

LONG SIGNATURE SHEET



UNC CHARLOTTE

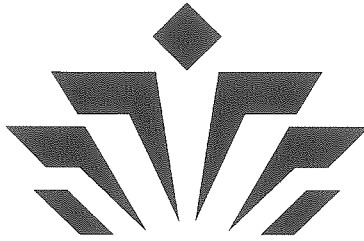
Proposal Number: MBA 3-14-13b

Proposal Title: Establishment of a New MBA Concentration in Quantitative Methods for Business

Originating Department: MBA Program Committee

TYPE OF PROPOSAL: UNDERGRADUATE \_\_\_\_\_ GRADUATE X \_\_\_\_\_ UNDERGRADUATE & GRADUATE \_\_\_\_\_ (Separate proposals sent to UCCC and Grad. Council)

DATE RECEIV	DATE CONSIDERE	DATE FORWARD	ACTION	SIGNATURES
3-7-13	3-7-13	3-14-13	Approved	<u>MBA DIRECTOR</u> <i>Nay F. Wolf</i>
3-14-13	3-18-14	3-18-14	Approved	<u>COLLEGE CURRICULUM COMMITTEE CHAIR</u> <i>Jim Clark</i>
			Approved	<u>COLLEGE FACULTY CHAIR (if applicable)</u> <i>Rob Roy M. Gregor</i>
			Approved	<u>COLLEGE DEAN</u> <i>[Signature]</i> [Steve Ott]
			Approved	<u>GENERAL EDUCATION</u> (for General Education courses)
			Approved	[ N/A ] <u>UNDERGRADUATE COURSE &amp; CURRICULUM COMMITTEE CHAIR</u> (for undergraduate courses) [ N/A ]
3/25/13	4/2/13	4/5/13	Approved	<u>GRADUATE COUNCIL CHAIR</u> (for graduate courses) <i>Rob Roy M. Gregor</i>
			Approved	<u>FACULTY GOVERNANCE ASSISTANT</u> (Faculty Council approval on Consent Calendar)
				<u>FACULTY EXECUTIVE COMMITTEE</u> (if decision is appealed)



# UNC CHARLOTTE

## LONG FORM COURSE AND CURRICULUM PROPOSAL

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To: Belk College Graduate Council Chair

From: MBA Director

Date: March 14, 2013

Re: Establishment of Quantitative Methods for Business concentration in the MBA program

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New Graduate

Course and Curriculum Proposal from: MBA Program Committee

Title: Establishment of Quantitative Methods for Business concentration in the MBA program

II. CONTENT OF PROPOSAL

A. PROPOSAL SUMMARY AND CATALOG COPY

1. **SUMMARY:** The MBA program committee recommends the creation of a new concentration in Quantitative Methods for Business in the MBA program. Students electing to pursue the Quantitative Methods for Business concentration will be required to take ECON 6112, MBAD 6122, and two approved electives.
  
2. **PROPOSED CATALOG COPY:**  
**Concentration & Elective Component (15 credit hours)**  
Students complete twelve to fifteen hours of elective courses specified for a concentration or as free electives. Students may enroll in electives as soon as they complete the prerequisites for each course. MBAD 6890 (Directed Individual Study) and MBAD 7090 (Special Topics in Business) may be included in a concentration with permission of the MBA Director and the related Department.

Concentration and elective requirements:

**Quantitative Methods for Business**

Required Courses:

ECON 6112 Graduate Econometrics

MBAD 6122 Decision Modeling and Analysis via Spreadsheets

Plus two of the following courses:

Students must complete two of the following:

ECON 6217 Advanced Microeconomics

ECON 6218 Advanced Business and Economic Forecasting

MBAD 6172 Marketing Research

MBAD 6211 Advanced Business Analytics

ITCS 6500 Complex Adaptive Systems

## **B. JUSTIFICATION**

Increasing use of quantitative techniques by business has created greater need for individuals with advanced training in quantitative methods. Students completing the Quantitative Methods for Business concentration will be well positioned to fill analyst positions employing high level quantitative techniques or to combine these quantitative skills with general management training in order to fill positions as managers of quantitative functional areas. Increasing numbers of companies, such as Bank of America, Wells Fargo, IBM, SAS, and SAP, employ sophisticated quantitative techniques in analyzing data for making sound business decisions. Moreover, increased employment opportunities in areas of business consulting require more sophisticated quantitative ability from employment candidates. The proposed concentration in Quantitative Methods for Business addresses the growing importance of sophisticated quantitative methods in organizations and the consequent demand for managers with these skills. The Quantitative Methods for Business concentration will also help the Belk College to remain at the forefront of management education by preparing managers with quantitative and computer software skills to partially fill the expected talent gap in these areas.

