Proposal for a New Academic Program

Institution: Oregon State University
College/School: College of Business
Department/Program: No Department

1. Program Description

a. Proposed Classification of Instructional Programs (CIP) number (*contact your Registrar or campus Institutional Research office for this number*).

CIP Code #: 52.1301

Title: Management Science.

Definition: A general program that focuses on the application of statistical modeling, data warehousing, data mining, programming, forecasting and operations research techniques to the analysis of problems of business organization and performance. Includes instruction in optimization theory and mathematical techniques, data mining, data warehousing, stochastic and dynamic modeling, operations analysis, and the design and testing of prototype systems and evaluation models.

Examples: Business Intelligence, Competitive Intelligence

b. Brief overview (1-2 paragraphs) of the proposed program, including its disciplinary foundations and connections; program objectives; programmatic focus; degree, certificate, minor, and concentrations offered.

The College of Business proposes a new Graduate Certificate in Supply Chain and Logistic Management. The Supply Chain and Logistic Management (SCLM) Graduate Certificate program provides a means for individuals to acquire a solid mastery of international operations and supply chain and logistics management concepts and methods.

This graduate certificate prepares individual for operations, logistics and supply chain management in the service and manufacturing industries. In the past two decades, the loss of manufacturing jobs in the U.S. triggered attrition of innovation capabilities across many sectors of the economy contributing to the current anemic economic recovery. The U.S. needs a professionally-trained workforce that is able to manage internal operations and global supply chains in the manufacturing and service sectors and in government agencies. Well trained operations and supply chain managers are also needed in global companies that operate outside the U.S., including companies that operate in the Asia-Pacific Rim.

Category	Information Summary
Proposal Title	**Graduate Certificate in Supply Chain and Logistics Management**
Proposal Purpose (e.g., New; Change—Rename, Move, Reorganization; Suspend; Terminate)	**New Graduate Certificate**
Classification of Instructional Program (CIP) #	**52.1301**
Curriculum Proposal System # (incl link)	
Banner Student Information System (SIS) #	**To be assigned by the Registrar's Office**
Degree Type (e.g., B.S., M.S., or Ph.D.)	**Certificate**
Program Type (e.g., Undergraduate, Graduate, First Professional)	**Graduate**
Academic Home	**College of Business**
College Code	**02**
Contacts (e.g,, Name, Title, Tel #, eMail Address)	**Dr. John Becker-Blease,** **Associate Dean** **7-6061** john.becker-blease@bus.oregonstate.edu
Faculty (New)	**No new faculty will be required to support the launch of the program. Existing faculty are currently delivering all of the program courses.**
Staff (New)	**No new staff will be required to support the launch of the program.**
Library	**No additional library resources will be required**
Facilities/Space	**No new facilities or space will be required**
Budget (first four years)	**Year 1: $(500); Year 2: $0; Year 3: $0; Year 4: $0**
Undergraduate Option(s)	**Not Applicable**
Graduate Option(s)	**Not Applicable**
Undergraduate Minor(s)	**Not Applicable**
Graduate Minor(s)	**Not Applicable**
Course Designator (e.g., Existing or New or Change)	**BA (Existing; no new course designator will be required)**
Courses (e.g., New Courses)	**7 existing courses (BA 551, BA 552, BA 554, BA 555, BA 557, BA 562, BA 578) No new courses will be required.**
Location (e.g., Main; Cascades; Ecampus; HMSC)	**Main Campus (Corvallis), Collaborative Life Sciences Building (Portland), online**
Modality (e.g., Face-to-Face; On-line; Hybrid)	**Face-to-Face on campus, available online via Extended Campus and as hybrid courses in Portland)**
Enrollment Limitations	**None**
Accreditation	**Association to Advance Collegiate Schools of Business**

Program Unique Within Oregon University System (e.g., Yes or No)	**Yes**
Proposed Effective Term (e.g., term and year; Banner code)	**Fall Term 2018 (201901)**

Table 1. Summary of Master of Science in Business Proposal

c. Course of study – proposed curriculum, including course numbers, titles, and credit hours.

