|  |
| --- |
| Proposing New CSU Degree ProgramsBachelor’s and Master’s LevelsOffered through Self-Support and State-Support Modes |

1. **Program Type (Please specify any from the list below that apply—delete the others)**

b. Self-Support

i. New Program

1. **Program Identification**
2. *Campus*

California State University, Long Beach

1. *Full and exact degree designation and title (e.g. Master of Science in Genetic Counseling, Bachelor of Arts with a Major in History).*

Master of Science in Global Supply Chain Management

1. *Date the Board of Trustees approved adding this program projection to the campus Academic Plan.*

 January 18, 2013

1. *Term and academic year of intended implementation (e.g. Fall 2013).*

Fall 2014

1. *Total number of units required for graduation. This will include all requirements, not just major requirements.*

30 semester units to be completed in 18 months (three semesters)

1. *Name of the department(s), division, or other unit of the campus that would offer the proposed degree major program. Please identify the unit that will have primary responsibility.*

Management and Human Resources Management Department, College of Business Administration (Primary responsibility)

Department of Economics, College of Liberal Arts

1. *Name, title, and rank of the individual(s) primarily responsible for drafting the proposed degree major program.*

Chen, Ming, Ph.D., Assistant Professor in Operations and Supply Chain Management

Chong, Philip, Ph.D., Professor in Operations and Supply Chain Management

Reddy, Sabine, Ph.D., Associate Professor in Strategic Management

Steimetz, Seiji S.C., Associate Professor in Economics, Associate Chair of the Department of Economics

Strauss, Judy, Ph.D., Professor in Organizational Behavior, Chair of the Management and Human Resources Management Department

Su, Xuemei, Ph.D., Assistant Professor in Operations and Supply Chain Management

1. *Statement from the appropriate campus administrative authority that the addition of this program supports the campus mission and will not impede the successful operation and growth of existing academic programs.*

 Michael E. Solt, Dean of the College of Business Administration, endorsed the proposed program. His statement is enclosed.

1. *Any other campus approval documents that may apply (e.g. curriculum committee approvals).*

 The Graduate Program Committee in the College of Business Administration approved the proposed program on Feb 25, 2013.

1. *Please specify whether this proposed program is subject to WASC Substantive Change review. The campus is required to either attach a copy of the WASC Sub-Change proposal or submit that document in lieu of the CSU proposal format.*

Not applicable

1. *Optional: Proposed Classification of Instructional Programs and CSU Degree Program Code*

*Campuses are invited to suggest one CSU degree program code and one corresponding CIP code. If an appropriate CSU code does not appear on the system-wide list at: http://www.calstate.edu/app/resources.shtml, you can search CIP 2010 at http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55 to identify the code that best matches the proposed degree program. The Classification of Instructional Programs (CIP) is a National Center for Education Statistics (NCES) publication that provides a numerical classification and standard terminology for secondary and postsecondary instructional programs. The CSU degree program code (based on old HEGIS codes) and CIP code will be assigned when the program is approved by the Chancellor.*

 CSU Degree program code: 05105

 CIP: 52.0299

1. **Program Overview and Rationale**
2. *Rationale, including a brief description of the program, its purpose and strengths, fit with institutional mission, and a justification for offering the program at this time. The rationale may explain the relationship among the program philosophy, design, target population, and any distinctive pedagogical methods.*

Program Purpose and Description

The Master of Science in Global Supply Chain Management program is designed to provide its students with advanced and highly demanded training in modern supply chain management practices, analysis methods, technology applications, strategy development, and other relevant skills that will advance their career prospects and prepare them for lifelong learning in a global supply chain environment.

The program’s requirements comprise a 30-unit, lock-step sequence of courses covering three core components: (i) developing an advanced understanding of operations planning, supply chain management, logistics and transportation, project management, and leadership in a global supply chain environment, (ii) acquiring business analytics, statistics, and information-technology skills required to tackle real world supply chain management challenges, and (iii) demonstrating competency through a culminating (“capstone”) experience in which students interact with local industry leaders to identify improvement opportunities and develop data-driven solutions.

Strengths

Our rigorous curriculum will equip its graduates with advanced knowledge and skills needed to identify, analyze, and resolve complex supply chain challenges faced by global-scale businesses. This is accomplished through a unique combination of quantitative, technical, operational, strategic, and behavioral preparation.

Embedded in our curriculum is hands-on training with popular analytical tools and management software, providing highly employable skills. Our corporate-sponsored Supply Chain Lab gives students unlimited access to commercial management software such as SAP-ERP and Project Management. And our program is the only one in the region to offer a “Business Analytics” course, which responds to a strong demand for graduates who can manipulate large data sets and develop informed, data-driven business decisions.

The program is located within one of the world’s most active supply-chain environments. Most Fortune 500 companies have a presence in California and more than two dozen fortune 500 companies are headquartered within an 80-mile radius of the University. All fast-growing industries, such as health care, energy, entertainment, high-tech and business services have a large presence in the region. The nearby ports of Long Beach and Los Angeles handle about 40% of the nation’s containerized goods, and the surrounding region hosts a massive transportation and logistics industry, which accounts for approximately 600,000 of the region’s jobs. The demand for logisticians and supply chain management talents is exceptionally high in the region. The close proximity of the University to those businesses will give our program a distinct advantage in terms of networking and students job placement.

The College of Business Administration’s Graduate Program Office has an established student advising system that offers individualized service to these graduate students. The Graduate Program Office also administers an off-site orientation and provides in-depth career counseling in conjunction with the Career Development Center. The College’s scholarship fund, sponsored by government and local businesses, annually supports $120,000 to 140,000 in scholarships and graduate assistant positions, which will help to recruit outstanding students to our program.

Finally, our program is a joint effort between the Department of Management and Human Resources Management in the College of Business Administration and the Department of Economics in College of Liberal Arts. It thus consolidates resources and combines valuable expertise from both colleges and departments. Our joint faculty comprises nationally recognized scholars in the fields of business analytics, supply chain management, transportation and logistics, leadership, and strategic management, with strong publication records and active research programs. Most of our faculty have considerable professional or consulting experience in the field. The proposed program also benefits from a graduate program director with many years of experience in marketing and growing a graduate program.

Program Philosophy and Justification

The core justification for offering this program is to meet a high level of anticipated demand for specialized graduate training in a rapidly growing discipline. Our target population includes local graduating seniors, international students, and working professionals. Our general program philosophy is to graduate highly valued business leaders capable of excelling in a dynamic business environment.

Since 2006, the nation’s number of undergraduate programs in supply chain management has increased by over 25%, and most of that growth has occurred within only the last two years. Among universities in the West and South, 22 offer undergraduate degrees with specific concentrations in Supply Chain Management, fourteen of which belong to the California State University system. At this University, the number of undergraduates declaring a concentration in Operations and Supply Chain Management has grown by nearly 35% in only the last four years.

Meanwhile, the demand for supply chain professionals in related fields such as management analysis, logistics, and business analytics is expected to increase by 30% from 2010 to 2020. By then, the United States is expected to face a shortage of up to 190,000 people with the analytical expertise that this program is designed to offer.

In short, a large and growing body of undergraduate “feeder” programs, combined with substantial growth in supply chain management employment prospects, reveals a substantial pool of potential applicants for this degree program. And given the program’s unique strengths and its limited number of competing programs, strong enrollment projections are reasonably justified.

Alignment with the University’s Mission

As a globally-oriented program designed to advance its graduates’ career opportunities, it aligns with the University’s mission of being a “globally-engaged public university committed to providing highly-valued educational opportunities”. And by offering a curriculum that responds directly to employer skillset demands, it aligns with “CSULB’s core academic purpose to graduate students with highly-valued degrees”, as described in the University’s Strategic Plan.

1. *Proposed catalog description, including program description, degree requirements, and admission requirements. For master’s degrees, please also include catalog copy describing the culminating experience requirement(s).*

Degree Program Name

Master of Science in Global Supply Chain Management (MSGSCM)

Catalog Description

Supply chain management is the management of business activities ranging from product development, sourcing, production, and logistics, to managing the resources and capabilities needed to accomplish strategic objectives. The Master of Science in Global Supply Chain Management program provides its students with advanced and highly demanded training in modern supply chain management practices, analysis methods, technology applications, strategy development, and other relevant skills that will advance their career prospects and prepare them for lifelong learning in a global supply chain environment.

Degree requirements

The degree requirements comprise a 30-unit, lock-step sequence of courses covering three core components: (i) developing an advanced understanding of operations planning, supply chain management, logistics and transportation, project management, and leadership in a global supply chain environment, (ii) acquiring business analytics, statistics, and information-technology skills required to tackle real world supply chain management challenges, and (iii) demonstrating competency through culminating (“capstone”) experiences in which students interact with local industry leaders to identify improvement opportunities and develop data-driven solutions.

The ten courses (30 semester units) are all at graduate level, and are listed as follows:

|  |  |  |
| --- | --- | --- |
| Course Code  | Course Title  | Units |
| SCM 500 | Research Methods for Supply Chain Management | 3 |
| SCM 520 | Business Economics | 3 |
| SCM 611 | Operations Planning and Analysis | 3 |
| SCM 614 | Supply Chain Management | 3 |
| SCM 620 | Business Analytics | 3 |
| SCM 625 | Global Supply Chain Strategy | 3 |
| SCM 630 | Project Management | 3 |
| SCM 640 | Logistics and Transportation Management | 3 |
| SCM 657 | Seminar in Supply Chain Leadership | 3 |
| SCM 699 | Capstone Seminar in Global Supply Chain Management | 3 |

Program Admission Requirements:

Admission decisions are based on consideration of the applicant’s previous academic record, statement of purpose, resume, letters of recommendation, and performance on admission and English proficiency exams:

* A bachelor’s degree from a regionally accredited university
* A minimum GPA of 2.5 in the last 60 semester units attempted, and good standing at the last college attended
* A statement of purpose
* A recent resume
* Two letters of recommendation
* Admission and English Proficiency Exams
* A satisfactory score is required on either the Graduate Management Admission Test (GMAT) or the Graduate Record Exam (GRE) that demonstrates balance between verbal and mathematical skills.
* International applicants must take TOEFL and score a minimum of (i) 80 on the online version or (ii) 550 on the paper version of this examination.  A score of 4.0 or higher on the writing portion of the GMAT or GRE may be used to waive the TOEFL requirement for international applicants. IELTS will be accepted as a substitute to TOEFL if no individual section score is less than 6.
* Although there is no prerequisite coursework, students who performed reasonably well in math and statistics courses are more likely to succeed in this program. As a reference point, scores at the 60th percentile or higher on the quantitative section of the GMAT or GRE will be considered as satisfactory. In addition, students who have had coursework in business, economics, and industrial engineering are more likely to succeed in the program.

University Graduation Requirements:

* Applicants who are admitted to the program will be subject to the university’s Graduation Writing Assessment Requirement (GWAR). All entering students are required to take the GWAR Placement Exam (GPE), except students who have previously (1) received degrees from accredited colleges and universities in the United States; or (2) received degrees from an accredited non-US institution located in a country where English is a primary language of communication; or (3) achieved a score of 4.0 or higher on the writing portion of the GMAT or GRE.
* Completion of 30 units of approved graduate courses with a 3.0 GPA or better
* Completion of the SCM 699 Capstone course with a grade of “B” or better
* Satisfaction of all university graduation requirements

Catalog Description of Culminating Project

Course Number: SCM 699

Title: Seminar in Global Supply Chain Management

Prerequisites: Graduate standing in the final 12 units of the program.

Description: A Capstone Seminar that requires students to integrate knowledge and demonstrate technical skills. Students will research a real company, collect data, conduct analysis, and offer improvement recommendations. A written paper and oral presentation is required. Letter grade only (A-F).

1. **Curriculum**
2. *Describe goals for the (1) program and (2)* [*student learning outcomes*](http://www.calstate.edu/acadaff/sloa/index.shtml)*.*

Goals

The goal of this program is to provide its students with advanced and highly demanded training in modern supply chain management practices, analysis methods, technology applications, strategy development, and other relevant skills that will advance their career prospects and prepare them for lifelong learning in a global supply chain environment.

That goal directly aligns with the learning goals adopted by the College of Business Administration, where students must demonstrate competency in the following six areas:

* Critical thinking and problem solving skills
* Ethics
* Interpersonal, leadership and team skills
* Business functions
* Quantitative and technical skills
* Domestic and global environment

Student Learning Outcomes

Student learning outcomes are demonstrated by meeting the following learning objectives. Note that each of these learning objectives encompasses all six levels of Bloom’s Taxonomy, with emphases on levels 4, 5, and 6 (i.e. Analysis, Synthesis, and Evaluation).

1. *Critical Thinking & Problem Solving Skills.* Students will be able to demonstrate conceptual learning, critical thinking, and problem-solving skills. Specifically these skills include but are not limited to recognizing and solving problems in supply chain design, operations and strategy, model building, economic analysis, and general research skills.
2. *Ethics.* Students will be able to demonstrate awareness and knowledge of social responsibility, ethical leadership, and citizenship issues in the local, regional and world communities.
3. *Interpersonal, Leadership & Team Skills*. Students will be able to demonstrate interpersonal and leadership skills for working in a dynamic and diverse world, both independently and in a team environment.
4. *Business Functions*. Students will be able to demonstrate understanding of all business functions, practices and related theories and be able to integrate this functional knowledge in order to address business problems. Specifically these competencies include but are not limited to managing operations in manufacturing and service organizations, supply chain design, operations and strategy, and recognizing the link between all business functions and supply chain management.
5. *Quantitative & Technical Skills*. Students will possess quantitative and technological skills enabling them to analyze, interpret, and communicate business data effectively and to improve business performance. Specifically these skills include but are not limited to competency in statistical analysis, cost-benefit analysis, business analytics, and competency in supply chain technologies.
6. *Domestic & Global Environment*. Students will be able to demonstrate knowledge of today’s dynamic business environment (e.g., legal, regulatory, political, cultural, and economic), especially the links between our region and global business. Specifically these competencies include but are not limited to understanding institutions and market mechanisms that govern international trade and finance.
7. *Include plans for assessing Program Learning Outcomes or Goals and Student Learning Outcomes*.

