MEMORANDUM

Date: October 13, 2008

To: Joan Braddock, Dean, CNSM
    Jennie Carroll, Acting VC, CRCD
    Ron Davis, Dean, CLA
    Doug Goering, Dean, CEM
    Mark Herrmann, Dean, SOM

    James Huesmann, Dean, Libraries
    Carol Lewis, Dean, SNRAS
    Eric Madsen, Dean SoEd
    Pete Pinney, Interim Director, CES
    Denis Wiesenbug, Dean, SFOS

From: Jayne Harvie, Faculty Senate Coordinator

Subject: UAF Faculty Senate Actions

The following actions were taken by the UAF Faculty Senate at their October 13, 2008 meeting:

1. Resolution on Tuition Rates for Graduate Students after Two Years of Study: Passed unanimously

2. Motion to Approve a Graduate Certificate in Statistics: Passed unanimously.

If you have any questions, please contact me at x7964.

cc: Brian Rogers, Interim Chancellor
    Susan Henrichs, Provost
    Dana Thomas, Asst. Provost, General Studies
    Buck Sharpton, Vice Chancellor for Research
    Larry Duffy, Dean, Graduate School
    Tim Barnett, VC, Student & Enrollment Svcs.
    Tim Stickel, Acting Registrar
    Melissa McGinty, Graduation Office

    Linda Hapsmith, Academic Advising Ctr.
    Lael Oldmixon, Admissions
    Michelle Bartlett, Summer Sessions
    Debbie Toopetlook, Rural Student Svcs.
    Rick Caulfield, Tanana Valley Campus
RESOLUTION ON TUITION RATES FOR GRADUATE STUDENTS
AFTER TWO YEARS OF STUDY

WHEREAS, out-of-state graduate students pay higher tuition than other UAF graduate students; and

WHEREAS, the amount of annual income from this out-of-state graduate tuition is small compared to the UA budget; and

WHEREAS, UAF seeks to increase the number of graduate students who attend and complete their Master’s and Doctoral degree; now

THEREFORE BE IT RESOLVED, that the UAF Faculty Senate recommends that the Board of Regents policy be amended to offer all graduate students a resident tuition rate after completion of two years of full-time graduate study at a UA institution.

[Signature]
President, UAF Faculty Senate

Date: 10-13-08
MOTION:
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The UAF Faculty Senate moves to approve the Graduate Certificate in Statistics.

EFFECTIVE:    Fall 2009 and/or
               Upon Board of Regents approval.

RATIONALE:   See the full program proposal #1-GNP from the Fall 2008 review cycle on file in the Governance Office, 314 Signers' Hall.

Certificate is a post-bachelors program, equivalent to a full year of graduate statistics courses. Courses will be in applied statistics, with one theory-based core course (STAT 651) from the M.S. in Statistics.

President, UAF Faculty Senate  Date

APPROVAL: ___________________________   DATE: ______________________
           Chancellor's Office

DISAPPROVED: ___________________________   DATE: ______________________
             Chancellor's Office

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Overview

College of Natural Science and Mathematics
Department of Mathematics and Statistics

Graduate Certificate in Statistics
Minimum Requirements for the Certificate: 12 credits

The Graduate Certificate in Statistics is designed for students who are pursuing a graduate degree in a quantitative field of study. The curriculum of the Graduate Certificate is designed to expose
the students to a variety of areas in applied statistics along with a core of theoretical statistics that will enable the students to understand advanced statistical techniques. The Certificate program is entirely based on coursework – there are no comprehensive exams, projects or theses. This Graduate Certificate will also demonstrate students’ quantitative expertise to future employers.

Graduate Certificate Program

1. Complete the general university requirements
2. Have a Bachelor’s Degree from an accredited institution. Prerequisites are Calc. I, II and III (MATH200-201-202) or equivalent with at least a C in each course and a B average overall, and STAT401 (Regression and Analysis of Variance) or equivalent.
3. Complete the following:

   STAT 651-- Statistical Theory I...........................................3

4. Complete one or more of the following:

   A. One of the following theory courses:
   STAT 652-- Statistical Theory II......................................4
   STAT 653-- Statistical Theory III....................................3