The curriculum for the certificate program will use six existing courses within the MBA degree program. The certificate coursework includes:

Course Number	Title	Credit Hours
BA 551	**Supply and Sourcing Management**	3
BA 552	**Manufacturing and Service Operations**	3
BA 554	**Lean Enterprise Management and Capstone**	3
BA 555	**Practical Business Analysis**	3
BA 557	**Global Logistics Management: Fundamentals and Strategy**	3
BA 561	**Supply Chain Management**	3
BA 578	**Supply Chain Analytics**	3

d. Manner in which the program will be delivered, including program location (if offered outside of the main campus), course scheduling, and the use of technology (for both on-campus and off-campus delivery).

The courses will be offered on-campus in Corvallis and via Extended Campus as a hybrid program in Portland. Coursework offered via Extended Campus in the "hybrid" format means 80 percent online and 20 percent face-to-face.

Courses are scheduled every year as follows:

On Campus

Fall	Winter	Spring	Summer
BA 551	BA 552	BA 554	
BA 555	BA 578	BA 557	
BA 561			

Hybrid

Fall	Winter	Spring	Summer
BA 551	BA 552	BA 554	

BA 561	BA 578	BA 557	
	BA 555		

e. Ways in which the program will seek to assure quality, access, and diversity.

Application Review Process. All applications will be reviewed by the Associate Dean for Graduate Student Development. Applicants must have a bachelor's degree and a GPA of at least 2.75 (overall, or in the last 90 quarter credits). Students who have not completed coursework in statistics may be required to take foundation knowledge requirements in statistics.

Retention and Evaluation. The academic advisors in the Graduate Business Programs office will check the status of enrolled students at the end of each academic term to ensure they are making progress and are meeting minimum performance expectations (maintain a GPA of 3.0 in all certificate courses). Students who are struggling will be required to meet with an academic advisor. Final grades will be reviewed by the Associate Dean for Graduate Student Development prior to awarding the Graduate Certificate in Supply Chain and Logistic Management.

Diversity. The College of Business is actively engaged in efforts to enhance the diversity of our Graduate Programs. The certificate program will enable us to offer graduate courses to individuals who are not able to meet our minimum Graduate Management Admissions Test (GMAT) requirements for the MBA program. The online format also enables working professionals in the community to enroll in the program, thus expanding the pool of potential candidates.

f. Anticipated fall term headcount and FTE enrollment over each of the next five years.

We expect five to ten students annually to enroll in the certificate program.

Year	2015-16	2016-17	2017-18	2018-19	2019-20
Headcount	5-10	5-10	5-10	5-10	5-10
FTE	3.9-7.8	3.9-7.8	3.9-7.8	3.9-7.8	3.9-7.8

g. Expected degrees/certificates produced over the next five years.

25-50. The certificate can be a one-year program for part-time students. We anticipate 5-10 students per year for 5 years.

h. Characteristics of students to be served (resident/nonresident/international; traditional/nontraditional; full-time/part-time; etc.)

We expect the Supply Chain and Logistic Management Certificate to attract working professionals who are seeking additional training to advance within their current place of employment or move to a new position (with a possible change of employer). These professionals will all be part-time students, some completing the certificate in one year and others taking one class per quarter and completing in 21 months.

The certificate is also available to other graduate students on campus who wish to expand their knowledge (and potential career options).

i. Adequacy and quality of faculty delivering the program.

The College of Business is accredited by the Associate to Advance Collegiate Schools of Business (AACSB), which has very strict requirements regarding faculty sufficiency. All faculty meet minimum AACSB requirements and have been approved for delivery of graduate coursework by the Graduate School.

j. Faculty resources – full-time, part-time, adjunct.

All faculty are on full-time appointments within the College of Business.

k. Other staff.