The proposed MS in Global Supply Chain Management program has developed an assessment methodology to ensure continuous improvement and maintenance of program quality. The assessment components and procedures are similar to those currently in place for the existing graduate programs of the College of Business Administration and conform to the requirements put forth during the last accreditation by the Association to Advance Collegiate Schools of Business (AACSB). For each course a Standard Course Outline (SCO) has been developed. Each SCO specifies course student learning objectives and suggests appropriate student assessment methods. Table 4.1 shows how student learning outcomes for each course line up with the graduate program learning outcomes.

**Table 4.1: Courses and Learning Goals**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course Number | SCM 500 | SCM520 | SCM611 | SCM 614 | SCM 620 | SCM 625 | SCM 630 | SCM640 | SCM657 | SCM699 |
| Course Title | Research Methods for Supply Chain Mgmt. | Business Economics  | Operations Planning and Analysis | Supply Chain Mgmt. | Business Analytics | Global Supply Chain Strategy | Project Mgmt. | Logistics and Transportation Mgmt. | Seminar in in Supply Chain Leadership | Capstone Seminar in Global Supply Chain Mgmt. |
| Units | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 1. Critical Thinking
 | X | X | X | X | X | X | X | X | X | X |
| 1. Ethics
 |  |  | X |  |  | X |  |  | X | X |
| 1. Interpersonal, Leadership & Team Skills
 |  |  |  |  |  |  | X |  | X | X |
| 1. Business Functions
 |  |  | X | X |  | X |  |  | X | X |
| 1. Quantitative and Technical Skills
 | X | X | X | X | X |  | X | X |  | X |
| 1. Domestic and Global Environment
 |  |  |  |  |  | X |  | X | X | X |

Each learning goal is covered by at least three of the required courses. All courses cover the critical thinking learning goal and advanced level subject matter which fulfills AACSB Accreditation Standard 19 for Specialized Master’s Programs[[1]](#footnote-1):

The level of knowledge represented by the students of a specialized master’s level program is the:

* Application of knowledge even in new and unfamiliar circumstances through a conceptual understanding of the specialization.
* Ability to adapt and innovate to solve problems.
* Capacity to critically analyze and question knowledge claims in the specialized discipline.
* Capacity to understand the specified discipline from a global perspective.

According to AACSB, each learning goal should be assessed twice during five years. The following Table 4.2 shows a proposed assessment schedule.

**Table 4.2: Assessment Schedule for Five Cohorts**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Goal #1-Critical Thinking | Goal #2-Ethics | Goal #3-InterpersonalLeadershipTeam | Goal #4-BusinessFunctions | Goal #5-QuantTechnical | Goal #6-DomesticGlobal |
| Cohort 1 | Fall 2014 |  | SCM 611 |  | SCM 611 |  | . |
| Spring 2015 |  | SCM 657 | SCM 657 | SCM 614 | SCM 620 |  |
| Summer 2015 |  |  |  |  |  |  |
| Fall 2015 | SCM 699 |  |  |  |  |  |
| Cohort 2 | Fall 2015 |  |  |  |  |  |  |
| Spring 2016 | SCM 640 |  |  |  | SCM 500 | SCM 640 |
| Summer 2016 |  |  |  |  |  |  |
| Fall 2016 |  |  | SCM 630 |  |  | SCM 625 |
| Cohort 3 | Fall 2016 |  | SCM 611 |  | SCM 611 |  |  |
| Spring 2017 |  | SCM 657 | SCM 657 | SCM 614 | SCM 620 |  |
| Summer 2017 |  |  |  |  |  |  |
| Fall 2017 | SCM 699 |  |  |  |  |  |
| Cohort 4 | Fall 2017 |  |  |  |  |  |  |
| Spring 2018 | SCM 640 |  |  |  | SCM 500 | SCM 640 |
| Summer 2018 |  |  |  |  |  |  |
| Fall 2018 |  |  | SCM 630 |  |  | SCM 625 |
| Cohort 5 | Fall 2018 |  | SCM 611 |  | SCM611 |  |  |
| Spring 2019 |  | SCM 657 | SCM 657 | SCM 614 | SCM 620 |  |
| Summer 2019 |  |  |  |  |  |  |
| Fall 2019 | SCM 699 |  |  |  |  |  |

Each learning goal will be assessed in at least two different courses. While a variety of assessment methods are feasible, program faculty will design embedded standardized assignments to be administered in selected courses. Scoring rubrics will be used where appropriate. Program faculty will be responsible for designing appropriate assessment standards.

This program will use the same assessment practices as the other accredited CBA graduate programs. Students will be scored using three levels of performance:

* Exceeds Expectation: Percentage of students who exceed the expected assessment standard
* Meets Expectation: Percentage of students who meet the expected assessment standard
* Below Expectation: Percentage of students who are below the expected assessment standard.

According to current practice, it is expected that the percentage of students who exceed and meet expectations will be 70% or greater of all students. If this benchmark is not met, a plan to improve the student learning outcome and to “close the loop” must be developed and implemented. The cycle of assessing each goal twice in five years provides sufficient time for faculty to develop and implement curriculum improvements.

In addition to the embedded assessments, a student satisfaction survey will be administered at least twice in five years. To ensure that the curriculum continues to meet employer needs, the placement of graduated students will be tracked and potential employers will be surveyed periodically.

1. *Indicate total number of units required for graduation.*

The total number of units for degree completion is 30 semester units, to be completed in 18 months with an overall GPA of a least 3.0.

1. *Include a justification for any baccalaureate program that requires more than 120-semester units or 180-quarter units.*

Not applicable.

1. *If any formal options, concentrations, or special emphases are planned under the proposed major, identify and explain fully. Optional: You may propose a CSU degree program code and CIP code for each concentration that you would like to report separately from the major program, if the option is approximately equivalent to a degree currently listed on the CSU application-booklet degree program table. If an appropriate CSU code does not appear on the system-wide list at:* [*http://www.calstate.edu/app/resources.shtml*](https://cowebmail.calstate.edu/OWA/redir.aspx?C=fa6f8dbd94274118a5297c50fefaf9ea&URL=http%3a%2f%2fwww.calstate.edu%2fapp%2fresources.shtml)*, you can search CIP 2010 at* [*http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55*](https://cowebmail.calstate.edu/OWA/redir.aspx?C=fa6f8dbd94274118a5297c50fefaf9ea&URL=http%3a%2f%2fnces.ed.gov%2fipeds%2fcipcode%2fDefault.aspx%3fy%3d55) *to identify the code that best matches the proposed degree program.*

Not applicable

1. *List all requirements for graduation, including electives, for the proposed degree program, specifying catalog number, title, total units required for completion of the degree, major requirements, electives\*, and prerequisites or co-requisites (ensuring there are no “hidden prerequisites that would drive the total units required to graduate beyond the total reported in 4c above). Include proposed catalog descriptions of all new courses.*

There are 10 courses (30 units) to be taken in a lock-step sequence for completing the program. All courses are graduate level and require graduate level standing. They are shown in Tables 4.3 and 4.4 below.

**Table 4.3: Required Courses for Graduation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Catalog # | Course Title  | Units | Major Reqmt.? (Y/N) | Pre Req. or Co Req.? (Y/N) | Elective (Y/N) | New Course (Y/N) |
| SCM 500 | Research Methods for Supply Chain Management | 3 | Y | N | N | Y |
| SCM 520 | Business Economics | 3 | Y | N | N | Y |
| SCM 611 | Operations Planning and Analysis | 3 | Y | N | N | Y |
| SCM 614 | Supply Chain Management | 3 | Y | N | N | Y |
| SCM 620 | Business Analytics | 3 | Y | N | N | Y |
| SCM 625 | Global Supply Chain Strategy | 3 | Y | N | N | Y |
| SCM 630 | Project Management | 3 | Y | N | N | Y |
| SCM 640 | Logistics and Transportation Management | 3 | Y | N | N | Y |
| SCM 657 | Seminar in Supply Chain Leadership | 3 | Y | N | N | Y |
| SCM 699 | Capstone Seminar in Global Supply Chain Management | 3 | Y | N | N | Y |
|  | Total Units | 30 |  |  |  |  |

**Table 4.4: Course Descriptions**

|  |  |  |
| --- | --- | --- |
| Catalog # | Course Title  | Course Description |
| SCM 500 | Research Methods for Supply Chain Management | Applications of research methods to topics in supply-chain management and logistics, with an emphasis on descriptive and inferential statistics. Letter grade only (A-F). |
| SCM 520 | Business Economics | Development of microeconomic analytic tools and their application to problems in business and management. Topics include unconstrained and constrained economic optimization, capital theory, product and factor markets, market structures, forecasting, and cost-benefit analysis. Letter grade only (A-F). |
| SCM 611 | Operations Planning and Analysis | Advanced topics on work system design, business process reengineering, and using analytics to make operational decisions such as inventory control, capacity management and scheduling. Emerging operations practices in various industries and hands-on software experiences are included. Letter grade only (A-F). |
| SCM 614 | Supply Chain Management | Introduce the concepts, insights and tools for the effective management of the supply chain. Emphasize on both strategic and tactical decisions. Topics include inventory management, value of information, network design, distribution strategies, strategic alliance, revenue management, and international issues. Letter grade only (A-F). |
| SCM 620 | Business Analytics | Use advanced techniques such as predictive analytics, optimization, and simulation to make data-orientated decisions that improve operational effectiveness and supply chain coordination. Topics include business statistics, Solver, dynamic optimization, and case studies using Arena simulation. Letter grade only (A-F). |
| SCM 625 | Global Supply Chain Strategy | Current theory and principles of global business pertaining to problems of formulating and implementing strategies and tactics in multinational corporations. Special emphasis on management of supply chain operations across cultural, economic and political boundaries. Case studies, readings, and research report. Letter grade only (A-F). |
| SCM 630 | Project Management | This course focuses on the planning, implementation, and control of projects.  Coverage will include project definition, time and cost management, conflict resolution and team processes, scheduling and lifecycle management. Computerized network models and project management software packages are included. Letter grade only (A-F). |
| SCM 640 | Logistics and Transportation Management | Economic analysis of freight transportation, demand and cost factors, market structures, public policy and regulation, social and environmental impacts. Introduction to the logistics and economics of goods movement via ocean, surface, air, and intermodal strategies. Letter grade only (A-F). |
| SCM 657 | Seminar in Supply Chain Leadership | This course examines the effectiveness of numerous approaches to leadership, including both traditional and modern approaches, from both managerial and psychological viewpoints.  Leadership assessment and self-assessment are included to aid diagnosis and understanding of one's own and others' leadership styles and abilities.  Personality, situational factors, group processes, fellowship, and implications for leadership training are discussed. Letter grade only (A-F). |
| SCM 699 | Capstone Seminar in Global Supply Chain Management | A Capstone Seminar that requires students to integrate knowledge and demonstrate technical skills. Students will research a real company, collect data, conduct analysis and offer improvement recommendations. A written paper and oral presentation is required. Letter grade only (A-F). |

1. *List any new courses that are: (1) needed to initiate the program or (2) needed during the first two years after implementation. Include proposed catalog descriptions for new courses. For graduate program proposals, identify whether each new course would be at the graduate-level or undergraduate-level.*

