

# Cover Sheet: Request 10443

## QMB7565 Statistical Research Methods (DBA)

### Info

Process	Course New Ugrad/Pro
Status	Pending
Submitter	Hatch,Tiffany G tiffany.hatch@warrington.ufl.edu
Created	9/23/2015 8:40:39 AM
Updated	11/12/2015 11:51:02 AM
Description	This course will help students understand concepts in statistics. This will enable them to undertake advanced econometrics courses later on. Topics covered in the course will be: summary statistics, estimations, hypothesis testing, sample size estimations, correlations, multivariate regressions, testing for patterns, and testing independence.

### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CBA - Information Systems and Operations Management 011707000	Brawner, Patricia A		9/23/2015
No document changes					
College	Approved	CBA - College of Business Administration, Warrington	Mathis, Renee C		10/1/2015
No document changes					
University Curriculum Committee	Comment	PV - University Curriculum Committee (UCC)	Baker, Brandi N	Added to October agenda.	10/1/2015
No document changes					
University Curriculum Committee	Recycled	PV - University Curriculum Committee (UCC)	Baker, Brandi N	1. Please consult with Statistics and receive written support for this class. 2. Please revise the course title to include a reference to Business or the DBA program.	10/27/2015
No document changes					
College	Approved	CBA - College of Business Administration, Warrington	Mathis, Renee C	The chain of email was uploaded showing that Brett Presnell approved.	11/12/2015
Deleted DBA Statistics Class.pdf					11/4/2015
Added DBA Statistics Class.pdf					11/12/2015
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			11/12/2015
No document changes					

<b>Step</b>	<b>Status</b>	<b>Group</b>	<b>User</b>	<b>Comment</b>	<b>Updated</b>
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

# Course|New for request 10443

## Info

**Request:** QMB7565 Statistical Research Methods (DBA)

**Submitter:** Mathis,Renee C rcmathis@ufl.edu

**Created:** 10/1/2015 2:40:49 PM

**Form version:** 8

## Responses

**Recommended Prefix:** QMB

**Course Level :** 7

**Number :** 565

**Lab Code :** None

**Course Title:** Statistical Research Methods

**Transcript Title:** Stat Research Methods

**Effective Term :** Spring

**Effective Year:** 2016

**Rotating Topic?:** No

**Amount of Credit:** 3

**Repeatable Credit?:** No

**S/U Only?:** No

**Contact Type :** Regularly Scheduled

**Degree Type:** Professional

**Weekly Contact Hours :** 3

**Category of Instruction :** Advanced

**Delivery Method(s):** On-Campus

**Course Description :** This course will help students understand concepts in statistics.

This will enable them to undertake advanced econometrics courses later on. Topics covered in the course will be: summary statistics, estimations, hypothesis testing, sample size estimations, correlations, multivariate regressions, testing for patterns, and testing independence.

**Prerequisites :** None

**Co-requisites :** None

**Rationale and Placement in Curriculum :** This course is required for all DBA students. Students must pass this 1-week course in order to progress into remainder of DBA curriculum, which has advanced econometric courses throughout. Proficiency in statistics is necessary for the research requirements in the DBA program. QMB 7565 is a course specifically designed for the Doctor of Business Administration (DBA) program which is a professional degree offered as a track under the Ph.D. degree. The course is a 3 credit course taken at the outset of Year 1 in preparation for the subsequent 6 terms with 36 hours of contact.

**Course Objectives :** Knowledge of statistics is important for any researcher who needs to extract information from quantitative or qualitative data. My purpose in this course is to introduce statistical tools required for hypothesis testing and linear models. This course should provide you with a package of statistical concepts and procedures that will help you understand how and why statistical techniques work and how to employ them in your research.