## **C. IMPACT**

From past data, enrollments were quite low in the economics concentration which included some of the courses included in this concentration. However, by eliminating the economic theory courses and including applied business courses as electives, this proposed concentration is expected to have higher enrollments. Enrollment projections for this proposed concentration are in the range of 5-10 students per year.

## **D. RESOURCES REQUIRED TO SUPPORT PROPOSAL**

The proposed Quantitative Methods for Business concentration does not require any new physical facility or other resources. The details of the courses that form part of the Quantitative Methods for Business concentration are listed in Appendix A.

## **E. CONSULTATION WITH THE LIBRARY AND OTHER DEPARTMENTS OR UNITS**

1. **LIBRARY CONSULTATION.** Since no new courses are proposed, library consultation is not required.
2. **CONSULTATION WITH OTHER DEPARTMENTS OR UNITS.**

Economics Department was consulted and consent for including the following courses was obtained (see attached document).

- ECON 6112 Graduate Econometrics (3G)
- ECON 6217 Advanced Microeconometrics (3G)
- ECON 6218 Advanced Business and Economic Forecasting (3G)

Business and Information Systems Department was consulted and consent for including the following courses was obtained (see attached document).

- MBAD 6122 Decision Modeling and Analysis via Spreadsheets (3G)
- MBAD 6211 Advanced Business Analytics (3G)

Marketing Department was consulted and consent for including the following courses was obtained (see attached document).

- MBAD 6172 Marketing Research (3G)

College of Computing and Informatics was consulted and consent for including the following courses was obtained (see attached document).

- ITCS 6500 Complex Adaptive Systems (3G)

## **F. INITIATION, ATTACHMENTS AND CONSIDERATION OF THE PROPOSAL**

1. **ORIGINATING UNIT.** MBA Program
2. **OTHER CONSIDERING UNITS**
  - i. MBA Program Committee unanimously approved March 1, 2013.
  - ii. Belk College Graduate Council
  - iii. Belk College Faculty
  - iv. Graduate Council

## **G. ATTACHMENTS**

1. CONSULTATION:

- i. Consultation with Economics Department attached.
- ii. Consultation with Business and Information Systems Department
- iii. Consultation with Marketing Department
- iv. Consultation with College of Computing and Informatics
- v. Library consultation not required since no new courses proposed for this concentration.

2. PROGRAM OUTLINE: N/A
3. PROPOSED CATALOG COPY: See attached Appendix A
4. ACADEMIC PLAN OF STUDY: The Quantitative Methods for Business concentration will be a new concentration option for the MBA students and will follow the plan of study outlined in Appendix A.

## Appendix A

### II. Concentration and Elective Component (12 credit hours)

Students complete twelve hours of elective courses specified for a concentration. Students may enroll in electives as soon as they complete the prerequisites for each course. MBAD 6890 (Directed Individual Study) and MBAD 7090 (Special Topics in Business) may be included in a concentration with permission of the MBA Director and the related department.

Concentration and elective requirements:

#### Applied Investments Management

Required courses:

- MBAD 5158 Student Managed Investment Fund I (3)
- MBAD 5159 Student Managed Investment Fund II (3)
- MBAD 6153 Investment Management (3)
- MBAD 6157 Advanced Corporate Finance (3)

#### Business Analytics

Required Courses:

- MBAD 6201 Data and Knowledge Management (3)
- MBAD 6122 Decision Modeling and Analysis via Spreadsheets (3)
- MBAD 6207 Business Project Management (3)

Plus one of the following courses:

- MBAD 6202 Business Information Systems: Analysis, Design, and Management (3)
- MBAD 6203 Information Systems Economics, Strategy, and Policy (3)
- MBAD 6204 Business Data Communications (3)
- MBAD 6208 Supply Chain Management (3)
- MBAD 6172 Marketing Research (3)
- MBAD 6177 Pricing and Positioning Strategy (3)
- MBAD 7090 Special Topics in Business: Advanced Analytics (3)
- ECON 6112 Graduate Econometrics (3)
- ECON 6218 Business and Economic Forecasting (3)

#### Business Finance

Required courses:

- MBAD 6153 Investment Management (3)
- MBAD 6157 Advanced Corporate Finance (3)