 **Table 4.5: New Courses to appear in AY 2014-15 Catalog**

|  |  |  |
| --- | --- | --- |
| Catalog # | Course Title  | Course Description |
| SCM 500 | Research Methods for Supply Chain Management | Applications of research methods to topics in supply-chain management and logistics, with an emphasis on descriptive and inferential statistics. Letter grade only (A-F). |
| SCM 520 | Business Economics | Development of microeconomic analytic tools and their application to problems in business and management. Topics include unconstrained and constrained economic optimization, capital theory, product and factor markets, market structures, forecasting, and cost-benefit analysis. Letter grade only (A-F). |
| SCM 611 | Operations Planning and Analysis | Advanced topics on work system design, business process reengineering, and using analytics to make operational decisions such as inventory control, capacity management and scheduling. Emerging operations practices in various industries and hands-on software experiences are included. Letter grade only (A-F). |
| SCM 614 | Supply Chain Management | Introduce the concepts, insights and tools for the effective management of the supply chain. Emphasize on both strategic and tactical decisions. Topics include inventory management, value of information, network design, distribution strategies, strategic alliance, revenue management, and international issues. Letter grade only (A-F). |
| SCM 620 | Business Analytics | Use advanced techniques such as predictive analytics, optimization, and simulation to make data-orientated decisions that improve operational effectiveness and supply chain coordination. Topics include business statistics, Solver, dynamic optimization, and case studies using Arena simulation. Letter grade only (A-F). |
| SCM 625 | Global Supply Chain Strategy | Current theory and principles of global business pertaining to problems of formulating and implementing strategies and tactics in multinational corporations. Special emphasis on management of supply chain operations across cultural, economic and political boundaries. Case studies, readings, and research report. Letter grade only (A-F). |
| SCM 630 | Project Management | This course focuses on the planning, implementation, and control of projects.  Coverage will include project definition, time and cost management, conflict resolution and team processes, scheduling and lifecycle management. Computerized network models and project management software packages are included. Letter grade only (A-F). |
| SCM 640 | Logistics and Transportation Management | Economic analysis of freight transportation, demand and cost factors, market structures, public policy and regulation, social and environmental impacts. Introduction to the logistics and economics of goods movement via ocean, surface, air, and intermodal strategies. Letter grade only (A-F). |
| SCM 657 | Seminar in Supply Chain Leadership | This course examines the effectiveness of numerous approaches to leadership, including both traditional and modern approaches, from both managerial and psychological viewpoints.  Leadership assessment and self-assessment are included to aid diagnosis and understanding of one's own and others' leadership styles and abilities.  Personality, situational factors, group processes, fellowship, and implications for leadership training are discussed. Letter grade only (A-F). |
| SCM 699 | Capstone Seminar in Global Supply Chain Management | A Capstone Seminar that requires students to integrate knowledge and demonstrate technical skills. Students will research a real company, collect data, conduct analysis and offer improvement recommendations. A written paper and oral presentation is required. Letter grade only (A-F). |

h. *Attach a proposed course-offering plan for the first three years of program implementation, indicating likely faculty teaching assignments.*

**Table 4.6: Proposed Course-Offering Plan for First Three Years**

|  |  |  |  |
| --- | --- | --- | --- |
| Semester | Cohort # | Course | Faculty who could possible teach |
| Year 1: Fall  | 1 | SCM 500 | Research Methods for Supply Chain Management | Steimetz |
| SCM 611 | Operations Planning and Analysis | Su; Chen |
| SCM 520 | Business Economics | Yamarik |
| Year 1: Spring  | 1 | SCM 614 | Supply Chain Management | Chen; Su |
| SCM 620 | Business Analytics | Chen, H: Su |
| SCM 640 | Logistics and Transportation Management | Steimetz |
| SCM 657 | Seminars in Supply Chain Leadership | Scherwin |
| Year 2: Fall | 1 | SCM 625 | Global Supply Chain Strategy | Reddy |
| SCM 630 | Project Management | Kukalis; Chen |
| SCM 699 | Capstone Seminar in Global Supply Chain Management | Team teaching |
| 2 | SCM 500 | Research Methods for Supply Chain Management | Steimetz |
| SCM 611 | Operations Planning and Analysis | Su; Chen |
| SCM 520 | Business Economics | Yamarik |
| Year 2: Spring | 2 | SCM 614 | Supply Chain Management | Chen; Su |
| SCM 620 | Business Analytics | Chen, H: Su |
| SCM 640 | Logistics and Transportation Management | Steimetz |
| SCM 657 | Seminars in Supply Chain Leadership | Scherwin |
| Year 3: Fall | 2 | SCM 625 | Global Supply Chain Strategy | Reddy |
| SCM 630 | Project Management | Kukalis; Chen |
| SCM 699 | Capstone Seminar in Global Supply Chain Management | Team teaching |
| 3 | SCM 500 | Research Methods for Supply Chain Management | Steimetz |
| SCM 611 | Operations Planning and Analysis | Su; Chen |
| SCM 520 | Business Economics | Yamarik |
| Year 3: Spring | 3 | SCM 614 | Supply Chain Management | Chen; Su |
| SCM 620 | Business Analytics | Chen, H: Su |
| SCM 640 | Logistics and Transportation Management | Steimetz |
| SCM 657 | Seminars in Supply Chain Leadership | Scherwin |

1. *For master’s degree proposals, include evidence that program requirements conform to the minimum requirements for the culminating experience, as specified in* [*Section 40510*](http://www.calstate.edu/APP/documents/Title5_MastersDegree_requirements.doc) *of* [*Title 5 of the California Code of Regulations*](http://government.westlaw.com/linkedslice/search/default.asp?RS=GVT1.0&VR=2.0&SP=CCR-1000&tempinfo=TOC)*.*

The culminating experience of the proposed Master program is SCM 699: Capstone Seminar in Global Supply Chain Management. This course meets and exceeds the requirements by Title 5 of the California Code of Regulations, Section (b)(3)(B).[[2]](#footnote-2)

In SCM 699, the Capstone Seminar in Global Supply Chain Management, students will research a real company, collect data, conduct analysis and offer improvement recommendations. Corporations that routinely provide us with job shadow opportunities, speakers, and internships are willing to support the Capstone Seminar by providing research projects in their organizations. Furthermore, the active Operations and Supply Chain Management Advisory Board members (including members from, for example, the Ports of Long Beach and Los Angeles, UPS, Toyota, Trimodal, and Transport Solutions) are enthusiastic about the MS program and willing to assist faculty in locating organizations that are a good match to students’ research interests. The class time will be allocated among company visits, internships, classroom instruction, and consulting with instructors. The sequential tasks as listed below are integral to the culminating experience.

1. Gain knowledge of supply chain related business practices by observing operations in a local firm as well as interviewing professionals from the local firm.
2. Document the current management practices.
3. Identify problems or opportunities related to operations and supply chain management.
4. Collect data.
5. Analyze the data. The analysis can be mathematical model construction based on established theories in the field and rigorous assumption testing. It can also be statistical analysis that identifies patterns of business activities/results, and projects the pattern into the future to assist in decision-making.
6. Write a carefully crafted report that details the project's significance, the nature of the challenge, the objectives, the methodology and recommended solutions justified by thorough qualitative and quantitative analysis. In this task, students need to demonstrate comprehensive understanding of the managerial issues (people, product, process) facing a supply chain management professional as well as demonstrate proficiency in applying analytical models in the field. Further, students will be challenged to demonstrate critical thinking skills and find ways to bridge the gap between theory and practice.
7. Give an oral presentation to classmates, faculty, and local industry participants. Students need to be able to defend their analysis and recommendations.
8. A grade of “B” or better is required in this course to graduate. This requirement operates independently of the student’s overall GPA.
9. *For graduate degree proposals, cite the corresponding bachelor’s program and specify whether it is (a) subject to accreditation and (b) currently accredited.*

The proposed master degree program corresponds to the Bachelor of Science in Business Administration at the College of Business Administration, California State University, Long Beach. It is currently accredited by Association of Advanced Collegiate School of Business (AACSB).

1. *For graduate degree programs, specify admission criteria, including any prerequisite coursework.*

Admission decisions are based on consideration of the applicant’s previous academic record, statement of purpose, resume, letters of recommendation, and performance on admission and English proficiency exams:

* A bachelor’s degree from a regionally accredited university
* A minimum GPA of 2.5 in the last 60 semester units attempted, and good standing at the last college attended
* A statement of purpose
* A recent resume
* Two letters of recommendation
* Admission and English Proficiency Exams
* A satisfactory score is required on either the Graduate Management Admission Test (GMAT) or the Graduate Record Exam (GRE) that demonstrates balance between verbal and mathematical skills.
* International applicants must take TOEFL and score a minimum of (i) 80 on the online version or (ii) 550 on the paper version of this examination.  A score of 4.0 or higher on the writing portion of the GMAT or GRE may be used to waive the TOEFL requirement for international applicants. IELTS will be accepted as a substitute to TOEFL if no individual section score is less than 6.
* Although there is no prerequisite coursework, students who performed reasonably well in math and statistics courses are more likely to succeed in this program. As a reference point, scores at the 60th percentile or higher on the quantitative section of the GMAT or GRE will be considered as satisfactory. In addition, students who have had coursework in business, economics, and industrial engineering are more likely to succeed in the program.
1. *For graduate degree programs, specify criteria for student continuation in the program.*

Applicants who are admitted to the program will be subject to the university’s Graduation Writing Assessment Requirement (GWAR). All entering students are required to take the GWAR Placement Exam (GPE), except students who have previously (1) received degrees from accredited colleges and universities in the United States; or (2) received degrees from an accredited non-US institution located in a country where English is a primary language of communication; or (3) achieved a score of 4.0 or higher on the writing portion of the GMAT or GRE.

Per the requirements in section 4 of Title 5 Section 40510, students in the program must sustain “…A grade point average of 3.0 (grade of B) or better in all courses taken to satisfy the requirements for the degree, except that a course in which no letter grade is assigned shall not be used in computing the grade point average….”.

m. *For undergraduate programs, specify planned provisions for articulation of the proposed major with community college programs.*

Not applicable.

n. *Describe advising “roadmaps” that have been developed for the major.*

**Table 4.7: MS in Global Supply Chain Management Advising Roadmap**[[3]](#footnote-3)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fall** | **Units** | **Spring** | **Units** | **Fall** | **Units** |
| SCM 500 | 3 | SCM 620 | 3 | SCM 630 | 3 |
| SCM 611 | 3 | SCM 614 | 3 | SCM 625 | 3 |
| SCM 520 | 3 | SCM 657 | 3 | SCM 699 | 3 |
|  |  | SCM 640 | 3 |  |  |
| Total Units | 9 |  | 12 |  | 9 |

**Figure 4.1: Degree Completion Roadmap**



1. *Describe how accreditation requirements will be met, if applicable, and anticipated date of accreditation request (including the WASC Substantive Change process).*

Because the proposed Master of Science in Global Supply Chain Management degree program is substantially housed by the College of Business Administration (CBA), it is subject to the Association to Advance Collegiate School of Business (AACSB) accreditation standards. Accreditation is conferred at the College/Business School level and includes all programs housed within the college. Accredited colleges must meet three sets of standards: strategic planning standards, participants standards (faculty qualifications and sufficiency), and assurance of learning standards.

The CBA has a well-developed strategic planning process and a strategic plan.[[4]](#footnote-4) The assessment activities needed to demonstrate assurance of learning are detailed above in section 4.b. of this document.

AACSB requires that for each program, sixty percent (60%) of annual teaching is delivered by participating faculty. Participating faculty are faculty members who actively engage in activities of the College that go beyond their direct teaching responsibilities. Participating faculty members are considered to be long-term faculty, whether or not their appointment is full or part time. A survey was conducted which shows there are sufficient participating faculty to meet the faculty sufficiency requirement. Other elements of the participants standard are already clearly met by the CBA as evidenced by its current accreditation.

*Accreditation Note for Master’s degree program proposals:*

*If subject to accreditation, establishment of a master’s degree program should be preceded by national professional accreditation of the corresponding bachelor’s degree major program.*

The proposed Master’s Program in Global Supply Chain Management is subject to the Association to Advance Collegiate School of Business (AACSB) accreditation. An extensive accreditation maintenance review is conducted every five years. The College of Business Administration at CSULB is currently accredited by AACSB. The next maintenance review will take place during AY 2013-2014.

# Societal and Public Need for the Proposed Degree Major Program

# *List of other California State University campuses currently offering or projecting the proposed degree major program; list of neighboring institutions, public and private, currently offering the proposed degree major program.*

We surveyed 54 major universities in California, including all University of California (UC) campuses, California State University (CSU) campuses, and other major universities in the region. To the best of our knowledge, only two universities currently offer similar programs. The University of Southern California is in the process of establishing a Master of Science program in Global Supply Chain Management, and the University of San Diego offers a Master of Science program in Supply Chain Management. In addition, there are several CSU campuses that offer options, concentration, or specializations in operations or supply chain management via their Master of Business Administration (MBA) programs. No UC campuses offer such specialized options in their MBA programs.

The University of Southern California Master of Science program in Global Supply Chain Management program targets managers and professionals currently working in or planning to work in the field of Supply Chain Management.[[5]](#footnote-5) The program requires 24 units to be completed within 16 months on a part-time basis. International students must complete the program online. The total cost of the program is estimated to be $40,000.

The University of San Diego Master of Science program in Supply Chain Management is web-based and targets high-performing managers and executives who have established track records in one or more supply-chain management functions.[[6]](#footnote-6) The program requires 36 units to be completed within 26 months for each cohort. Students spend only 20 days on campus and complete the remaining course online. The total cost of the program is estimated to be $46,000

The remaining similar programs are options or concentrations within MBA programs. The College of Business and Economics at California State University, East Bay (CSUEB) offers a multi-year evening MBA program with a special option in operations and supply chain management.[[7]](#footnote-7) The program has a 16-course curriculum run on a quarter system. It primarily targets working professionals and allows the students to complete the program at their own pace. Students typically take 2-3 courses each quarter. In addition to general course requirements for all MBA students, those who choose this option must take one required course and three electives in operations and supply chain management.

The College of Business and Public Administration at the California State University, San Bernardino (CSUSB) offers a traditional MBA program with a concentration in Supply Chain Management.[[8]](#footnote-8) The MBA program consists of 48 quarter units (12 courses) designed for both full-time students and working professionals. Among the 12 courses, seven are required for all MBA students, while the remaining five are concentration courses.

The College of Business Administration at San Diego State University offers an MBA program with a specialization in supply chain management.[[9]](#footnote-9) The MBA program requires 30-48 units. Those who plan to earn a specialization in supply chain management must complete at least 12 units in that specific area.

