

Contact: Diana Gonzalez

**REQUEST FOR NEW PROGRAM AT THE UNIVERSITY OF NORTHERN IOWA:
BACHELOR OF ARTS PROGRAM IN SUPPLY CHAIN MANAGEMENT**

Action Requested: Consider approval of the request by the University of Northern Iowa to establish a new Bachelor of Arts Program in Supply Chain Management in the Department of Management in the College of Business Administration.

Executive Summary: The proposed program will transition from an emphasis in the Management Program to a standalone program. This proposal was reviewed by the Board Office and the Council of Provosts and is recommended for approval. No concerns were raised when it was presented to the Iowa Coordinating Council for Post-High School Education. The proposed program addresses the Board of Regents Strategic Plan priorities to “provide educational excellence and impact as well as economic development and vitality” and Goal #8 – “Iowa’s public universities and special schools shall be increasingly efficient and productive.”

Background:

- ◇ **Description of proposed program.** The current Management Program includes only four classes which provide discipline-specific content within the emphasis area. The proposed program will build on the Supply Chain and Operations Management Emphasis in the Management Program which has existed for more than 35 years (formerly named Production Management). The proposed program will merge ‘traditional’ and ‘Management Science’ perspectives to offer a forward-looking program that recognizes the importance of analytics and quantitative analysis with a traditional supply chain management foundation (i.e., purchasing) with global linkages. As an emphasis, students have no options for electives. The proposed program will provide students with more opportunities to gain discipline-specific knowledge and skills.

The required courses proposed in the new program include Supply Chain and Purchasing Management and Distribution and Logistics (both are offered in the current emphasis). Global Strategic Supply Management will be revised from the current Strategic Supply Management course; Supply Chain Modeling and Analytics is a new course that will replace Quality and Process Improvement. In addition, students will select two electives from the following list: Six Sigma and Lean Consulting Methodology (new course, but already taught on an experimental basis); Project Management, Dynamics of Negotiation; Organizational Behavior; Managerial Problem Solving; Locational Analysis for Business and Applied Writing: Technical Communication. Only one course outside the College of Business/Management Department may be counted as an elective for the major (i.e., students could take either Location Analysis (Geography Department) or Applied Writing: Technical Communication (English Department), but not both).

- ◇ **Academic objectives.** The proposed program includes the following objectives:
 - ⇒ Prepare students to conduct in-depth analyses of the procurement process and supplier management with a strong emphasis on managing a supplier base for both products and services.
 - ⇒ Provide students with the fundamental analytic tools, approaches and techniques necessary for the design and operation of logistics systems and integrated supply chains.

- ⇒ Develop students' knowledge and awareness of the importance of managing a supply chain within a global context and its interrelationship with firm strategy.
- ⇒ Develop students' ability to use decision support tools in dealing with a wide range of supply chain issues and effectively communicate suggested solutions.
- ◇ Need for proposed program. Since the 1970s, there has been a rapidly increasing recognition of the importance of employees who understand how to manage the linkages between organizations which create products and services for end-user consumption. Application of supply chain management is now an important part of most organizations regardless of size or profit orientation. This has led many industry leaders to engage with universities in hopes of developing curriculum which leads to the creation of professional supply chain managers. UNI supply chain management faculty members consulted with industry leaders regarding the creation of a stand-alone supply chain management program. Industry leaders report that the underlying relevance of supply chain management to organizational success continuously increases in importance yearly. As a higher education leader in Business and Management Studies, UNI's curriculum must respond to sustained industry shifts, such as those occurring in the area of supply chain management. The proposed program is vital to on-going success of UNI graduates.
- ◇ Link to institutional strategic plan. The University's Vision Statement specifies that "The University of Northern Iowa will be nationally known for innovative education, preparing students for success in a rapidly changing, globally competitive, and culturally diverse world." The proposed program is expected to be a forward looking, innovative program that will help students become competitive in a global marketplace. Furthermore, under the new accreditation guidelines of the Association to Advance Collegiate Schools of Business, the College of Business Administration is focused on impact. Based on discussion with the College's Executive Advisory Board and Industry Partners, it is expected that the proposed program will have a greater impact for students than the current emphasis in the Management Program.
- ◇ Relationship to existing programs at UNI. The proposed program will complement rather than duplicate existing programs at UNI. By providing a Supply Chain Management Program rather than a Management Emphasis, students in the Organizational Leadership Emphasis will have the opportunity to double major, which they are currently not allowed to do because both are emphases under the same umbrella. It is expected that a high quality Supply Chain and Operations Management Emphasis will lead to a high quality Supply Chain Management Program.
- ◇ Relationship to existing programs at other colleges and universities. The University of Iowa does not offer an undergraduate Supply Chain Major. The closest undergraduate major at UI is the Business Analytics and Information Systems, which is substantially different from the proposed program. Iowa State University takes a more traditional view (e.g., logistics, purchasing) with their undergraduate Supply Chain Management Major than UNI's proposed program.

