Fiscal Unit/Academic Org	Statistics - D0694
Administering College/Academic Group	Arts And Sciences
Co-adminstering College/Academic Group	
Semester Conversion Designation	Converted with minimal changes to program goals and/or curricular requirements (e.g., sub- plan/specialization name changes, changes in electives and/or prerequisites, minimal changes in overall structure of program, minimal or no changes in program goals or content)
Current Program/Plan Name	Statistics & Statistical Data Analysis Minor
Proposed Program/Plan Name	Statistical Data Analysis Graduate Minor
Program/Plan Code Abbreviation	STATDAN-GM
Current Degree Title	

Credit Hour Explanation

Program credit hour requ	irements	A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program		18	12.0	12	0.0
Required credit hours offered by the unit	Minimum	18	12.0	12	0.0
	Maximum	23	15.3	12	0.0
Required credit hours offered outside of the unit	Minimum	0	0.0	0	0.0
	Maximum	0	0.0	0	0.0
Required prerequisite credit hours not included above	Minimum	0	0.0	0	0.0
	Maximum	5	3.3	5	0.0

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? No

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

Attachments

• Grad Minor Data Analysis Attachments.pdf: Documents from Department of Statistics

(Program Proposal. Owner: Craigmile,Peter F)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Craigmile,Peter F	10/29/2010 09:34 AM	Submitted for Approval
Approved	Craigmile,Peter F	10/29/2010 09:35 AM	Unit Approval
Pending Approval	Andereck,Claude David	10/29/2010 09:35 AM	College Approval

Department of Statistics

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http://www.stat.osu.edu/

28 October 2010

To: Office of Academic Affairs Re: Proposed Graduate Minor in Statistical Data Analysis degree program

Please find attached our proposal for the **Graduate Minor in Statistical Data Analysis** degree program under semesters. The ad-hoc graduate service course conversion committee put this proposal together, with continual feedback from the entire faculty. In a faculty meeting on 23 September 2010, this program was approved unanimously (out of 21, 21 for, 0 against, 0 abstains).

Sincerely,

Douglas A. Well

Douglas A. Wolfe, Chair, Department of Statistics.



Proposed Graduate Minor in Statistical Data Analysis Program Rationale for Changes

The proposed Graduate Minor in Statistics Data Analysis is a straight conversion of the degree program under the quarter system. The choice of electives has been changed to match the pre-requisites of the converted semester courses.

Proposed Graduate Minor in Statistical Data Analysis Program List of Semester courses

Math prerequisite (or equivalent)

	Unde	er Semesters	Under Qua	rters	
Code	Credits	Title	Code	Credits	Notes
Math 1075	5	Pre-College Mathematics II	Math 75	5	Required for Stat 5301

Core Required Courses

Under Semesters		Under Qua	rters		
Code	Credits	Title	Code	Credits	Notes
5301	4	Intermediate Data Analysis I	528/529	3+3	Merging of content of 528 and 529
5302	3	Intermediate Data Analysis II	529/530	3+4	Merging of content of 529 and 530

Elective Courses (at least five credits of the following)

	Und	er Semesters	Under Qua	rters	
Code	Credits	Title	Code	Credits	Notes
6510	3	Survey Sampling Methods	651	4	Material added
6610	3	Applied Nonparametric Statistics	661	5	Straight conversion
6620	2	Environmental Statistics	662	3	Straight conversion
6640	3	Principles of Statistical Quality Control	664	5	Straight conversion
6650	2	Discrete Data Analysis	665	5	Converted to a two semester hour required course for MAS degree - material removed
6615	2	Design and Analysis of Clinical Trials	BIOSTAT 615	3	Straight conversion

Elective Courses (these are at higher level, but can be substituted as an alternative with permission)

	Und	er Semesters	Under Qua	rters	
Code	Credits	Title	Code	Credits	Notes
6605	3	Applied Survival Analysis	BIOSTAT 605	5	Staight conversion
6520	3	Applied Statistical Analysis with Missing Data	652	4	Material added
6530	2	Introduction to Spatial Statistics	631	3	Straight conversion
6540	3	Applied Stochastic Processes	632	3	Material added
6550	2	Statistical Analysis of Time Series	635	3	Straight conversion
6560	3	Applied Multivariate Analysis	656	5	Straight conversion
6570	2	Applied Bayesian Analysis	625	4	Converted to a two semester hour required course for MAS/PhD - material removed
6690	1-5	Graduate topics in Statistics			New general topics course

GRADUATE MINOR IN STATISTICAL DATA ANALYSIS PLAN OF STUDY

Core Course Requirements : Grade or Semester Planned Statistics 5301 5302 Electives: (at least 5 additional credit hours at the 6000-level, from the approved list of courses) 6000 Level Elective Credit Hrs Grade or Semester Plann 6000 Level Elective	Name:					Date:	
Grade or Semester Planned Statistics 5301 5302	Core Cours	se Require	ements :				
Statistics 5301 5302 Electives: (at least 5 additional credit hours at the 6000-level, from the approved list of courses) 6000 Level Elective Credit Hrs Grade or Semester Plann 			Grade or Sen	nester P	lanned		
5302	Statistics	5301					
Electives: (at least 5 additional credit hours at the 6000-level, from the approved list of courses) 6000 Level Elective Credit Hrs Grade or Semester Plans		5302					
6000 Level Elective Credit Hrs Grade or Semester Plans	Electives: (at least 5) from tl	additional (1e approved	credit ł l list of	ours at the (courses)	6000-level,	
		6000 Leve	el Elective		Credit Hrs	Grade or Semester Plar	ned
Having met on, the undersigned approve the listed program	Having met	on		, the ı	indersigned a	approve the listed progra	m.
Student's Signature		Student's	s Signature				
Approved By: Date: Graduate Minor Coordinator	Approved B	3y:	Graduate Minor	r Coordin	ator	Date:	