## *Differences between the proposed program and programs listed in Section 5a above.*

Compared to the two existing programs in the region, i.e., the Master of Science program in Global Supply Chain Management at the University of Southern California and the Master of Science program in Supply Chain Management at the University of San Diego, our proposed program primarily differs in the following aspects. First of all, unlike the other two programs which are either a combination of face-to-face and online instruction, or purely- online instruction, our program focuses on face-to-face instruction and is cohort-based. Our program highlights the importance of interaction between students and faculty, and provides substantially greater opportunities for hands-on learning.

Second, both existing programs in the region target working professionals. Our proposed program, on the other hand, not only targets working professionals in the region but, importantly, also targets graduating seniors in related fields. The resulting diversity in student population will be especially compelling to international students, particularly those from Asia. Our curriculum is designed to accommodate the needs of all three groups of potential students. Moreover, we anticipate that our program will become one of few available programs in the Western region that caters to the needs of international students.

Third, our program is a joint effort between the Department of Management and Human Resources Management in the College of Business Administration and the Department of Economics in the College of Liberal Arts. It thus consolidates resources and combines valuable expertise from both colleges and departments. Our joint faculty comprises nationally recognized scholars in the fields of business analytics, supply chain management, transportation and logistics, leadership, and strategic management, with strong publication records and active research programs. Most of our faculty have considerable professional or consulting experience in the field. The proposed program also benefits from a graduate program director with many years of experience in marketing and growing a graduate program.

Fourth, our curriculum is markedly different from those offered by the other two specialized programs. Table 5.1 below provides a comparison of their curricula with ours. The courses listed in boldface type highlight specific differences in course offerings. Notably, our curriculum requires three quantitative methods courses, namely “Research Methods for Supply Chain Management”, “Business Economics”, and “Business Analytics”. Those courses not only train students to think critically, identify, analyze, and resolve complex business problems, they also form a solid foundation for those who wish to pursue a doctoral degree in the field. This curricular design reflects our goal of preparing students for lifelong learning in a global supply chain environment.

Finally, we emphasize equipping our students with employable skill sets. Among the competing, specialized master’s degree programs in the West and South, ours provides the greatest breadth of information technology and software training, which is embedded in our curriculum. Six of our ten courses exploit modern software applications and even educational games. For example, SAP’s Enterprise Resource Planning, the most widely-adopted management system in the industry, is used extensively in our “Operations Planning and Analysis” course. Such hands-on experience with SAP-ERP is demanded by a majority of global-scale employers.

**Table 5.1: Curriculum Comparison**

|  |  |
| --- | --- |
| **MS in Global Supply Chain Management, California State University, Long Beach**(30 units) | * **Research Methods for Supply Chain Management (3)**
* **Business Economics (3)**
* Operations Planning and Analysis (3)
* Supply Chain Management (3)
* **Business Analytics (3)**
* Global Supply Chain Strategy (3)
* Project Management (3)
* Logistics and Transportation Management (3)
* Seminar in Supply Chain Leadership (3)
* Capstone Seminar in Global Supply Chain Management (3)
 |
| MS in Global Supply Chain Management, University of Southern California(24 units) | * Operations Management (3)
* Enterprise Systems (3)
* Global Supply Chain Management in International Settings (1.5) (travel to Singapore)
* Supply Chain Management (3)
* Logistics Management (3)
* Sustainable Supply Chains (1.5)
* Sourcing and Supplier Management (1.5)
* Project Management (3)
* Global Supply Chain Management in International Settings (1.5) (travel to Los Angeles)
* International Perspectives in Global Supply Chain Management (3.0)
 |
| MS in Supply Chain Management, University of San Diego(36 units) | * Supply Management (3)
* Operational Processes (3)
* Logistics & Supply Chain Systems (3)
* Strategic Cost Management (3)
* International Negotiations (3)
* Project Management Principles (3)
* Leadership & Ethics for Supply Chain Managers (3)
* World Class Supplier Development (2)
* Organization Change Management (2)
* Global Supply Management (1)
* Law, Ethics & Contracts for Supply Chain Management (2)
* Finance for Supply Chain Managers (1)
* Marketing in a Supply Chain Management Context (1)
* Value Network Management (3)
* Advanced Integrative Project (3)
 |

## *List of other curricula currently offered by the campus that are closely related to the proposed program.*

Our University’s Center for International Trade & Transportation (CITT) offers a certificate program called the Global Logistics Specialist (GLS) Professional Designation Program. The program follows a self-paced format, where students are expected to complete six courses plus a capstone project within six months to two years. All courses are taught by industry professionals (i.e. none with academic affiliations). The program offers three options: (1) a traditional face-to-face instruction; (2) online instruction; (3) an option that is designed specifically for international students, jointly hosted by CSULB’s American Language Institute. It is important to emphasize that this program strictly offers a professional certificate. In contrast, our program is an academic one that provides rigorous, graduate-level training, leading to a Master of Science degree.

## *Community participation, if any, in the planning process. This may include prospective employers of graduates.*

The department of Management and Human Resources Management maintains a close relationship with major local employers such as Toyota, United Parcel Service (UPS), the Port of Long Beach, and the Port of Los Angeles. The department established its Operations and Supply Chain Management (OSCM) Advisory Board in the summer of 2011. That board comprises industry professionals from the companies mentioned above, along with several from other local private logistics companies. Board members meet twice each semester and are actively involved in the development and improvement of our undergraduate program in Operations and Supply Chain Management. The board members also serve as guest speakers, sponsor events, provide internship opportunities, guide curricular development, and serve in other important capacities. Board members have also been actively involved in discussions about developing our proposed master’s degree program, and their response to the program’s proposal has been very favorable.

## *Applicable workforce demand projections and other relevant data.*

Supply chain management is a relatively new discipline compared to other business disciplines. Rather than focusing on a specific set of job tasks, supply chain management professionals typically undertake an extensive range of duties, which often involve overseeing a firm’s entire operational structure. Potential employment opportunities exist in a variety of industries and organizations, ranging from traditional manufacturers and retailers to logistics service providers, high-tech firms, healthcare enterprises, entertainment firms, and government agencies. Specific positions include supply chain manager, supply manager, strategic sourcing manager, project manager, operations manager, inventory manager, distribution manager, warehouse manager, transportation specialist, new product procurement planner, pricing analyst, business process specialist, Six Sigma/Lean Operations manager, among many others. At more advanced levels, positions include operations director, chief operating officer, vice president of supply chain management, vice president of strategic sourcing, and so forth. In a broader sense, supply chain management positions fall into the category of professional and business services.

According to the Bureau of Labor Statistics (BLS) Employment Outlook Report (2010 – 2020): “*The health care and social assistance sector and the professional and business services sector will account for almost half the projected job growth from 2010 to 2020*.”[[10]](#footnote-10)

Due to the wide applicability of technical methods in the field, and the interdisciplinary nature of supply chain management, possible job positions span a wide range of industries and are dispersed across several occupation categories defined by Bureau of Labor Statistics (BLS). That being said, some SCM positions are quite specific and were created only recently as companies begin to recognize the importance of SCM specialists. As a result, the employment outlook reported by the BLS only partially reflects the growth in job prospects within this area.

The three job categories discussed below, as defined by the BLS, represent about 60% of all job opportunities in SCM. A brief discussion of each sheds light on future employment trends in supply chain management.

The first and most relevant job category is “Management Analysts”, often called management consultants, who propose ways to improve an organization's efficiency. They advise managers on how to make their organizations more profitable through reduced costs and increased revenues. The projected number of new positions in this category from 2010 to 2020 is 157,200, with a growth rate of 22%. By comparison, the average growth rate across other job categories is 14%.

The second relevant job category is “Logisticians”, who analyze and coordinate an organization’s supply chain—the system that moves a product from supplier to consumer. They manage the entire life cycle of a product, which includes how a product is acquired, distributed, allocated, and delivered. The projected number of new jobs from 2010 to 2020 in this category is 27,800, with a growth rate of 27%.

The third relevant job category is “Cost Estimators”, who collect and analyze data to estimate the time, money, resources, and labor required for product manufacturing, construction projects, or services. Some specialize in a particular industry or product type. The projected number of new jobs from 2010 to 2020 in this category is 67,500, with a growth rate of 36%.

Those three job categories reveal 252,500 new jobs from 2010-2020, at a combined growth rate of 25%, as reflected in Table 5.2 below.

 **Table 5.2: Job Outlook for SCM Professionals[[11]](#footnote-11)**

|  |  |  |  |
| --- | --- | --- | --- |
| Occupation | Number of Jobs 2010 | Job Outlook2010-20  | Employment Change 2010-20 |
| Management Analysts | 718,800 | 22% | 157,200 |
| Logisticians | 108,900 | 26% | 27,800 |
| Cost Estimators | 185,400 | 36% | 67,500 |

The job outlook for SCM professionals projected by the State of California is even more promising due to California’s high density of economic activities and its concentration of job opportunities for logisticians. According to California Employment Development Department’s first-quarter projections for 2012, the projected number of new jobs in California for 2010-2020 for “Management Analysts”, “Logisticians” and “Cost Estimator” is 30,400, with an overall growth rate of 26%, as shown in Table 5.3 below. Moreover, other SCM related jobs such as “operations research analysts”, “purchasing managers” and “production managers” are projected to grow steadily as well.

**Table 5.3: State of California Job outlook for SCM professionals[[12]](#footnote-12)**

|  |  |  |
| --- | --- | --- |
| Occupation | 2020 Projected Employment(Change from 2010) | % Change  |
|

|  |
| --- |
| Management Analysts |

 | 101,400 (+18,600) | 22.5% |
| Logisticians | 18,200 (+4,600) | 33.8% |
| Cost Estimators | 29,600 (+7,200) | 32.1% |
|

|  |
| --- |
| Operations Research Analysts |
|  |

 | 9,000 (+1,100) | 13.9% |
|

|  |
| --- |
| Purchasing Managers |

 | 9,100 (+1,000) | 12.3% |
|

|  |
| --- |
| Industrial Production Managers |

 | 19,600 (+1,800) | 10.1% |

It is important to note that our program also prepares students to be placed in a variety of additional, related positions such as customer service, negotiation, contract management, new division development, among many others.

1. **Student Demand**
	1. *Provide compelling evidence of student interest in enrolling in the proposed program. Types of evidence vary and may include national, statewide, and professional employment forecasts and surveys; petitions; lists of related associate degree programs at feeder community colleges; reports from community college transfer centers; and enrollments from feeder baccalaureate programs, for example.*

In this section, we provide specific and compelling evidence of student interest in the proposed program. The evidence is presented from the following perspectives: 1) enrollments from feeder baccalaureate programs; 2) job outlook; 3) salary attractiveness; 4) the influx of international students; 5) competition from other graduate programs. For each of the above, we provide multiple data sources including national data, regional data, local and statewide data, and data generated by professional organizations and associations in the field.

Enrollments from Feeder Baccalaureate Programs

Supply chain management (SCM) is not a predominant business school major, but job openings, attractive salaries, and the prospect for advancement have caused the academic community to take notice, with more students majoring in the subject and more programs offering courses and concentrations in it.

Schools all over the country have reported significant enrollment increase in SCM at the undergraduate level. According to the Association to Advance Collegiate Schools of Business (AACSB), the number of undergraduate SCM programs has increased 25 percent since 2006. Almost half of that growth occurred during the 2009-10 school year (BusinessWeek, Nov. 2011). The launch of the Annual Supply Chain Management Director’s Conference in 2011 offers further evidence that the academic community is stepping up its effort to expand education in SCM.

A search of 54 national universities in the West and South, including all California State University and University of California campuses, found that all of those universities offer operations and SCM related courses at the undergraduate level, and 22 of them have well-established concentrations in the area, revealing a substantial pool of potential applicants for the MSGSCM program.

In the California State University system, 14 of its 23 campuses offer a major option in SCM/Operations, with declared majors totaling between 1600-2100 on a regular basis. This potentially represents a critical mass for feeding our graduate program.

Promising Job Outlook

There is compelling evidence that Supply Chain Management majors are in great demand. According to a survey conducted by the National Association of Colleges & Employers, only 45.4% of Business Administration majors and 46.9% of Accounting majors from the Class of 2010 received one or more job offers. By Comparison, a 2009 survey of graduating Supply Chain majors at Arizona State University’s Carey School of Business showed that 64% reported having a job after graduation.

At the graduate level, the Carey School reports a 100% job-placement rate for master’s students who specialized in SCM and graduated in 2011; in contrast, the job-placement rate was only 75% among those who specialized in marketing.

Meanwhile, in 2012, Boeing provided more than 100 internship positions exclusively in Operations and Supply Chain Management on the West Coast alone.

According to McKinsey & Company, by 2018, the United States will face a shortage of 140,000 to 190,000 people with the analytical expertise that the MSGSCM program aims to provide.

At the national level, the Bureau of Labor Statistics provides further, compelling evidence of a favorable job outlook for SCM graduates. The three occupations defined by BLS---“Management Analysts”, “Logisticians” and “Cost Estimators” represents about 60% of SCM job opportunities. Table 5.2 shows that there will be 252,500 new jobs in these three categories from 2010-2020, at a combined growth rate of 25%.

The job outlook for SCM professionals projected by the State of California is even more promising due to California’s high density of economy activities and its concentration of job opportunities for logisticians. According to California Employment Development Department’s first-quarter projections for 2012, the projected number of new jobs in California for 2010-2020 for the above three categories is 30,400, with an overall growth rate of 26%, as shown in Table 5.3. Besides, other SCM related jobs such as “operations research analysts”, “purchasing managers”, and “production managers”, are projected to grow at healthy rate (Table 5.3). Although no statistics are available, new SCM positions such as “contract management” and “corporate expansion and development” have been raved by professional organizations for their great job outlook.