Plus two of the following courses:

- MBAD 6151 Financial Institutions and Markets (3)
- MBAD 6154 Applied Business Finance (3)
- MBAD 6155 Multinational Finance (3)

### **Financial Institutions/Commercial Banking**

Required courses:

- MBAD 6153 Investment Management (3)
- MBAD 6156 Commercial Bank Management (3)
- MBAD 6157 Advanced Corporate Finance (3)

Plus one of the following courses:

- MBAD 6151 Financial Institutions and Markets (3)
- MBAD 6155 Multinational Finance (3)

### **Global Business**

Required courses:

- MBAD 6193 Global Business Environment (3)
- MBAD 6197 Managing Multinational Enterprise (3)
- Plus one course involving MBA-approved international study or travel (3)

And one of the following courses:

- MBAD 6155 Multinational Finance (3)
- MBAD 6174 Global Marketing (3)

### **Information and Technology Management**

Required courses:

- MBAD 6201 Data and Knowledge Management in Business (3)
- MBAD 6202 Business Info Systems Development (3)

Plus two of the following courses:



- MBAD 6203 Information Systems Economics, Strategy, and Policy (3)
- MBAD 6204 Business Data Communications (3)
- MBAD 6122 Decision Modeling and Analysis via Spreadsheets (3)
- MBAD 6207 Business Project Management (3)

### **Management**

Choose four of the required courses:

- MBAD 6162 Leadership in Organizations (3)
- MBAD 6163 Human Resource Management (3)
- MBAD 6164 Executive Communication (3)
- MBAD 6165 Negotiation and Conflict Management (3)
- MBAD 6166 Ethics and Global Capitalism (3)
- MBAD 6191 Entrepreneurship (3)
- MBAD 6192 Business Ethics and Corporate Responsibility (3)
- MBAD 6193 Global Business Environment (3)
- MBAD 6197 Managing Multinational Enterprise (3)
- MBAD 6207 Business Project Management

### **Marketing**

Choose four of the required courses:

- MBAD 6172 Marketing Research (3)
- MBAD 6173 Promotional Strategy (3)
- MBAD 6174 Global Marketing (3)
- MBAD 6176 Consumer Behavior (3)
- MBAD 6371 Marketing of Sports (3)
- MBAD 6361 Management of Motorsports (1.5) and MBAD 6362 Management of Professional Team Sports (1.5)

### **Quantitative Methods for Business**

Required Courses:

ECON 6112 Graduate Econometrics  
 MBAD 6122 Decision Modeling and Analysis via Spreadsheets

Plus two of the following courses:

ECON 6217 Advanced Microeconometrics  
 ECON 6218 Advanced Business and Economic Forecasting  
 MBAD 6172 Marketing Research  
 MBAD 6211 Advanced Business Analytics

ITCS 6500 Complex Adaptive Systems

### **Real Estate Finance and Development**

Required courses:

- MBAD 6158 Real Estate Finance & Investment (3)
- MBAD 6159 Real Estate Development (3)

Plus two of the following courses:

- MBAD 6160 Real Estate Capital Markets (3)
- MBAD 6258 Site Feasibility Analysis (3)
- MBAD 6259 Applied Real Estate Development (3)

### **Supply Chain Management**

Required courses:

- MBAD 6122 Decision Modeling and Analysis via Spreadsheets (3)
- MBAD 6142 Quality & Manufacturing Management (3)
- MBAD 6208 Supply Chain Management (3)

Plus one of the following courses:

- MBAD 6207 Business Project Management (3)
- Elective approved by the MBA Director (3)

### **Student Structured Concentration**

Students may propose a 12-semester hour concentration in a significant area of interest for approval by the Director of the MBA program. This concentration may include graduate courses from other programs within the University with approval of the related department.



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BELK COLLEGE *of* BUSINESS

9201 University City Blvd, Charlotte, NC 28223-0001  
t/ 704.687.7577 f/ 704.687.4014 www.belkcollege.uncc.edu

### Memorandum

**To:** MBA Program Committee  
**From:** Dr. Jennifer Troyer, Chair, Department of Economics  
**Subject:** Consultation Regarding the Concentration in Quantitative Methods for Business  
**Date:** January 30, 2013

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The Department of Economics has reviewed the proposal for the Concentration in Quantitative Methods for Business. The proposal contains one required econometrics course, ECON 6112 (Graduate Econometrics), and two elective courses, ECON 6217 (Advanced Microeconometrics) and ECON 6218 (Advanced Business and Economic Forecasting). The proposal was discussed at a Department faculty meeting in Fall 2012, and the notion of the proposal was unanimously endorsed. The Department of Economics faculty see this Concentration as being very valuable for students in the MBA program with an interest in developing strong quantitative skills.