   OR

   B. Two graduate statistics courses (STAT 602, STAT 605, STAT 611, STAT 621, STAT 631)

2. Complete additional graduate courses to total at least 12 credits by completing graduate
   STAT courses and/or courses from the following:
   STAT 461—Applied Multivariate Statistics ......................3
   PHYS 628—Digital Time Series Analysis .........................3
   WLF/FISH 625—Analysis of Vertebrate Population
   Survival and Movement ..................................................3
   FISH 601—Quantitative Fishery Science .........................3
   ECON 626—Econometrics .............................................3
   ECON 627—Adv. Econometrics ......................................3
   ESM 621-- Operations Research ....................................3
   MATH 641—Real Analysis ............................................4
   MIN/GE 653—Geostatistical Ore Reserve Est..................3

6. Minimum credits required.............................................12

Resources Impact

Implementing the Certificate Program will have virtually no impact on resources. The Department Chair in the Dept. of Mathematics and Statistics or a designated Faculty member will have to answer questions about the program and review applications. There will be program assessment required. There may be a slight increase in enrollment in applied statistics courses. The statistics core courses are likely to have an increase in enrollment, but not one that would require any reallocation of workloads; current enrollment in these courses is 5 to 10. No new courses, new library materials or facilities will be required.
University of Alaska Board of Regents
Program Approval Summary Form

MAU: UAF

Title: Graduate Certificate in Statistics

Target admission date: Spring 2009

How does the program relate to the Education mission of the University of Alaska and the MAU? What State Needs are met by this program?

From UAF Vision Statement, the interests of the university includes spearheading integrated research “emphasizing our complex high latitude physical, biological and social systems”; students success (in general); and “...vitality and creativity of new discoveries and research...”. The proposed Graduate Certificate in Statistics will encourage and reward more in-depth study of statistics by graduate students, primarily in the sciences. This will improve the students’ employability and improve the quality of research design and analysis.

What are the Student opportunities and outcomes? Enrollment projections? We sent out an informal e-mail survey of interest in the program to graduate students in the College of Natural Sciences and Mathematics and to graduate students in the School of Fisheries and Ocean Science. We received fourteen replies- ten said they were interested but wanted more information while four said that they were likely to enroll. Faculty from the SFOS in Juneau sent the following comment: “Many of our graduate students in Fisheries would be interested in certifying an expertise in statistics. The statistical theory course series in particular would be very useful to us.”

Describe Research opportunities: Many research activities involve research design and statistical analysis. To the extent that the Graduate Certificate encourages, recognizes and rewards strong quantitative skills, especially in the fundamentals of statistics, it will support the goals of other graduate programs at UAF.

Describe Fiscal Plan for development and implementation: There are only negligible costs associated with the proposed program. These include a need for annual program assessment, some advising and possibly an increase in the sizes of some statistics courses. This should not result in an appreciable increase in workload.
UNIVERSITY OF ALASKA FAIRBANKS  
Department of Mathematical Sciences and Statistics  
Graduate Certificate in Statistics  
Academic Outcomes Assessment Plan  
Date: July 2008  
Certificate or Degree Program: Graduate Certificate in Statistics  
Mission: We shall provide quality education responsive to the needs of individual students and the diverse population of Alaska.  
Goal: To assure that our graduates are adequately prepared to succeed in the job market through the application of advanced statistics to their primary field of study.

<table>
<thead>
<tr>
<th>Intended Outcome Objectives</th>
<th>Assessment Criteria</th>
<th>Implementation Procedures (what, when, who)</th>
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<tbody>
<tr>
<td>The Graduate Certificate in Statistics will further students' career and improve the quality of their research in their primary area of expertise.</td>
<td>Alumni survey</td>
<td>Each May, the statistics faculty will send an alumni survey to all students who graduated the previous year. The statistics faculty will evaluate the survey responses. We will ask the alumni for suggestions for improvements in the program, applicability to their academic research and career.</td>
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<td>Students' will leave the program with adequate skills in advanced statistical theory and methods.</td>
<td>Evaluation of student learning.</td>
<td>Once each year, the statistics faculty will meet to discuss the performance of Graduate Certificate Students in their courses.</td>
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<tr>
<td>Evaluating the prerequisites of students entering the program.</td>
<td></td>
<td>Once each year, the statistics faculty will examine the background of all entering students, and determine whether the students are starting the program with adequate skills.</td>
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