Attractive salaries

The Institute for Supply Chain Management’s 2011 Survey shows that the average salary for supply chain management professionals is $103,664, up from $98,200 a year earlier. The average salary of SCM professionals with five or fewer years of experience is $83,689, up from $72,908 in 2010, representing an increase of nearly 15%. Another survey conducted independently by Council for Supply Chain Management Professionals (CSCMP) supports this finding with an average salary of $107,802 in 2011. In that survey, 10% of the 669 respondents reported a raise of 10% or more in a 12-month period, and nearly half of the respondents reported a modest, but sustainable salary increase. Those data are tabulated in Table 6.1 below.

**Table 6.1: Surveyed Salary Data for SCM professionals**

|  |  |  |  |
| --- | --- | --- | --- |
| Data Source  | 2010 Mean Salary |  2011 Mean Salary | % Change |
| Institute for Supply Chain Management | $98,200 | $103,664 | 5.56% |
| Council for Supply Chain Management Professionals | n/a | $107,802 | n/a |

Statistics and projections provided by the State of California’s Employment Development Department are consistent with those discussed above, as shown in Table 6.2 below.

**Table 6.2: California Salary Statistics[[13]](#footnote-13)**

|  |  |  |  |
| --- | --- | --- | --- |
| Occupation | Hourly Wage Mean | Hourly Wage 75th Percentile | Annual Salary75th Percentile |
|

|  |
| --- |
| Management Analysts |

 | $44.85 | $54.05 | $112,424 |
| Logisticians | $39.49 | $47.49 | $98,779 |
| Cost Estimator  | $34.01 | $42.43 | $88,254 |
|

|  |
| --- |
| Operations Research Analysts |
|  |

 | $41.39 | $50.74 | $105,539 |
|

|  |
| --- |
| Purchasing Managers |
|  |
|  |

 | $55.25 | $67.45 | $140,296 |
|

|  |
| --- |
| Industrial Production Managers |
|  |
|  |

 | $50.37 | $60.51 | $125,860 |

Influx of International Students

Our program expects a strong demand from international students and, according to the Institute of International Education, the demand for graduate-level programs in the United States from international students continues to grow.[[14]](#footnote-14) For Fall 2011, 53% of all surveyed institutions reported increases in new international student enrollments. Among institutions enrolling over 1,000 International Students, the reported increase in enrollments for 2011 was 80% compared to 65% in 2010. The top three countries of origin are China, India, and South Korea. Among those, China shows the strongest demand growth with an increase of 67% over the past five years for graduate programs alone (an increase from 53,047 students to 88,429 students).

Table 6.3 below reports annual enrollments of international students by field of study, and by country of origin for graduate students. Specific data are not available for SCM fields, but the growth in “Business and Management” enrollment can be used as a guideline for SCM enrollment growth, given that SCM is typically a concentration within Business and Management. Note also that Business and Management continues to be the leading field of study.

**Table 6.3: Number of International Students in United States from 2007-2012[[15]](#footnote-15)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **2007-08** | **2008-09** | **2009-10** | **2010-11** | **2011-12** |
| Total International Students | 623,805 | 671616 | 690,923 | 723,277 | 764,495 |
| **Field of Study** |  |  |  |  |  |
| Business and Management | 110,908 | 138,565 | 145,401 | 155,769 | 166,733 |
| Engineering | 96,133 | 118,980 | 127,443 | 135,592 | 141,285 |
| Math and Computer Sciences | 46,313 | 56,367 | 60,800 | 64,588 | 71,364 |
| **Graduate Programs** |  |  |  |  |  |
| China | 53,047 | 57,452 | 66,453 | 76,830 | 88,429 |
| India | 68,069 | 71,019 | 68,290 | 63,624 | 59,014 |
| South Korea | 24,697 | 25,463 | 23,386 | 22,486 | 21,260 |

Based on our institutional knowledge, we expect that employers in Asian countries, especially China and India, will have the strongest demand for Logistics and Supply Chain Management talents. In the next ten years, the two countries will inject a substantial amount of capital into their logistics systems toward becoming vital links in global supply chains. State and city governments all over China are already blueprinting and building their regional logistics centers, and logisticians with advanced knowledge are paid high salaries, given the shortage of such talents. Our specialized and in-depth supply chain curriculum is well positioned to attract a substantial number of international students from those two countries in particular. Moreover, our faculty is active in international education with well-established connections to Asian universities, governments, and businesses. As such, we can reasonably expect our program to be well recognized and received by international students.

Competition from Other Graduate Programs

Competition for our proposed MSGSCM program is minimal at this stage. Among the 54 national universities in the West and South, only two offer a Master of Science degree specifically in Supply Chain Management, and they primarily target working professionals, which is a subset of our target student body. Three other universities (all in CSU system) offer concentrations at the graduate level.

Our program offers a specialized Master of Science degree with comprehensive and in-depth training in the field, which yields a competitive advantage over other graduate programs that primarily train generalists (with SCM as only a concentration). As shown in Figure 4 below, across 482 AACSB accredited schools for the academic year 2011-2012, there was a 3.1% growth in the number of students enrolled since 2007-2008 at the master’s generalist level. In contrast, the enrollment growth in specialized master’s programs was a more dramatic 26.7% (from 71,159 to 90,189). See Figure 6.1 below for a graphical depiction of those trends.

**Figure 6.1: The Demand Advantage of Offering a Specialized Master’s Degree Program[[16]](#footnote-16)**



Furthermore, our campus is uniquely situated in Southern California — at the heart of one of the world’s largest trading hubs. The Port of Long Beach and the Port of Los Angeles, collectively known as the San Pedro Bay Ports, handle about 40% of the nation’s containerized goods and rank sixth in the world in terms of container traffic. As such, the surrounding region hosts a massive transportation and logistics industry, which accounts for approximately 600,000 of the region’s jobs. A 2009 report predicted a doubling of container traffic at Los Angeles/Long Beach by 2030. A proposed Pacific free-trade agreement could boost maritime trade further. The close proximity of California State University, Long Beach to the ports and the surrounding industry puts the MSGSCM program in a unique position to network with industry leaders and assess their management needs, which generate good job placements. The current Operations and Supply Chain advisory board members support our program without reservation, and have expressed their intention to provide corporate sponsorships for internships and student advising.

Affordability is another competitive advantage. Due to economies of scale in administration, student advising and other services, we can effectively run this new program at a low cost. We charge $25,500 for tuition, as compared to $35,000-$43,000 charged by other universities.

* 1. *Identify how issues of diversity and access to the university were considered when planning this program.*

The proposed MSGSCM Program will be offered through the University’s College of Continuing and Professional Education (CCPE) and thus will be in line with the policies set forth by CCPE with regard to issues of diversity and access to the university in its planning and organizational structure, as well as in accessing resources available to aid prospective students.

The CSULB campus and CSU system as a whole serve a widely diverse population of students. As such, policies and procedures advancing access to the University are in place across the campus and will be employed in the proposed MSGSCM program. Included in such an environment committed to diversity and accessibility is the affordability of university programs and student financial aid opportunities. Our faculty have noteworthy associations with the international populations that are expected to populate the program and add to its diversity of opportunities.

* 1. *For master’s degree proposals, the cite the number of declared undergraduate majors and the degree production over the preceding three years for the corresponding baccalaureate program, if there is one.*

Table 6.4 below reports the number of declared undergraduate majors and the number of graduates in the Operations and Supply Chain Management major option at CSULB.

**Table 6.4: Declared Undergraduate SCM Majors and Degrees Produced**

|  |  |  |
| --- | --- | --- |
| AY | Declared Undergraduate Majors | Degrees Produced |
| 2009-2010            |  156 | 126 |
| 2010-2011            | 187 | 182 |
| 2011-2012              |  175 | 92 |
| 2012-2013 |  210 | - |

Note that the relatively low degree production in 2011-2012 was due to severe state budget cuts, resulting in insufficient course offerings for many students to fulfill their degree requirements. Currently there are 210 students declaring Operations and Supply Chain Management as an option. With a slightly improved state budget due to the passage of Proposition 30, we expect a considerable increase in degree production for the 2012-2013 academic year.

* 1. *Describe professional uses of the proposed degree program.*

Our graduates will be well positioned for the following employment areas and positions:

1. Operations and Supply Chain Management

Job titles include: Supply Chain Manager, Operations Director, Project Manager, Business Process Specialist, and Management Consultant.

Those positions are categorized as “Management Analysts” and “Cost Estimators” in Table 5.2. Duties and responsibilities include:

* Recommend new systems, procedures, or organizational changes (Supply chain design, business process reengineering)
* Develop business relationships with suppliers and customers, and cultivate supply chain coordination.
* Gather and organize information about problems to be solved or procedures to be improved; interview personnel and conduct on-site observations to determine the methods, equipment, and personnel that will be needed
* Analyze data to estimate the time, money, resources, and labor required for product manufacturing, construction projects, or services
* Performance measurements and evaluation, including building and using sophisticated mathematical models
* Make recommendations to management through presentations or written reports, and confer with managers to ensure that the changes are working
1. Logistics Management

Job titles include: Purchasing Manager, Fleet Manager, Transportation Manager, Logistics Director, Supply Chain Manager, Customer Account Manager, and Warehouse Manager.

Those positions are categorized as “Logisticians” in Table 5.2.

Logisticians direct the acquisition, distribution, and delivery functions of an organization. Logisticians analyze and coordinate an organization’s supply chain—the system that moves a product from supplier to consumer. They manage the entire life cycle of a product, which includes how a product is acquired, distributed, allocated, and delivered.

Logisticians oversee activities including purchasing, shipping and transportation, inventory, warehousing, and delivery. They may direct the movement of a range of goods, people, or supplies, from common consumer goods to military supplies.

Logisticians use sophisticated software systems to plan and track the movement of goods. They operate software programs specifically tailored to manage logistical functions, such as procurement, inventory management, and other supply chain planning and management systems. Their duties include:

* Direct the allocation of materials, supplies, and finished products (network planning, distribution arrangement)
* Design strategies to minimize the cost or time required to move goods (transportation analysis)
* Review the success of logistical functions and identify areas for improvement
* Stay current on advances in logistics technology and incorporate new technologies into procedures
* Be aware of trade agreements, tariffs, international payment, and custom clearance procedures in global logistics.
1. Operations Research Analysis

Job titles include: Business Analyst, Decision Support Manager, and Demand Management Specialist.

Those positions are categorized as “Operations Research Analysts” in Table 5.2 above. Duties and responsibilities include:

* Identify and define business problems, such as those in production, logistics, or sales.
* Collect and organize information from a variety of sources, such as computer databases
* Gather input from workers involved in all aspects of the problem or from others who have specialized knowledge that can help solve the problem
* Examine information to figure out what is relevant to the problem and what methods should be used to analyze it
* Use statistical analysis, simulation, and optimization (minimizing or maximizing a function based on a set of variables) to analyze information and develop practical solutions to business problems
* Based on their findings, advise managers and other decision makers on the appropriate course of action to take to solve a problem
* Write memos, reports, and other documents outlining their findings and recommendations for managers, executives, and other officials
	1. *Specify the expected number of majors in the year of initiation and three years and five years thereafter. Specify the expected number of graduates in the year of initiation, and three years and five years thereafter.*

The proposed MSGSCM restructures the Master of Arts in Global Logistics (MAGL) which has operated continuously since January 2002 with considerable success. The proposed MSGSCM extends beyond logistics study (the focus of MAGL) to include operations analysis, behavioral and strategic aspects of value chain management and business analytics. The new program will prepare students for a broader range of jobs as discussed in section 6d of this proposal. Correspondingly, the target student pool will be expanded. We expect that our MSGSCM program will attract three general categories of students:

1. Our existing Operations and Supply Chain Management baccalaureate graduates, as well as undergraduate students in related fields such as Economics and Industrial Engineering
2. International students in related fields
3. Local supply chain management professionals who seek to strengthen their knowledge and advance their careers

As a baseline for our enrollment projections, we use data from the existing MAGL program, where annual applications typically ranged from 25 to 35, with a typical acceptance rate of 60%. Since the MAGL will simultaneously be discontinued if this new degree program is approved, we anticipate approximately 12 to 21 students to enroll in our first cohort beginning Fall 2014. When factoring in the expanded student pool, targeted marketing, dedicated advising, and more extensive networking with local industry professionals, we are optimistic that student demand will steadily increase in the next five years. We expect much of that growth will be among international students, especially given the rapidly growing Asian supply chain environment and our existing relationships with Asian universities.

