3(3)

FAU
FLORIDA ATLANTIC UNIVERSITY

MEMORANDUM

DATE: February 21, 2017

TO: Dr. Jerome E. Haky, Chair of the University Undergraduate Programs Committee

FROM: Dr. Hongwei Long, Chair of Undergraduate Committee in Mathematical Sciences

SUBJECT: Updated Certificate and Minor Programs in Statistics

In recent years, two new courses in Statistics: *SAS for Data and Statistical Analyses* (STA 3024) and *Statistical Learning* (STA 4241) have been approved, and the name of one existing course STA 4222 has been changed from *Planning Investigations* to *Statistical Designs*. All these courses have been listed in the University Course Catalog. However, the certificate and minor programs in Statistics are outdated and haven't incorporated these changes yet. In order to reflect the changes and keep the programs updated and attractive, the Undergraduate Committee in the Department of Mathematical Sciences discussed and approved that the two new courses STA 3024 and STA 4241 will be added to the list of elective courses, and the course title *Planning Investigations* of STA 4222 will be changed to *Statistical Designs* in both the certificate and minor programs in Statistics at a meeting on February 15, 2017. This proposal was discussed and approved by the Department of Mathematical Sciences at a departmental meeting on February 21, 2017. Please find the updated certificate and minor programs in Statistics in the enclosed document. We would very much appreciate if the related authorities in the College of Science and University could approve our proposal.

Cc: Rainer Steinwandt, Chair of Mathematical Sciences

Approved by		Date
Department Chair	*R. Steinwandt*	2-21-17
College Curriculum Chair	*J. E. Haky*	3/31/17
College Dean		4/3/17
UUPC Chair	*D. L. J. Haky*	4/6/2017
Undergraduate Studies Dean	*E. Smrott*	4/5/17
UFS President		
Provost		

Charles E. Schmidt College of Science
Department of Mathematical Sciences
777 Glades Road
Boca Raton, FL 33431
tel: 561.297.3340
fax: 561.297.2436
www.math.fau.edu

Certificate Program in Statistics (updated)

The certificate program in statistics enables students to pursue an interdisciplinary course of study in statistics.

The required curriculum provides students with necessary statistical foundations of the field and exposes them to practical applications relevant to their chosen area of specialization.

Each course must be completed with a grade of at least C-. To complete the certificate program in statistics, one has to complete the following required courses:

Please submit application to Dr. Lianfen Qian (Science Building- Room SE244)

Course	Semester Offered	Credits	Required / Elective
MAC 2311 Calculus 1	Every	4	Required
MAC 2312 Calculus 2	Every	4	Required
STA 4442 Prob. & Stats 1	Every	3	Required
STA 4443 Prob. & Stats 2	Fall & Summer	3	One is required
STA 4032 Prob. & Stats for Eng.	Every		
STA 4821 Stochastic Models for CS	Fall & Spring		
EEL 4541 Prob. & Random Process			
STA 4234 Applied Stats 1 STA 4202L Applied Stats 1 Lab	Spring	3	Required
MAC 2313 Calculus 3	Every	4	Recommended

Charles E. Schmidt College of Science
Department of Mathematical Sciences
777 Glades Road
Boca Raton, FL 33431
tel: 561.297.3340
fax: 561.297.2436
www.math.fau.edu

MAS 2103 Matrix Theory	Every	3	Recommended
Choose 3 elective courses from the following:			
STA 3024 SAS for Data and Statistical Analyses*	Fall	3	Elective
STA 4102 Computational Stats 1*	Spring	3	Elective
STA 4103 Computational Stats 2*	Every second Summer	3	Elective
STA 4241 Statistical Learning*	Every second Fall	3	Elective
STA 4702 Applied Statistics 2 *	Every second Spring	3	Elective
STA 4222 Statistical Designs *	Every second Fall	3	Elective
STA 4853 Applied Time Series and Forecasting*	Every second Spring	3	Elective
ECO 4422 Econometrics 2		3	Elective
MAP 4260 Intro to Queuing Theory		3	Elective
PHY 4523 Statistical Physics		4	Elective
* Recommended Elective Courses			
The total number of credits required for a Certificate in Statistics = 26.			

* As with all degree programs, the authoritative source for the degree requirements is the University Catalog that was in effect for the academic year in which the student entered the University. The information on this page does not supersede the Catalog.

Minor in Statistics (updated)

The minor enables students to pursue knowledge in statistics while pursuing a major in other disciplines, including mathematics.

The required curriculum provides necessary statistical foundations of the field and practical applications relevant to their chosen area of specialization.

Each course must be completed with a grade of at least a C. To complete the minor in statistics, one has to complete the following required courses:

Prerequisites		
Title	Course	Credits
Calculus 1 or Calculus for Engineers 1	MAC 2311 or MAC 2281	4
Calculus 2 or Calculus for Engineers 2	MAC 2312 or MAC 2282	4
Matrix Theory	MAS 2103	3
Core Required Courses		
Applied Statistics Lab	STA 4202L	1
Applied Statistics 1	STA 4234	2
Probability and Statistics 1	STA 4442	3
Probability and Statistics 2 or Probability and Statistics for Engineers	STA 4443 or STA 4032	3
To complete the program, students must select two electives from the following:		
SAS for Data and Statistical Analyses	STA 3024	3
Computational Statistics 1	STA 4102	3
Computational Statistics 2	STA 4103	3
Statistical Learning	STA 4241	3
Statistical Designs	STA 4222	3

Charles E. Schmidt College of Science
Department of Mathematical Sciences
777 Glades Road
Boca Raton, FL 33431
tel: 561.297.3340
fax: 561.297.2436
www.math.fau.edu

Applied Statistics 2	STA 4702	3
Applied Time Series and Forecasting	STA 4853	3
Intermediate Econometrics	ECO 4422	3
Introduction to Queuing Theory	MAP 4260	3
Statistical Mechanics	PHY 4523	3
Mathematics and Statistics Total		26

* As with all degree programs, the authoritative source for the degree requirements is the University Catalog that was in effect for the academic year in which the student entered the University. The information on this page does not supersede the Catalog.