**Course Textbook(s) and/or Other Assigned Reading:** REQUIRED TEXT: An Introduction to Statistical Methods and Data Analysis, by R. Lyman Ott and Michael Longnecker (6th edition, Brooks/Cole Cengage Learning, 2010), ISBN 978-0-495-01758-5

REQUIRED SOFTWARE: We will use SPSS and Microsoft Excel to run our tests and analyze data

Weekly Schedule of Topics : Day	Module	Topics Readings
		Contact hours
1	Module 1-Descriptive statistics	
		<ul style="list-style-type: none"> <li>Graphical methods (Histogram, Boxplot)</li> <li>Measures of central tendency</li> <li>Measures of variability</li> </ul>
		Sections 3.3, 3.4, 3.5, 3.6
		4-Contact hours
	Module 2- Random variables and Random sampling	
		<ul style="list-style-type: none"> <li>Discrete and continuous random variables</li> <li>Probability distributions</li> <li>Random sampling</li> <li>Sampling distributions</li> <li>Central Limit theorem and applications</li> </ul>
		Sections 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12
		4- Contact Hours
2	Module 3-Statistical inference	
		<ul style="list-style-type: none"> <li>Estimating population mean</li> <li>Choosing sample size for estimation</li> <li>Single variable hypothesis test</li> <li>Level of significance of a statistical test</li> <li>Power of a test</li> <li>Inference about difference between two population means</li> <li>Inference about equality of population variances</li> </ul>
		Sections 5.2, 5.3, 5.4, 5.5, 5.6, 5.7
		Sections 6.2, 6.4
		Sections 7.2, 7.3
		8 - Contact Hours
3	Module 4- Regressions	
		<ul style="list-style-type: none"> <li>Correlation</li> <li>Estimating model parameters</li> <li>Inferences about regression parameters</li> <li>Lack of fit in linear regressions</li> <li>Checking model assumptions</li> </ul>
		Sections 11.2,11.3, 11.5, 11.7
		Sections 12.2, 12.3, 12.4
		Sections 13.4
		8 - Contact Hours
4	Module 5- ANOVA	
		<ul style="list-style-type: none"> <li>Completely randomized design</li> <li>Randomized complete block design</li> <li>Estimation of treatment differences</li> <li>Comparison of treatment means</li> <li>Fisher's Least Significant Difference</li> </ul>
		Sections 8.2, 8.3
		Sections 9.2, 9.3, 9.4
		8 -Contact Hours
5	Module 6- Categorical data	
		<ul style="list-style-type: none"> <li>Goodness of fit Chi-square test</li> <li>Contingency tables</li> <li>Test for independence</li> </ul>
		Sections 10.3, 10.4, 10.5
		8 - Contact Hours
6	Review	

- Review of the material
  - Discuss exam
- 8 - Contact Hours

Disclaimer: This syllabus represents my current plans and objectives. As we go through the course, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

<b>Grading Scheme :</b>		Sr. No.	Evaluation Mechanism	Weights
1.	Four Quizzes (individual)			48%
	Each quiz weight 12%			
2.	Final Exam (individual)			52 %

Grades will be awarded using the following table:

Points earned (on a scale of 100)	Letter grade
90 – 100	A
85 – 89.9	A-
80 – 84.9	B+
75 – 79.9	B
70 – 74.9	B-
65 – 69.9	C+
60 – 64.9	C
0 – 59.9	C-, D+, D, D- or E as seen fit by instructor

UF grading policies are available at

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>. This link gives details of how grade points are assigned for individual grades, how GPA is calculated and other related information. Please familiarize yourself with these policies.

Requirements for class attendance and make-up exams, assignments, and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

**Accommodations/Disability:**

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc/>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

**Evaluating Course:**

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>

**Instructor(s) :** Dr. Praveen A. Pathak

Associate Professor

University of Florida,

Warrington College of Business

Department of Information Systems and Operations Management

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Gainesville, Florida 32611-7169

Ph: 352.392.9599  
Email: [praveen@ufl.edu](mailto:praveen@ufl.edu)

Office Hours: After class and by appointment

-----Original Message-----

From: Ray,Brian D  
Sent: Wednesday, November 04, 2015 4:15 PM  
To: Mathis,Renee C <renee.mathis@warrington.ufl.edu>  
Cc: Erenguc,S. Selcuk <selcuk.erenguc@warrington.ufl.edu>  
Subject: FW: Statistics Class

Hi Renee. Please upload a pdf of this correspondence from Dr. Presnell into the UCC system so we can bring this course up again at the next UCC meeting.