**Table 6.5: Enrollment and Graduation Projections over the Next Five Years**

|  |  |
| --- | --- |
|  | Year |
| 1 | 2 | 3 | 4 | 5 |
| Expected Majors | 15 | 25 | 35 | 45 | 50 |
| Expected Graduates | 0 | 15 | 25 | 35 | 45 |

1. **Existing Support Resources for the Proposed Degree Major Program**

## *Note: Sections 7 and 8 should be prepared in consultation with the campus administrators responsible for faculty staffing and instructional facilities allocation and planning. A statement from the responsible administrator(s) should be attached to the proposal assuring that such consultation has taken place.*

## *List Faculty who would teach in the program, indicating rank, appointment status, highest degree earned, date and field of highest degree, professional experience, and affiliations with other campus programs. For master’s degrees, include faculty publications or curriculum vitae.*

## *Note: For all proposed graduate degree programs, a minimum of five full-time faculty members with the appropriate terminal degree should be on the program staff. (Code Memo EP&R 85-20)*

The faculty members who have agreed to teach in the proposed degree program are listed below in alphabetical order. Attachment A provides a curriculum vitae for each of the listed faculty members, including publications, professional experience, and affiliations.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Rank | Status | Highest Degree | Degree Date | Field of Highest Degree |
| Chen, HongYu | Assistant Professor | Full time | Ph.D. | 2012 | Management Science |
| Chen, Ming | Assistant Professor | Full time | Ph.D. | 2011 | Operations Management |
| Reddy, Sabine | AssociateProfessor | Full time | Ph.D. | 1994 | Business Administration |
| Scherwin, Vicki | Assistant Professor | Full time | Ph.D. | 2009 | Management |
| Steimetz, Seiji | Associate Professor | Full time | Ph.D. | 2004 | Economics |
| Su, Xuemei | Assistant Professor | Full-Time | Ph.D. | 2007 | Management Science |
| Yamarik, Steven | Professor | Full time | Ph.D. | 1996 | Economics |

## *Describe facilities that would be used in support of the proposed program.*

College of Continuing & Professional Education (CCPE)

The MS in Global Supply Chain program is a self-support program that leverages facilities, resources and support from the CSULB College of Continuing and Professional Education (CCPE). Facilities available through CCPE include a state-of-the-art multimedia conference room, three videoconference facilities for live meetings and classes, a computer lab with the latest hardware and software, a large distance learning classroom, nine training rooms/classrooms with varying levels of multi-media equipment, and three conference rooms.[[17]](#footnote-17) It is expected that most courses will be held in the CCPE classrooms in close proximity to the campus.

College of Business Administration

To supplement the CCPE facilities, the CBA has four teaching labs which house a total of 160 high-end computers capable of supporting the software, hardware and data needs of various industry used applications. Every *CBA computer classroom* houses 40 Dell duo core 3.0+ GHz CPUs with 21” monitors, there are total of 4 of these computer classrooms capable of hosting a class size of 40 students per room. The *CBA Open Access Lab* has 80 computer and many laptop stations with computer configuration similar to the computer classrooms described above. In all, the CBA has 20 small-lecture classrooms.

The CBA is in the process of refurbishing at least one classroom into an Active Learning Classroom to be completed by Fall 2013. The designs for the refurbishing are in process. $100,000 of the CBA one-time monies are being matched by the University, providing $200,000 for upgrades. The potential classroom (or two classrooms, depending on the models used) will have state of the art technology and allow for student directed learning modules.

## *Provide evidence that the institution provides adequate access to both electronic and physical library and learning resources*

Library Resources

Please see Attachment B for a comprehensive report prepared by Susan Jackson, Business Librarian and Joseph Aubele, Economics Librarian of the CSULB University Library (prepared in January 2013).

Other Library-Related Resources

In terms of journal coverage in the subject area, please see the Attachment C, which indicates availability of 14 top-ranked journals (rankings 10 or better) in the area of Operations and Supply Chain Management. All are available electronically and/or in hard copy (although 4 journals are delayed 1-3 years).

In addition to the above named databases (e.g., ABI Inform Complete, Business Source Premier, EconLit, IEEE Xplore, Compendex and Science Direct), the University Library has access to a wide number of business and engineering databases that would support such a program. These include (but are not limited to) the following:

* Academic Search Complete
* ACM Digital Library
* EBSCO Ejournals
* Journal Citation Reports
* JSTOR
* Library Information Science & Technology Abstracts (LISTA)
* Web of Science
* The library supports a number of statistical databases and links to datasets from government (e.g., BLS) and commercial sources.

In addition to the Economics and Business resources, there are other disciplines closely related to GSCM with relevant databases and library resources.[[18]](#footnote-18)

It would be reasonable to conclude that the CSULB library has more than sufficient library and learning resources to support a graduate Global Supply Chain Management program. The library has extensive research databases and datasets available. The library also has extensive borrowing options for books and journals to support the program.

## *Describe available academic technology, equipment, and other specialized materials.*

Existing Academic Technology

The CSULB Office of Academic Technology (ACT) works closely with CSULB faculty, staff and students in the use of technology to enhance student access and success, high quality teaching, and notable research and creative activity.

Academic Technology Services is made up of the following areas:

* Help services
* Classroom support services
* Instructional technology and multimedia services
* Desktop support and system administration services
* Web and application development services
* Server hosting and server management services
* Technology coordination, project planning and management services

Other Academic Technology Resources: [[19]](#footnote-19)

* Academic Technology to Enhance Learning and Discovery
* Faculty Center for Professional Development (FCPD)
* Instructional Technology Support Services (ITSS)
* CSU System-wide Academic Technology Services
* Microsoft Office Document Compatibility Problem

Campus Computer Labs

Two Open Access Computer Labs are available for current CSULB students, faculty, and staff: the ***Spidell Technology Center*,** located in the Library on the 1st Floor and the ***Horn Center*,** located on lower campus at the Steve and Nini Horn Center. The Horn Center has 139 PC computes and 52 Macintosh computers. The Spidell Technology Center has 187 PC computers and 10 Macintosh computers. The CBA Computer Lab has 80 computers. Horn Center hours are Monday through Thursday 7:45AM - 11:00PM, Friday 7:45AM - 5:00PM and Sunday 12:30PM - 9:00PM (closed Saturdays). The Spidell Center hours follow the Library hours and generally are: Monday through Thursday 7:45AM - 11:00PM, Friday 7:45AM - 5:00PM, Saturday 10:00AM -5:00PM, and Sunday 12:30PM - 11:00PM.

CCPE Resources

CCPE is uniquely capable of providing the technical and other support that will help make the Master of Science in Global Supply Chain Management (GSCM) program successful.  The College was a pioneer in offering online courses and programs, originally relying on a learning management system developed in-house.  CCPE was also an early adopter of “virtual classroom” synchronous course delivery technology.

The College of Continuing and Professional Education enjoys one of the most technologically sophisticated support structures among continuing education units in California.  A five person Information Technology group maintains a network of more than twenty-five servers and well over one hundred workstations. A Microsoft centered software infrastructure includes full implementation of an Exchange server, while additional collaboration is supported internally and externally via the SharePoint platform.

CCPE’s Technology Enhanced Learning Center relies on the “Beachboard” -branded implementation of Desire2Learn.  The Elluminate virtual classroom is integrated into “Beachboard” along with several other key online learning tools to provide a complete learning experience.  Over one hundred synchronous and asynchronous course sections are generally underway at any time.

Plexus Spectrum (formerly Continuity 2000) is the comprehensive course, student and faculty management system utilized by CCPE.  Spectrum also acts as a content management system for the CCPE website, along with a homegrown CMS that provides additional online content and assists production of CCPE’s traditional print publications.

The in-house Marketing Communications division creates CCPE’s catalogs and nearly all other marketing materials.  A team of four graphic artists on Macintosh workstations also contributes to development of multimedia elements of online and other technology-enhanced courses.

CCPE’s Advanced Media Production (AMP) Center utilizes a 2,200 square foot studio and separate distance learning classroom to create documentaries, marketing videos, community service programs and a variety of other broadcast quality video products.  AMP also manages CCPE’s and the university’s satellite, cable, FIOS and Educational Broadband Service (EBS) microwave distribution systems.

CBA Computer Labs

The College of Business Administration (CBA) has its own Instructional Technology Department, which works closely with the college departments to maintain technology needs. This includes maintenance of over 50 workstations that house the latest industry used software. The CBA Computer Lab hours are Monday through Thursday: 8 AM – 9 PM, Friday: 8 AM – 4 PM.

CBA IT Lab Software

All CBA lab computers are equipped with Microsoft Visual Studio.net 2010, Microsoft Office 2010, Oracle 10g, SAS 9.3, SPSS 20, and other software that is vital for student success.[[20]](#footnote-20)

|  |
| --- |
| CBA SAP Lab SoftwareFor the past two years, Boeing Corporation has provided grant money for membership with SAP University Alliances, which allows us to use SAP-ERP software to teach business concepts and analytical tools. This is a fundamental part of building our Supply Chain Management Lab. The funds also cover training and travel expenses for faculty. For example, four CBA faculty attended week-long SAP workshops in the summer of 2011 and four in January 2013. In January 2012, SAP-ERP was implemented in two CBA undergraduate courses: Operations Planning and Control (SCM 411) and Selected Topics in Information Systems (IS 495). Since SAP-ERP is such a powerful and comprehensive management system, as well as analytical tool, we plan to increase the course content related to SAP-ERP in MS and undergraduate courses in the future. The incorporation of SAP-ERP tools into our MS classes provides a competitive edge for Global Supply Chain Management students. Students graduating with SAP-ERP skills are in high demand by employers.  |
|   |

Hewlett-Packard (HP) Lab

CBA also hosts an HP Lab consisting of 21 computers that allow hands-on training to students for various related activities, including networking, and system architecture.

# Additional Support Resources Required

*Note: If additional support resources will be needed to implement and maintain the program, a statement by the responsible administrator(s) should be attached to the proposal assuring that such resources will be provided.*

## *Describe additional faculty or staff support positions needed to implement the proposed program.*

While we have enough faculty between the CBA and the Economics Department to serve a cohort of Master’s students, we may need to hire one more faculty member in the CBA trained in the Global Supply Chain area. This additional hire would ensure our ability to (a) support a growing undergraduate SCM program, and (b) expand to two MS cohorts per year in the future. The following justifications for the additional Operations and Supply Chain Management hire were provided to Dean Solt January 2013:

* The OSCM option is becoming increasingly popular among students who can double major in Management and OSCM. The [undergraduate] major concentration grew from 150 OSCM majors two years ago to 180 December 2012.
* As with the other major concentrations in the department, many of the courses are taught by part-timers. For example, one-half of the required and elective course sections Spring 2013 are being taught by part- and full-time lecturers.
* The Department is attempting to prepare our students for the growth in supply chain related job opportunities in southern California and beyond. Without additional full-time T/TT faculty members, it is unlikely that the full potential of a viable SCM option will be realized.
* With additional faculty in this area, the undergraduate program and the proposed Masters in Global Supply Chain Management will be strengthened.

Currently, the Masters in Business Administration (MBA) office in the CBA has three staff supporting its state-side and self-support MBA programs. By streamlining current work processes, the current staff resources are sufficient to support this new MSGSCM program and another two newly developed Master of Science programs. In addition, each new MS Program would have a Director that would be a faculty member of the corresponding department. The Director would be responsible for admission decisions, marketing and recruiting applicants through information sessions, student advising, and working closely with the Graduate Program staff. Also, this Director would work with the Director of Graduate Programs for maintaining the academic integrity of the program and compliance with AACSB standards.

## *Describe the amount of additional lecture and/or laboratory space required to initiate and to sustain the program over the next five years. Indicate any additional special facilities that will be required. If the space is under construction, what is the projected occupancy date? If the space is planned, indicate campus-wide priority of the facility, capital outlay program priority, and projected date of occupancy.*

As noted above, primary responsibility for lab and lecture classrooms will be adequately met by CCPE facilities. However, in the event other classrooms are needed (e.g., we expand to two cohorts), the lecture spaces and computer labs at CBA are sufficient to house cohorts of Masters’ students. The CBA houses 20 classrooms (not inclusive of large lecture halls), 4 of which are classrooms with 41 computers in each. The utilization rate of the computer classrooms for Fall semester of 2012 was between 60 and 70%. A sample of three non-computer classrooms (Spring 2013) typically assigned to the Management and HRM Department (which includes the Operations and Supply Chain Management program) found 70% CBA usage for daytime classes. The proposed MS program will run initially during the daytime – three unit classes, concurrent with the semester-length undergraduate program.

In conclusion, the current lecture and lab space can accommodate the program proposed without issues in the next five years.

## *Include a report written in consultation with the campus librarian which indicates any necessary library resources not available through the CSU library system. Indicate the commitment of the campus to purchase these additional resources.*

Current library resources for the proposed program are sufficient. However, to maintain the quality of library resources, the college (with proceeds from the new program) could provide an annual library budget augmentation when new programs are instituted to enable the library to acquire highly recommended books requested by the program.

## *Indicate additional academic technology, equipment, or specialized materials that will be (1) needed to implement the program and (2) needed during the first two years after initiation. Indicate the source of funds and priority to secure these resource needs.*

Regarding software resources required, the proposed MS program fully overlaps with our undergraduate program. All key software packages such as MS office, Oracle Database, SAP and SAS have been installed in the current computers of CBA labs. The CSU and CSULB cover costs related to these programs. The proposed program imposes no additional cost on software.

We annually apply for funding from Boeing. We plan to continue to fund the Supply Chain Management lab and keep the partnership with SAP University Alliance. We are going to take full advantage of the resources that come with the partnership. We plan to involve and develop additional faculty members to enable us to produce quality students and meet the demand of employers.

If a future course offered in this program requires new software, our program will cover the cost by the revenue generated.

## *For self-support programs,* *please provide information on the per-unit cost to students and the total cost to complete the program.*

The current cost to students for most programs offered through CCPE is $850 per unit. For our 30-unit program, this would translate to a cost of $25,500 to complete the program (over an 18-month period). Students should expect to incur additional expenses such as for books, parking, Student Heath Center fees, and health insurance. The tuition would be subject to re-evaluation for each new cohort.