The certificate program will be supported by the Graduate Business programs staff, which includes the Associate Dean for Graduate Student Development, one academic advisor, and one admissions advisor.

l. Facilities, library, and other resources.

The current facilities and resources used to support the MBA program will also support the Graduate Certificate.

m. Anticipated start date.
Fall term 2018.

2. Relationship to Mission and Goals

a. Manner in which the proposed program supports the institution's mission and goals for access; student learning; research, and/or scholarly work; and service.

The proposed certificate will create access to practice-oriented academic education without the requirement to complete a full graduate degree. The proposed graduate certificate program will allow students to progress through an applied education at a pace consistent with their other work and life responsibilities. Completion of the certificate program will enhance the employment opportunities of the students and broaden their knowledge and skills.

b. Connection of the proposed program to the institution's strategic priorities and signature areas of focus.

The Supply Chain and Logistic Management Certificate supports a rapidly-growing interest from organizations that need individuals with undergraduate degrees in fields other than business to gain exposure to, and understanding of, basic functional business skills. Developing a sufficient and competent public workforce is key to Oregon's economic development, and directly supports the Healthy Economy strategic priority for the University.

c. Manner in which the proposed program contributes to Oregon University System goals for access; quality learning; knowledge creation and innovation; and economic and cultural support of Oregon and its communities.

The on campus and hybrid format of the certificate program offers working professional access to graduate education.

d. Manner in which the program meets broad statewide needs and enhances the state's capacity to respond effectively to social, economic, and environmental challenges and opportunities.

Oregon's economy spans the entire supply chain from abundant natural renewable and non-renewable resources through manufacturing and, ultimately, consumption. The proposed certificate in Supply Chain and Logistics Management will provide the Oregon economy with managers who understand the emerging area of big data-informed supply chain and logistics.

3. Accreditation

a. Accrediting body or professional society that has established standards in the area in which the program lies, if applicable.

The College of Business, and all of the programs it offers, is accredited by the Association to Advance Collegiate Schools of Business (AACSB).

b. Ability of the program to meet professional accreditation standards. If the program does not or cannot meet those standards, the proposal should identify the area(s) in which it is deficient and indicate steps needed to qualify the program for accreditation and date by which it would be expected to be fully accredited.

Since the certificate program incorporates existing coursework from the accredited MBA program, the certificate will meet all accreditation standards.

c. If the proposed program is a graduate program in which the institution offers an undergraduate program, proposal should identify whether or not the undergraduate program is accredited and, if not, what would be required to qualify it for accreditation.

The undergraduate program is also accredited by AACSB.

d. If accreditation is a goal, the proposal should identify the steps being taken to achieve accreditation. If the program is not seeking accreditation, the proposal should indicate why it is not.

Not applicable

4. Need

a. Evidence of market demand.

The Bureau of Labor Statistics (BLS) predicts an increase demand for Operations Research Analysts of 27,600 between 2014-2024, which is a 30% growth rate and "Much Faster than Average" rate, with the Portland/Vancouver market experiencing above-national-average growth.

b. If the program's location is shared with another similar OUS program, proposal should provide externally validated evidence of need (e.g., surveys, focus groups, documented requests, occupational/employment statistics and forecasts).

n/a

c. Manner in which the program would serve the need for improved educational attainment in the region and state.

The Graduate Certificate is a good option for professionals who are interested in graduate coursework but who do wish to pursue a graduate degree program. The certificate is also a good option for professionals who are seeking advancement in their current job through graduate-level coursework.

d. Manner in which the program would address the civic and cultural demands of citizenship.

The College of Business has established professional behavior standards that are strictly enforced within all College programs (see URL http://business.oregonstate.edu/about/academic-policies-standards).

5. Outcomes and Quality Assessment

a. Expected learning outcomes of the program.