While faculty were quite supportive of the proposal, two concerns arose in discussions. First, students taking ECON 6112 should be screened for mathematics preparation prior to taking the course. In particular, students should have knowledge of linear algebra. The course pre-requisites include permission of the program coordinator. We suggest that the M.S. in Economics Program Director be responsible for handling permits for the course, to ensure that students have the appropriate mathematics preparation. Alternatively, the M.S. in Economics Program Director could provide formal guidance to the MBA Program Director regarding groups of courses that indicate sufficient background. Second, current demand for ECON 6112 from M.S. in Economics students and graduate students in Mathematics and Statistics in Fall is high. We now (as of Spring 2013) offer this class twice per year, which should help the overcrowding in the future. However, M.S. in Economics students entering in the program in Fall (most students enter in Fall) need to take the course in the Fall, as it is a pre-requisite for other required courses. This means that currently we have limited capacity for additional MBA students in the Fall semester. We suggest that MBA students in the Quantitative Methods for Business Concentration wishing to take ECON 6112 be advised to develop a plan of study that allows them to ECON 6112 in the Spring semester. Students taking ECON 6112 in Spring could then

take ECON 6218 in Fall and ECON 6217 the following Spring.

In sum, the Department of Economics faculty are very supportive of Concentration in Quantitative Methods for Business, subject to the caveats regarding mathematics preparation and limited capacity for MBA students in the Fall section of the ECON 6112 course. Please let me know if I can be of further assistance.



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BELK COLLEGE of BUSINESS

Department of Business Information Systems and Operations Management

9201 University City Blvd, Charlotte, NC 28223-0001  
t: 704.687.3713 f: 704.687.6330 www.belkcollege.uncc.edu

To: MBA Program Committee  
From: Dr. Cem Saydam, Chair  
Date: January 21, 2013  
Subject: Quantitative Methods for Business concentration in the MBA

Dear MBA Program Committee,

The Business Information Systems and Operations Management Department has reviewed the proposal to establish a Quantitative Methods for Business concentration in the MBA program and endorses this proposal.

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Saydam

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email=saydam@uncc.edu,  
c=US  
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UNC CHARLOTTE  
BELK COLLEGE *of* BUSINESS

Department of Marketing

9201 University City Blvd. Charlotte, NC 28223-0001  
P 704 687 7661 F 704 687 6463 www.belkcollege.mcc.edu

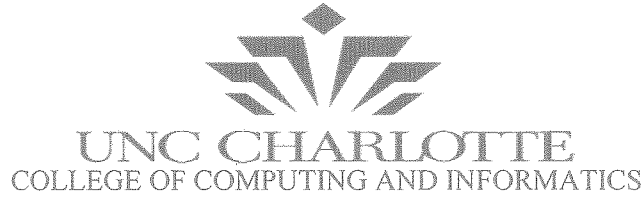
To whom it may concern

February 8, 2013

The Marketing Department has reviewed the proposal to establish a new MBA concentration in Quantitative Methods for Business and endorses this proposal. We wish you the best for this new and exciting concentration.

A handwritten signature in cursive script, appearing to read "Sunil Erevelles".

Sunil Erevelles, Ph.D. | Chair, Department of Marketing  
Associate Professor of Marketing  
UNC Charlotte | Belk College of Business



Department Software Information Systems

9201 University City Boulevard, Charlotte, NC 28223-0001  
t/ 704.687.8658 www.sis.uncc.edu

Moutaz Khouja, PhD  
Professor of Operations Management  
UNC Charlotte | Belk College of Business

January 25, 2013

The Software and Information Systems Department has reviewed the proposal to establish a Quantitative Methods for Business concentration in the MBA program and endorses this proposal.

Sincerely,

Mary Lou Maher

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Professor Mary Lou Maher | Chair  
Software Information Systems, Woodward 310A  
UNC Charlotte | 9201 University City Blvd. | Charlotte, NC 28223  
Phone: 704-687-1940 | Fax: 704-687-6065  
[M.maher@uncc.edu](mailto:M.maher@uncc.edu) | <http://sis.uncc.edu/maher-marylou>

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