faculty members present at the April 19th, 2007 faculty meeting of the Department of Statistics.

Admission:

There will be no formal application process required for graduate students currently enrolled in other departments at Texas A&M. These students will notify the Graduate Director in the Department of Statistics when they have completed the course work requirements listed below. The graduate director will review their transcript to ensure they meet program requirements before authorizing the conference of the certificate in applied statistics.

Applicants from the professional sector will apply for admission to Texas A&M with a non-degree seeking status. Since most professional applicants will complete the program at a distance, the director of online learning will review these applications and make acceptance decisions. In making these decisions, the director of online learning will ensure that each applicant admitted has the proper background to complete the program requirements, which will guarantee the integrity of the courses in the certificate program. The online program portion of the program will be an integrated extension of the on-campus program in that on-campus and distance students will be enrolled in the exact same classes.

Program Requirements

To complete the certificate program, students will be required to take 12 semester credit hours from the list of graduate courses taught by the Department of Statistics with a grade point average of 3.0 or higher in these courses. This certificate is designed to be easily customized to meet the needs of local students as well as distance students in the workforce. The specific four courses will be chosen by the student, in consultation with the Graduate Director and/or the Director of Online Learning, as to best meet the student's career goals. This certification can be transcribed and meets the requirements of the University and the Texas Higher Education Coordinating Board (Chapter 5, §5.48).

Potential Course Plan:

Year One (AY 2007-2008)

Fall Semester:

STAT 651. Statistics in Research I. (3-0). Credit 3. For graduate students in other disciplines. A non-calculus exposition of the concepts, methods, and usage of statistical data analysis. T-tests, analysis of variance, and linear regression.

Spring Semester:

STAT 652. Statistics in Research II. (3-0). Credit 3. Continuation of STAT 651. Concepts of experimental design, individual treatment comparisons, randomized blocks and factorial analysis, multiple regression, chi-square tests and a brief introduction to covariance, non-parametric methods, and sample surveys.

Year Two (AY 2008-2009)

Fall Semester:

STAT 653. Statistics in Research III. (3-0). Credit 3. Currently listed as STAT 689. The analysis of messy and complex data sets using analysis of variance, analysis of covariance and regression analysis. Transformations; regression diagnostics; nonlinear, robust, logistic and principal components regression; structural equations.

Spring Semester:

STAT 607. Sampling. (3-0). Credit 3. Planning, execution, and analysis of sampling from finite populations; simple, stratified, multistage, and systematic sampling; ratio estimates.

Other potential courses

Potential on campus students may choose from the more than 40 graduate course offered by the Department of Statistics. The department also has a large subset of these courses which are offered at a distance.