The proposed program will merge 'traditional' and 'management science' perspectives which recognizes the importance of analytics/quantitative analysis) with a traditional supply chain management foundation, such as purchasing and logistics. While ISU requires one course in analytics, it is a smaller proportion of the major's total required classes than UNI's proposed program. Further, the proposed program has a global orientation by requiring a course in Global Strategic Supply Management while ISU's program does not appear to have any significant global component.

- ◇ Unique features. There is a great deal of industry support for graduates with supply chain majors. UNI's Supply Chain Management Association student group has several local partners who provide support and hiring opportunities, including John Deere, Target, Ruan, Vermeer, and Bossard.
- ◇ Resources. With a high quality Supply Chain and Operations Management Emphasis, the department is expected to be able to offer a high quality Supply Chain Management program. In 2012, students with a Supply Chain and Operations Management Emphasis reported a 93% job placement rate with an average starting salary of more than \$48,000 per year. The Management department has two assistant professors dedicated to the supply chain area. There are two Management Information Systems (MIS) professors who split their time between MIS and supply chain. Thus, there is adequate coverage for the supply chain courses. As the program grows, the department anticipates hiring a new supply chain faculty member from an internal reallocation. The department does not anticipate the need for additional facilities. With a new analytics focus, the department is already using the two computer labs in the College in cooperation with the Management Information Systems program and Accounting Information Systems classes.
- ◇ Student demand. Currently, there are 83 students who have declared the Supply Chain and Operations Management emphasis. This enrollment has grown steadily from 19 students in 2006 to 83 in Fall 2014.
- ◇ Duplication. The proposed program is not expected to duplicate any existing program in the state. The University of Iowa does not offer an undergraduate major in supply chain. They offer a supply chain and analytics MBA. Iowa State University offers a supply chain management undergraduate major with a logistics and an operations concentration.
- ◇ Workforce need/demand. The Department of Labor's Occupational Outlook Handbook (www.bls.gov) shows that those who analyze and support an organizations supply chain (Logisticians) earn on average \$72,780 with a Bachelor's Degree and the job outlook is very positive with a much faster than average growth rate.
- ◇ Consultation with representatives of other programs. On January 16, 2015, an email was sent to Dr. Nick Street, Chair of the Management Sciences Department at the University of Iowa and Dr. Sree Nilakana, Chair of the Supply Chain and Information Systems Department at Iowa State University. On January 19, 2015, Dr. Street responded with no objections. In September, 2015, contact with the new Chair at ISU led to Dr. Scott Grawe, Associate Professor of Supply Chain who provided support for the proposed program.¹ ISU and UNI are currently working together on the possibility of teaching and research in the future.

¹ Attachment A.

- ◇ Cost. The total cost for the proposed program is expected to be \$10,000 per year. This will be provided by internal reallocation from the College of Business Administration.
- ◇ Projected enrollment. The enrollment is expected to be 90 students in year one, increasing to 120 by year seven.
- ◇ Anticipated sources of students. The primary source of students will be students enrolled in an emphasis in the Management Program in the College of Business Administration.
- ◇ Articulation agreement. Articulation agreements will be pursued beginning with Hawkeye Community College.
- ◇ Off-campus delivery. Off-campus delivery is not planned initially.
- ◇ Opportunities for internships. Internships will be an option in the proposed program. Internships are currently available to students in the Supply Chain and Operations Management emphasis from companies such as John Deere, Fastenal, Terex, and General Motors. Opportunities for internships are expected to grow with the proposed program. TMC Transportation provided the following at the Fall 2015 UNI Job and Internship Fair: "We were very impressed with the students that we met with yesterday. They were all from the Supply Chain Management Program and were all professional, knowledgeable, and asked great questions. We were sorry that we didn't sign up for the next day interviews."
- ◇ Marketing plan. The department did not develop a new marketing plan because they have been marketing the supply chain and operations management emphasis. The department anticipates highlighting this area at open houses and during UNI Business Up Close days. The advising office is aware of the proposed program and advisors are prepared to inform students about the new program. A new brochure will be created to highlight the new program; the department's on-line presence will focus on opportunities associated with majoring in supply chain management.
- ◇ Evaluation plan. The department has reviewed and benchmarked programs offered at other institutions to determine their offerings and worked with the college advisory board and industry partners to develop an ideal curriculum. The two full-time, tenure-track, faculty visited with companies throughout the 2013-2014 academic year as well as during Fall 2014 to obtain feedback on the traits desired by industry employers for supply chain and operations management graduates. A Learning Outcomes Assessment Plan was developed after a series of meetings were held with all full-time and adjunct faculty to discuss methods used in each section of the core operations management course. Program courses will be taught by supply chain and operations management faculty and MIS faculty.