## ATTACHMENT A

**Faculty Curriculum Vitae**

Hongyu Chen

PROFESSIONAL PREPARATION:

Nankai University B.E. 1997 Electronics

Peking University M.E. 2000 Electronic Engineering

The University of Texas at Dallas MBA 2006 Information Systems

The University of Texas at Dallas PhD 2012 in Management Science

APPOINTMENTS:

|  |  |
| --- | --- |
| 8/12-Present  | Assistant Professor, Department of Information Systems, California State University Long Beach, Long Beach, CA |

PUBLICATIONS:

*Brian Dos-Santos, Zhiqiang Zheng, Vijay Mookerjee, Hongyu Chen, (2011), Are New IT-enabled Investment Opportunities Diminishing for Firms?, Information Systems Research, Vol. 23, No. 2, June 2012, pp.287-305.*

*Brian Dos-Santos, Zhiqiang Zheng, Vijay Mookerjee, Hongyu Chen, (2010), Does IT Matter, the Evidence. In the Proceedings of the Fourth China Workshop on Information Management (CSWIM), Wuhan, China, 2010.*

*Brian Dos-Santos, Zhiqiang Zheng, Vijay Mookerjee, Hongyu Chen, (2008), Is IT Really Becoming a Commodity? In the Proceedings of the* International Conference on Information Systems (ICIS), Paris, 2008.

ACADEMIC, PROFESSIONAL, AND SERVICES ACTIVITIES

* Member, Undergraduate Program Committee (UPC), College of Business Administration (CBA), CSULB, Fall 2012
* Member, Intellectual Contributions Task Force (ICTF), College of Business Administration (CBA), CSULB, Fall 2012
* Member, INFORMS
* Reviewer, International Conference on Information Systems (ICIS), 2012
* Reviewer, Information Technology and Management (ITM)
* Reviewer, Information Systems Frontiers (ISF)

Ming Chen

PROFESSIONAL PREPARATION

Tsinghua University, China B.S. 2001 Civil Engineering

University of Maryland, College Park, MD M.S. 2005 Civil Engineering

University of Maryland, College Park, MD Ph.D. 2011 Operations Management

Professional Appointments:

2011-present Assistant Professor, College of Business Administration, California State University, Long Beach.

2005-2006 Traffic Engineer, Sabra, Wang & Associates, inc. Baltimore, MD

**Awards**

* Goldhaber Travel Grant, University of Maryland, 2010
* Top 15% Teaching Award, Robert H. Smith School of Business, 2009
* MITACS Student Grant, Revenue Management and Pricing Conference, Montreal, 2008

**Publications**

* Zhong, W., Z. Chen, M Chen (2010). Integrated Production and Distribution Scheduling with Committed Delivery Dates. *Operations Research Letters*, 38(2), 133-138.
* Chen, M., L. Chen, E. Miller-Hooks (2007). Traffic Signal Timing for Urban Evacuation. *ASCE Journal of Urban Planning and Development*, 133(1) , 33.
* Dong, J., N. Yang, M. Chen (2007). Heuristic Approaches for a TSP Variant: The Automatic Meter Reading Shortest Tour Problem. *Proceedings of 10th INFORMS Computing Society Conference*, Jan 3-5, 2007, Coral Gables, FL.

**Selected conference presentations**

* Chen, M., Z. Chen (2012). Survey of Dynamic Pricing Research in Revenue Management. INFORMS Annual Meeting, Phoenix, AZ.
* Chen M., Z. Chen (2012). Robust Dynamic Pricing with Two Substitutable Products. INFORMS Revenue Management and Pricing Section Meeting, Berlin, Germany.

PROFESSIONAL SERVICE:

* Faculty representative: Operations and Supply Chain Management Advisory Board
* Session chair, INFORMS Annual Meeting, 2012
* Reviewer, WDSI conference, 2011

PROFESSIONAL AFFILIATIONS:

* Institute for Operations Research and the Management Sciences (INFORMS)
* Decision Science Institute (DSI)
* Manufacturing & Service Operations Management (M&SOM)
* Productions and Operations Management Society (POMS)

Sabine B. Reddy

PROFESSIONAL PREPARATION:

Vocational School for Banking/Berliner Commerzbank AG1983 Vocational Degree Banking

Free University Berlin, Germany 1985 Vordiplom Business and Economics.

Western Michigan University, MI 1987 M.A. Economics.

University of Illinois at Urbana-Champaign, IL 1994 Ph.D. Business Administration.

APPOINTMENTS:

|  |  |
| --- | --- |
| 8/2007- Present | Associate Professor, Department of Management/HRM, California State University Long Beach, Long Beach, CA |
| 8/2001-2007  | Assistant Professor, Department of Management/HRM, California State University Long Beach, Long Beach, CA |
| 8/1994-2001 | Assistant Professor, Department of Management, Wayne State University, Detroit, MI |

PUBLICATIONS:

Witkowski, Terrence H. and Sabine Reddy. 2010. Antecedents of ethical consumption activities in Germany and the United States. *Australasian Marketing Journal* 18: 8-14.

Sabine Reddy. 2009. Attitudes towards female managers: Germany and the U.S. *Proceedings of the 51st Annual Meeting of the Academy of International Business*, 2009, San Diego.

Reddy, Sabine B. 2006. Strategic flexibility and information technology properties: competitive

 advantage and asset specificity. *Advances in Competitiveness Research*. 14 (1): 16-43.

Reddy, Ram and Sabine B. Reddy. 2002. Extracting value from the supply chain with mobile technologies. *Journal of Internet Commerce*, 1(3): 65-80.

Reddy, Sabine B., R.N. Osborn, and J.-F. Hennart. 2002. The prevalence of equity and non-equity cross-border linkages: Japanese investments and alliances in the U.S. *Organization Studies*, 23(5): 759-780.

Reddy, Sabine B. and Ram Reddy. 2002. Competitive agility and the challenge of legacy information systems. *Industrial Management & Data Systems*, 102 (1/2): 5-16.

Reddy, Ram and Sabine Reddy. 2001. *Supply chains to virtual integration*. New York: McGraw-Hill. ISBN-13: 978-0071374651.

Reddy, Sabine B., D. Sudharshan and T. Roehl. 2001. Japanese firm response to changing regulation: A dynamic strategic group analysis. *Journal of International Business and Economics*, 2 (1): 15-38.

Hennart, Jean-François and Sabine B. Reddy. 2000. Digestibility and asymmetric information in the choice between acquisitions and joint ventures: Where’s the beef? *Strategic Management Journal*, 21 (1): 191-193.

Hennart, Jean-François and Sabine B. Reddy. 1998. Testing theories of joint-ventures: Why Japanese investors in the U.S. choose joint-ventures over acquisitions. In Massimo Colombo (ed.) *The Changing Boundaries of the Firm*. London: Routledge.

Hennart, Jean-François and Sabine B. Reddy. 1997. The choice between mergers/acquisitions and joint ventures: The case of Japanese investors in the United States*. Strategic Management Journal*, 18 (1): 1-12.

ACADEMIC, PROFESSIONAL, AND SERVICES ACTIVITIES

**Selected Professional Service - Professional Organizations**

* Session chair, Academy of International Business Annual Meeting, 2003, 2009.
* Reviewer, Academy of Management Annual Meeting, 1999-2006, 2008.
* Reviewer, Academy of International Business Annual Meeting, 1999-2002, 2004-2005, 2007-2009.
* Ad hoc reviewer, Academy of Management Review, 2002, 2003, 2004, 2007.
* Reviewer, Organization Science, Special Issue, 1997.

**Selected Professional Service – University**

* Elected Member of College Faculty Council, 2012 to present.
* Elected Member of CSULB Curriculum and Educational Policies Council, 2011 to present.
* Elected Member of College Graduate Programs Committee, 2009 to present.
* Elected Member of CSULB Program Review and Assessment Council, 2004-2011.
* Member of various additional university, college, and department level committees at California State University, Long Beach, 2001 to present.
* Member of various university, college and department level committees at Wayne State University, 1994-2001.

Vicki M. Scherwin

PROFESSIONAL PREPARATION

University of California, Berkeley B.S. 2002 Psychology

University of California, Los Angeles Ph.D 2009 Management

APPOINTMENTS:

2009 - present, Assistant Professor, Department of Management/Human Resources Management, California State University, Long Beach

 SELECTED PUBLICATIONS:

Young, M.J., Morris, M.W., & Scherwin, V. M., (in press, Journal of Management) Managerial Mystique: Magical Thinking in Judgments of Managers’ Vision Charisma and Magnetism.

ACADEMIC, PROFESSIONAL, AND SERVICE ACTIVITIES

* **CONFERENCE PRESENTATIONS**
	+ Scherwin, V. M., Young, M.J., & Overbeck, J. R. (Paper presented at the 72nd annual meeting of the Academy of Management, Boston, MA, 2012.) Are Managers Obligated to Help? Subordinates’ Expectations of Receiving Help and the Effects of Help.
	+ Scherwin, V. M., (Presented at the Organizational Behavior Teaching Society Conference, Niagara Falls, Canada, June 2012) Acting Out the Globe: Gather Round the Experiential Fire.
	+ Claver, M. & Scherwin, V. M. (Poster presented at the 32nd annual meeting of the California Council on Gerontology and Geriatrics, Los Angeles, CA, 2012.) Ethical Leadership of an Intergenerational Workforce.
	+ Scherwin, V. M., Coget, J. F., Kirner, R. J., (Presented at the 71st annual meeting of the Academy of Management, San Antonio, TX, August 2011 ) Life Without Rating and Ranking: A Descriptive Study of How Organizations Fulfill the Purposes of Performance Appraisal Without It.
	+ Scherwin, V. M., (Presented at the Organizational Behavior Teaching Society Conference, Milwaukee, MN, June 2011) What is My Mindset? How an In-Class Active Listening Interview Activity Can Provide an Opportunity for Self Learning.
	+ Scherwin, V.M, Coget, J.F, Schroeder, S. J, Culbert, S.A (Symposium Chair and Presenter at the 70th annual meeting of the Academy of Management, Montreal, CAN, August 2010) Demystifying and Deconstructing the Leadership Process: Culbert's Influence.
* **SELECTED SERVICE**
	+ Faculty Liaison, Human Resources Management Advisory Board (Fall 2011- Current)
	+ Advisor, Human Resources Management Association student group (Fall 2011- Current)
	+ Directed a CBA Honor’s Program undergraduate thesis student (Fall 2010-Spring 2011)
	+ Directed a University Honor’s Program undergraduate thesis student (Fall 2009-Spring 2010)
	+ Directed a Human Development practicum for an undergraduate student (Spring 2010)
	+ UCLA Human Resources Roundtable (HARRT), Contributor to the HARRT Quarterly Newsletter Winter 2006, Spring 2007, Fall 2007, Winter 2008
* **PROFESSIONAL AFFILIATIONS**
* Academy of Management
* Organizational Behavior Teaching Society
* Society for Personality and Social Psychology
* Society for Human Resources Management
* Administrative Services Coordinator, Mental Health America of Greater Los Angeles,Long Beach, CA, 2002-2004

 Seiji S.C. Steimetz

PROFESSIONAL PREPARATION

San Jose State University B.S., M.A. 1996, 1999 Economics

University of California at Irvine Ph.D. 2004 Economics

APPOINTMENT:

2011-present Associate Professor of Economics, California State University, Long Beach

2005-2011 Assistant Professor of Economics, California State University, Long Beach

SELECTED PUBLICATIONS:

*“The Impact of Traffic Images on Travel Time Valuation in Stated-Preference Choice Experiments” (with Luis I. Rizzi and Juan Pablo Limonado), Transportmetrica (8), 427–442, November 2012*

*“Spatial Hedonics and the Willingness to Pay for Residential Amenities” (with Kenneth A. Small), Journal of Regional Science (52), 635–647, October 2012.*

*“Spatial Multipliers in Hedonic Analysis: a Comment on ‘Spatial Hedonic Models of Airport Noise, Proximity, and Housing Prices’”, Journal of Regional Science (50), 995–998, December 2010.*

*“White-Knuckle Externalities”, Economic Inquiry (47), 304–316, April 2009.*

*“Defensive Driving and the External Costs of Accidents and Travel Delays”, Transportation Research Part B: Methodological (42), 703–724, November 2008 (lead article).*

*“Estimating Commuters’ ‘Value of Time’ with Noisy Data: a Multiple Imputation Approach” (with David Brownstone), Transportation Research Part B: Methodological (39), 865–889, December 2005 (lead article).*

*“Congestion Pricing Theory”. In Kenneth Button, Peter Nijkamp, and Henry Vega (eds.), A Dictionary of Transport Analysis, Cheltenham: Edward Elgar, forthcoming.*

*“Bubbles”. In David R. Henderson (ed.), The Concise Encyclopedia of Economics, 2nd edition, Library of Economics and Liberty, Indianapolis: Liberty Fund, 2008.*

ACADEMIC, PROFESSIONAL AND SERVICE ACTIVITIES:

* Grants

*“Accident Rates and Safety Policies for Trucks Serving the San Pedro Bay Ports”, U.S. Department of Transportation, California Department of Transportation, and METRANS ($78,441). 2008.*

*“Evaluating the Efficiency of Traffic Mitigation Fees at the San Pedro Bay Ports in a Congestion Pricing Framework”, U.S. Department of Transportation, California Department of Transportation, and METRANS ($65,130).* 2006.