Many thanks, Brian

-----Original Message-----

**From: Brett Presnell [mailto:presnell@ufl.edu]**  
**Sent: Wednesday, November 4, 2015 4:12 PM**  
**To: Ray,Brian D <brian.ray@warrington.ufl.edu>**  
**Cc: Lindner,Angela S <alindner@aa.ufl.edu>; Erenguc,S. Selcuk <selcuk.erenguc@warrington.ufl.edu>**  
**Subject: Re: Statistics Class**

**Yes, I do support Angela's decision and her proposed way forward. If you change your mind about offering the course yourself, please don't hesitate to contact us.**

-----Ray,Brian D <brian.ray@warrington.ufl.edu> writes:-----

> Thanks for the note Angela. I have copied our Senior Associate Dean,  
> Dr. Selcuk Erenguc, who has responsibility for the DBA program.  
>  
> Dr. Presnell, please reply to this note with your support of Angela's  
> decision in this particular instance so we can move the process  
> forward with the UCC.  
>  
> Regards, Brian  
> \_\_\_\_\_  
>  
> Brian D. Ray, Ph.D.  
> Associate Dean and Director  
> Lecturer in Leadership and Ethics  
> P.O. Box 117160, 356 Heavener Hall  
> Gainesville, FL 32611-7160  
> LinkedIn:www.linkedin.com/in/BrianRayPhD  
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> e-mail: DrRay@ufl.edu  
> www.warrington.ufl.edu/heavener

> > From: Lindner,Angela S  
> Sent: Wednesday, November 4, 2015 10:28 AM  
> To: Ray,Brian D <brian.ray@warrington.ufl.edu>  
> Cc: Lindner,Angela S <alindner@aa.ufl.edu>  
> Subject: Statistics Class  
>  
> Brian,  
>  
> I have made a decision on the issue concerning the question of whether  
> the Department of Statistics offers its STA6166 rather than the  
> College of Business offer QMB7565 in the DBA Program curriculum.  
>  
> While Dr. Brett Presnell, Chair of the Department of Statistics,  
> believes that his online section of STA6166 can comfortably accommodate  
> 25 additional students, I am not confident that his instructors can  
> fully integrate the hybrid model of online/on-campus delivery that is  
> envisioned for the DBA program. For this reason, I have decided that  
> the College of Business will offer QMB7565. Dr. Presnell is  
> understanding of my decision, and I ask you to contact him again to  
> request his approval for our UCC records (please upload his approval  
> into the Approval System).  
>  
> In the future, I would like to guide the UCC process to initiate  
> communication with the Department of Statistics with a request of  
> their response to the question of whether they can provide the course  
> to fulfill the vision of the requesting program. This approach will  
> initiate the conversation in a much different way than currently done  
> (with a request to approve a similar course taught by the requesting  
> program). The outcome of the conversation initiated with the  
> request for you to teach; question may be the same as that  
> from the request for approval for us to teach; initiation,  
> but the process is far more collegial and collaborative. I hope I can  
> count on your support for making this slight adjustment in the path of  
> our UCC approval process.  
>  
> Kind regards,  
> Angela  
>  
> Angela Lindner, Ph.D.  
> Associate Provost for Undergraduate Affairs Associate Professor,  
> Environmental Engineering Sciences Office of the Provost & Sr. VP  
> University of Florida  
> 238 Tigert Hall  
> P.O. Box 113175  
> Gainesville, FL 32611  
> Phone: (352) 846-1761  
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