A measurement system was implemented to assess the achievement of student learning outcomes. The instrument is a self-efficacy survey instrument to track performance pre and post program. The instrument was developed by working with MIS program faculty in the UNI College of Business Administration. Additional tools which are administered by the UNI College are the "Business Core Survey," completed by faculty and the "End-of-Program Exam," completed by students. The Business Core Survey solicits instructor feedback on core course learning objectives and other attributes while the End-of-Program Exam provides feedback on learning assurance and outcomes for graduates of the College. There is an operations management section on the End-of-Program Exam.

The self-efficacy survey is currently administered in the capstone strategic supply management course or global supply chain management course and is starting to be used as a measurement of program objectives.

- ◇ Date of implementation. Creation of the proposed program will become effective upon approval by the Board of Regents and will be included in the University's General Catalog. The anticipated implementation date is Fall 2016.

E-MAILS FROM THE UNIVERSITY OF IOWA AND IOWA STATE UNIVERSITY

Nick Street<nick-street @uiowa.edu
1/19/15

Hi Mary,

I am only qualified to speak for the Management Sciences Department, not the College. From the departmental point of view, we have no objections and wish you the best with your new program. We would welcome applications from UNI grads to our graduate programs.

-nick

Based upon departmental faculty review and any subsequent consultation with you, our department/college/LACC:

X Does NOT object to the above proposal – it does NOT impact us.

On Fri, Jan 16, 2015 at 1:35 PM, Mary Connerley mary.connerley@uni.edu wrote:

Dear Nick Street,

Even though the University of Iowa does not have an undergraduate Supply Chain Management Major, I wanted to make you aware of our proposal for an undergraduate Supply Chain Management Major at UNI. We have had a Supply Chain and Production Operations Management Emphasis for over 35 years, and with the hiring of a couple of new energetic and enthusiastic faculty last year, we felt that now was the time to move to a major.

As you will see from the attached form, we do not expect huge changes in terms of enrollment and with a couple of years of experience, we feel that our graduates may be great prospects for you graduate program.

Please look over the attached form and let me know if you have any questions or concerns. For our internal purposes, if you could check a box below with any comments, that would be helpful.

I appreciate your consideration and look forward to hearing from you.

Sincerely,

Mary Connerley

On Fri, Sep 18, 2015 at 11:14 AM, Grawe, Scott J [SCIS] sgrawe@iastate.edu wrote:

Hi Mary –

This looks good. I look forward to working with you and your faculty in the future. I am also interested in attending your global trade event. If will see if I can move a couple things around to get over there for the morning. (I will need to be back to teach in the evening). However, if

you want to focus on UNI branding, I understand and can wait for another opportunity to make the trip to Cedar Falls.

Best regards,

Scott Grawe
Associate Professor of Supply Chain Management &
Associate Chair of Supply Chain & Management Systems
Iowa State University

Office: 515.294.3869
Email: sgrawe@iastate.edu
Skype: sgrawe

From: Mary Connerley
Date: Thursday, September 17, 2015 at 3:34 PM
To: Scott Grawe
Subject: UNI Supply Chain Management Major Proposal

Scott,

Attached you will find Form G, that will go to the Board of Regents and the ICCPHSE form that will be posted for your Provost to review. Both of these forms will be sent out after we have been given approval by our Faculty Senate (hopefully on September 28).

Thank you for your willingness to look over the forms to ensure that we have adequately represented your supply chain major.

To keep you from having to read the entire Form G document again, I tried to stick to making changes only in the areas we discussed: box d on p. 3, boxes a and b at the top of page 5 and a quick update to our numbers.

Please let me know if something needs additional clarification.

Also, in the interest of collaboration, I have attached a flyer for our upcoming Global Trade Conference which will be held on Oct. 28. I understand that your schedule is very busy, so feel no obligation, but please feel free to share the information with any of your colleagues or students. This year we have very unique aspects of trade being discussed: expanding in the medical field, moving live animals and making fuel from plastic.

I enjoyed our conversation and I look forward to hearing from you.

Mary

Mary L. Connerley, Professor & Head
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