	Graduate M	linor Program Form	
Student Name:			
Ohio State Email Addı	ress:		
Name of Graduate Mi	nor:		
	Graduate Mi	inor Program of Study	
<u>Department</u>	Course #	Course Title	Credit Hours
			· · · · · · · · · · · · · · · · · · ·
		· ·	
Student Signature			Date
Auvisor Signature			Date
Graduate Studies Chair in Gr	aduate Minor Program		Date

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Proposed Graduate Minor in Statistical Data Analysis Program Transition Policy

We believe that the best solution for smooth transition is to proactively advise students in advance that they finish the core sequence of Data Analysis, Stat 528-530 completely under quarters. Then they can fulfill all the requirements for the minor without taking any bridge courses.

For the Data Analysis 528-530 sequence, the material of the 3 credit second course (Stat 529) will be split into Stat 5301 (2 credits) and Stat 5302 (1 credit) under semesters. If needed, a 2 credit hour bridge course between 528 and 5302 (Stat 5299) will be offered during the first two years after transition to semesters. Those who take Stat 528 and Stat 529 under quarters can take Stat 5302 (the second semester course) to complete the requirement for the data analysis sequence.

An example transition:

Year 1 (Quarters)

Au	Wi	Sp
Stat 528	Stat 529	Stat 530

Year 2 (Semesters)

Au	Sp
Elective (3)	Elective (2)

Graduate Minor in Statistical Data Analysis

Prerequisites: High school-level Algebra

Required courses (credit hours in parentheses): Stat 5301 (4), Stat 5302 (3)

Elective courses: At least 5 additional credit hours at the 6000-level (from among courses in group A).

Courses at the 6000-level from group B or courses at a higher level can be substituted as an alternative with appropriate permission.

Tentative Calendar:

	Fall	Spring
Year 1	Stat 5301 (4)	Stat 5302 (3)
Year 2	Elective (3)	Elective (2)

Group A 6000-level courses

6510 (3)	Survey Sampling Methods
6610 (3)	Applied Nonparametric Statistics
6620 (2)	Environmental Statistics
6640 (3)	Principles of Statistical Quality Control
6650 (2)	Discrete Data Analysis
6615 (2)	Design and Analysis of Clinical Trials

Group B 6000-level courses

(3)	Applied Statistical Analysis with Missing Data
(2)	Introduction to Spatial Statistics
(3)	Applied Stochastic Processes
(2)	Statistical Analysis of Time Series
(3)	Applied Multivariate Analysis
(2)	Applied Bayesian Analysis
(3)	Applied Survival Analysis
(1-5)	Graduate Topics in Statistics
	(3) (2) (3) (2) (3) (2) (3) (1-5)

GRADUATE MINOR DEGREES (UNDER QUARTERS)

The Department of Statistics offers two graduate minor degrees. Official recognition of the completion of either of these minor degrees will appear on the student's University transcript. The first minor is a Graduate Minor in Statistics. This is a twenty hour minor degree which includes a theoretical component in addition to applied coursework. Students must have a good calculus background in order to complete this minor degree. The second minor is a Graduate Minor in Statistical Data Analysis. This is an eighteen hour minor degree and all coursework for this minor is applied. The Minor in Statistical Data Analysis does not require any formal mathematics beyond the ability to work with simple formulas and equations, material ordinarily covered in a high school algebra course.

For those students interested in going beyond the minor degree, an additional thirty hours can be added to the Graduate Minor in Statistics to complete a Master of Applied Statistics degree.

Graduate Minor Program Coordinator: Professor Mike Fligner (maf@stat.osu.edu)

GRADUATE MINOR IN STATISTICAL DATA ANALYSIS

The Minor in Statistical Data Analysis is an applied minor and the initial sequence required is Stat 528, Stat 529 and Stat 530. After the completion of Stat 529 students should have sufficient background to begin to take some of the electives for the minor. Any student interested in pursuing this minor degree should contact Professor Michael Fligner to help in planning their coursework in statistics and to answer any questions about the minor. (phone 292-0463, or e-mail gradminor using the department gradminor@stat.osu.edu)

The formal requirements and coursework for the minor follow.

Requirements

The Graduate Minor in Statistical Data Analysis will require a minimum of 18 hours and a maximum of 23 hours of coursework from the Statistics Department. The Graduate School requires that the student must receive the grade of B (or better) or S in each course comprising the minor.

Coursework

Required courses: Stat 528, Stat 529 and Stat 530.

Elective courses: At least 8 additional credit hours from among Stat 547, 651, 661, 664, 665, and 673. Other courses at the 600 level or higher in Statistics or Biostatistics can be used as electives upon approval of the Graduate Minor Program Chair in Statistics (Professor Michael Fligner).