1) Effectively use concepts of operations and supply chain management and qualitative and quantitative methods to make appropriate decisions in international business contexts that include new and unfamiliar situations.
2) Design appropriate management plans for global supply chains that are lawful, ethical and environmentally and socially responsible.
3) Develop a global outlook that reflects changes experienced and anticipated by firms and industries and understand the requirements for effective change management in global operations and supply chains.

b. Methods by which the learning outcomes will be assessed and used to improve curriculum and instruction.

The majority of the certificate learning objectives will be assessed using course-embedded measures. These include exam questions, case analyses, class discussion, class projects and presentations. In conjunction with assessing the MBA program, each certificate objective will be assessed once every two years. The 'off' assessment year will allow the course/discipline coordinator to analyze the data from the previous assessment and implement changes to coverage, delivery, etc. if it was deemed necessary. The

following assessment will allow us to 'close the loop', or evaluate the impact of changes implemented related to the objective. If no changes were made, the second assessment will allow us to continue to monitor whether students continue to meet the objective. Note that given the integrative nature of the program, coverage of a particular learning objective will take place in multiple courses or across courses.

c. Program performance indicators, including prospects for success of program graduates (employment or graduate school) and consideration of licensure, if appropriate.

   Program success will be measured by the number of graduates, and the success those graduates achieve post-certificate completion (promotion or movement to higher levels of managerial responsibility). A LinkedIn group is a planned tool we will use to maintain contact with graduates

d. Nature and level of research and/or scholarly work expected of program faculty; indicators of success in those areas.

   The College of Business sets expectations for the nature and level of research and/or professional development activity of program faculty. The Associate Dean for Research evaluates all faculty on an annual basis to ensure they are meeting our expectations for scholarly work and maintaining professional qualifications. The proposed certificate will not impact these expectations.

6. Program Integration and Collaboration

a. Closely related programs in other OUS universities and Oregon private institutions.

   To our knowledge, there are no other OUS programs that offer a Graduate Certificate in Supply Chain and Logistic Management.

b. Ways in which the program complements other similar programs in other Oregon institutions and other related programs at this institution. Proposal should identify the potential for collaboration.

   Because the certificate uses stand-alone graduate coursework, the courses could be added to any graduate program plan for Master and Doctoral programs at OSU. Because the courses are also available in the online/hybrid format, they could be used by other Oregon institutions within the Portland region to add Supply Chain and Logistic Management to a program of study.

c. If applicable, proposal should state why this program may not be collaborating with existing similar programs.

   n/a

d. Potential impacts on other programs in the areas of budget, enrollment, faculty workload, and facilities use.

   n/a

7. Financial Sustainability (attach the completed *Budget Outline*)

a. Business plan for the program that anticipates and provides for its long-term financial viability, addressing anticipated sources of funds, the ability to recruit and retain faculty, and plans for assuring adequate library support over the long term.

   Existing staff devoted to supporting the MBA program will provide support for the certificate program.

   The curriculum for the certificate uses existing courses that are delivered by existing faculty – no new faculty will be required. We currently have capacity in these courses for 5-10 additional students per year, with minimal impact on faculty workload.

   The College has long-standing and effective policies to recruit and retain faculty.

   The addition of 5-10 students per year should not impact the availability of library support. Since the library support is adequate for the MBA program, it should also be adequate for the certificate program.

b. Plans for development and maintenance of unique resources (buildings, laboratories, technology) necessary to offer a quality program in this field.

   There are no unique resources required for the certificate.

c. Targeted student/faculty ratio (student FTE divided by faculty FTE).

   The certificate will have minimal impact on the student/faculty ratio within the MBA program.

d. Resources to be devoted to student recruitment.

   The College currently has resources dedicated to recruiting MBA students. In those situations where students do not meet the minimum qualifications for admission to the MBA, the certificate provides an opportunity for those students to receive graduate education. The certificate is an additional program offering that is available within our current recruiting program.

8. External Review (if the proposed program is a graduate level program, follow the guidelines provided in *External Review of new Graduate Level Academic Programs* in addition to completing all of the above information)

Updated 10/3/16 glb/ch