* Selected Peer-Reviewed and Invited Presentations

METRANS Research Seminar Series, University of Southern California (2012, 2007), Western Economic Association International Annual Conference (2011, 2010, 2007), 52nd Annual Transportation Research Forum (2011), Caltrans Research Webinar Series for Transportation Professionals (2010), Time Use Observatory Workshop, Universidad de Chile, Santiago, Chile (2009), UTC-PATH Conference (2008), National Urban Freight Conference (2007, 2006), ”, Institute for Operations Research and Management Sciences International Conference (2006), University of California Transportation Center Annual Conference (2004)

* Refereeing for Peer-Reviewed Journals

*Economic Inquiry, Journal of Regional Science, Regional Science and Urban Economics (3), Journal of Transport Economics and Policy, Research in Transportation Economics, Risk Analysis, Southern Economic Journal, Transport Reviews (2), Transportation Research Part A (3), Transportation Research Part B (2), Transportation Research Part C, Transportation Research Record: Journal of the Transportation Research Board, Transportmetrica (4), Urban Forestry & Urban Greening*

* Selected Service Activities: Associate Chair, Department of Economics; Vice Chair, University Program Assessment and Review Council; Undergraduate Advisor and Coordinator, Department of Economics; University Partners for Success Faculty Mentor

Xuemei Su

PROFESSIONAL PREPARATION

Dongbei University of Finance and Economics B.S. 1998 Business Administration

Dongbei University of Finance and Economics M.A. 2001 Business Administration

University of Wisconsin-Milwaukee Ph.D. 2007 Management Science

Professional Appointments:

2007-present Assitant Professor, College of Business Administration, California State University, Long Beach.

2005-2007 Adjuct faculty, University of Wisconsin Milwaukee.

2000-2003 Director of Operations, Beijing Industrial Automation and Control Corp, China

PUBLICATIONS:

**Publications—Refereed Journals**

* Su, X., S.K. Mukhopadhyay (2012). Controlling power retailer’s gray activities through contract design, *Production and Operations Management,* 21(1), 145-160.
* Su, X., L. Wu, X. Yue (2010). Impact of introducing a direct channel on supply chain performance, *International Journal of Electronic Business.* 8(2), 101-121.
* Liu, Y., T. Lin, S. Ram, X. Su(2010). A non-invasive software architecture style for RFID data provisioning, *International Journal of Applied Logistics,* 1(1), 1-15.
* Mukhopadhyay, S.K., X. Su, S. Ghose (2009). Motivating retail marketing effort: Optimal contract design, *Production and Operations Managemen*t*,* 18(2),197-211.
* Jung, J., X. Su, M. Baeza, S. Hong (2008). The effect of organizational culture stemming from national culture towards quality management deployment, *The TQM Journal,* 20(6), 622-635.

**Publications—Refereed Book Chapters**

* Mukhopadhyay, S.K., X. Su (2011). Use of supply chain contract to motivate selling effort. *Springer's handbook on Innovative Schemes for Supply Chain Coordination under Uncertainty.*
* Su, X. (2010). Innovation and technology management, *The Volume of Business Administration in the Series on the Frontiers of Western Research in the Humanities and Social Sciences*, China Renmin University Press.

**Publications—Refereed** **Proceedings**

* “Fighting Gray Market with Marketing Effort”, with Mukhopadhyay, S. K. *Decision Sciences Institute Proceedings*, November 2006.
* “National Culture and National Entrepreneurial Activity”, with Wu, S., Yao, D and Lim, J.H. *Journal of Midwest International Business Research*, 2005

PROFESSIONAL SERVICE:

* Editorial Review Board: Production and Operations Management
* Senior Editor: International Journal of Operational Research
* Faculty representative: Operations and Supply Chain Management Advisory Board

PROFESSIONAL AFFILIATIONS:

* Productions and Operations Management Society (POMS)
* Institute for Operations Research and the Management Sciences (INFORMS)
* Decision Science Institute (DSI)
* Manufacturing & Service Operations Management (M&SOM)

Steven Yamarik

PROFESSIONAL PREPARATION

University of North Carolina B.S. 1989 Economics and History

University of North Carolina Ph.D. 1996 Economics

APPOINTMENT:

2009-present Professor of Economics, California State University, Long Beach

2011-2012 Visiting Professor of Economics & Econometrics, University of Lausanne, Switzerland

2005-2009 Associate Professor of Economics, California State University, Long Beach

2001-2005 Visiting Assistant Professor of Economics, Tufts University

1997-2001 Assistant Professor of Economics, University of Akron

1996-1997 Visiting Assistant Professor of Economics, Oberlin College

SELECTED PUBLICATIONS:

*“State-Level Capital and Investment: Updates and Implications” Contemporary Economic Policy (2012) DOI: 10.1111/j.1465-7287.2011.00282.x*

*“Tax Policy and State Economic Growth: the Long-Run and Short-Run of It” (with A. Ojede), Economics Letters 116 (August 2012), 161-165.*

*“Is Natural Openness or Trade Policy Good for the Environment?” (with S. Ghosh) Environment and Development Economics 16 (December 2011), 657-684.*

*“Human Capital and State-Level Economic Growth: What is the Contribution of Schooling?” The Annals of Regional Science 47 (August 2011), 195-211.*

*“Corruption is Bad for Growth (Even in the United States)” (with N. Johnson and C. LaFountain) Public Choice 147 (June 2011), 377-393.*

*“War! What is it Good for? A Deep Determinants Analysis of the Cost of Interstate Conflict” (with N. Johnson and R. Compton) Peace Economics, Peace Science and Public Policy 16: 1 (2010), Article 8.*

*“Estimating Returns to Schooling from State-Level Data: A Macro-Mincerian Approach” The B.E. Journal in Macroeconomics 8: 1 (Contributions 2008), Article 23.*

*“Does Cooperative Learning Improve Student Learning Outcomes?” Journal of Economic Education 38 (Summer 2007), 259-277.*

*“International Trade, Technology and Wage Inequalities: Evidence from Granger-causality Tests” (with S. Ghosh) Review of International Economics 15 (May 2007), 321-346.*

*“Solow and the States: New Evidence” Regional Studies 40 (August 2006): 571-582.*

*“Do Regional Trading Arrangements Harm the Environment? An Analysis of 162 Countries in 1990” (with S. Ghosh) Applied Econometrics and International Development 6-2 (April-June 2006).*

*“A Sensitivity Analysis of the Gravity Model” (with S. Ghosh) The International Trade Journal 19 (Spring 2005): 83-126.*

*“Are Regional Trading Arrangements Trade Creating? An Application of Extreme Bounds Analysis” (with S. Ghosh), Journal of International Economics 63 (July 2004): 369-395.*

*“Does Trade Creation Measure Up? A Reexamination of the Effects of Regional Trading Arrangements” (with S. Ghosh), Economics Letters 82 (February 2004): 213-219.*

*“Regional Convergence: Evidence from a New State-by-State Capital Stock Series,” (with G.A. Garofalo), The Review of Economics and Statistics 84 (May 2002): 316-323.*

*“Nonlinear Tax Structures and Endogenous Growth,” The Manchester School 69 (January 2001): 16-30.*

*“Can Tax Policy Help Explain State-Level Macroeconomic Growth?” Economics Letters 68 (August 2000): 211-215.*

ACADEMIC, PROFESSIONAL AND SERVICE ACTIVITIES:

* Co-Editor, *Contemporary Economic Policy,* 2006-2011
* Chair, Department of Economics Retention, Tenure, and Promotion Committee, 2009-2011

**ATTACHMENT B**

**University Library and Learning Resources Report**

1. **Library Services**
2. **The Library in General**

The University Library is a six-story structure which houses more than one million volumes, more than 1 million microforms, and extensive collections of other non-print materials, including a media collection that contains DVDs, CDs as well as older formats such as LPs, VHS, cassette tapes, and slides along with appropriate viewing and listening equipment. The library subscribes to close to 200 electronic databases that provide access to millions of full text articles across a multitude of disciplines.

The CSULB University Library is open more than any other library in the CSU system. The library schedule during regular session is as follows:

Monday – Thursday: 6:45 a.m. – 11:00 p.m.

Friday: 6:45 a.m. – 5:00 p.m.

Saturday: 10:00 a.m. – 5:00 p.m.

Sunday: 12:30 p.m. – 11:00 p.m.

For the week before and the week of finals, the library opens its doors for 24 hour service and provides free coffee after midnight while supplies last!

1. **Reference Services**

The Spidell Technology Center, where Reference services are located, is the place to get started with research. There are approximately 200 computers that are fully internet capable and offer access to the entirety of research services the library provides, as well as Microsoft products, many other specialized software programs, MACs, color printing, and scanners. There is a large Reference book collection with many encyclopedias, dictionaries, and bibliographies and indexes. Subject specialist librarians are available to explain and interpret these materials and are available for consultation at the following hours:

Monday – Thursday: 10:00 a.m. – 7:00 p.m.

Friday: 10:00 a.m. – 4:00 p.m.

Sunday: 12:30 p.m. – 6:30 p.m.

1. **Library Instruction**

To foster Information Competence on the CSULB Campus, the subject librarians offer approximately 600 individual information literacy sessions each academic year.

During these sessions for the College of Business and its majors, which includes the Department of Management & HRM, the College of Business Librarian covers basic search techniques, an introduction and demonstration of the online Library Catalog (COAST), the research databases for journal article searching, proper citing of information sources, as well as critical thinking and evaluation skills for utilizing information. For graduate students, other topics are added to sessions.

In addition to the scheduled instruction sessions, the College of Business Librarian and the Economics Librarian are also available for one-on-one consultations with faculty and students on an as-needed basis.

1. **Interlibrary Loan Services (ILS)**

The realities of smaller budgets, burgeoning amounts of available information, and the increasing demands of faculty and student research have made access to other library collections in the region, state, and nation increasingly important. The Library’s Interlibrary Loan services are an unparalleled set of services that meet these needs. Easy online request interfaces and prompt fulfillment of requests to thousands by participating libraries allows for seamless access to thousands of materials the Library unfortunately cannot purchase.

Interlibrary Services offers two options to obtain materials not currently available (i.e. checked out, temporarily unavailable, we don't own it, etc.) at CSULB:  [**BeachReach**](http://www.csulb.edu/library/guide/serv/docdel.html#beachreach) **and** [**LINK+**](http://www.csulb.edu/library/guide/serv/docdel.html#LINK+) (each are described in detail below). These services are available to all current CSULB students, faculty, and staff only.

*LINK+*

Link+ is a consortium that allows for a single search to be broadcast to more than fifty regional libraries. This service is for books and selected media only and the delivery time is within 2-4 working days. The service is available to CSULB students and faculty via COAST, thereby allowing requests to be made from any computer anywhere in the world.

*BeachReach*
[BeachReach](https://illiad.library.csulb.edu/LogonX.asp) allows you to request any kind of material.  Try [Link+](http://www.csulb.edu/library/guide/serv/docdel.html#LINK+) first for book requests as it has a faster service time for books.

* Articles, book chapters, conference proceedings, dissertations and books can be borrowed through BeachReach.
* Average delivery time for articles and book chapters is 2-5 business days.
* Average delivery time for books and media materials varies depending on availability and how far the item has to travel.  It can range from a few days up to two weeks.
* You will receive an email notification when your requests are electronically delivered to your [BeachReach Account](https://illiad.library.csulb.edu/LogonX.asp) or are ready for pick up.
* Books and media that cannot be delivered to you electronically can be picked up at the Circulation Desk (1st floor).
1. **The Library Web Page**

The Library’s web page, located at http://www.csulb.edu/library/ offers one-stop shopping for easily accessible information and research. Services available off the Library’s main page include:

* A current list of the Library’s hours
* Access to COAST, the Library’s catalog
* Access to the Library’s research databases
* Librarian listings by name or by subject area that includes their phone numbers, office locations, office hours, and email addresses
* Request forms for instruction sessions, consultations with a Librarian, and Interlibrary Services
* The Library’s 24/7 chat with a Librarian online service

The Business Librarian and the Economics Librarian have created in-depth research guides utilizing state of the art web 2.0 tools. The Business Research Guide can be found at <http://csulb.libguides.com/business>. The Economics Research Guide can be found at <http://csulb.libguides.com/econ?hs=a>.

Areas of interest on these pages include:

* Detailed information on searching for books/media information on a business topic.
* Detailed information on searching for article information on a business topic.
* Contact information for the Business Librarian and the Economics Librarian including links to email and a form to schedule an appointment with a librarian.
* Information on doing research off campus.
* General Library Information for ease of use.
1. **Library Collections**
2. **Philosophy**

Development and maintenance of a strong, well-used and curriculum-centered collection is a joint faculty/Library venture. The faculty in the department works closely with the subject specialist librarians, recommending new materials to be added to the collection and helping to evaluate new and existing publications. The Library relies on and values this participation and attempts to maintain continuous communication with the department on other matters as well, such as addressing any concern’s faculty may have regarding any aspect of the library’s collections or services.

1. **Description**

The Library utilizes the Library of Congress classification scheme for the organization of its materials thereby approximating the academic departments. It is hard to narrow down the library materials on this subject since it is a subject that encompasses many different areas. The areas that more specifically relate to global supply chain management, but are not necessarily limited to them, can be found in the following classification stems of this scheme:

* HC, HD and HF
* TE and TS

Like other academic libraries nationwide, CSULB has seen a decline in resources available for library materials at a time when inflation and publisher price increases have driven up subscription prices. This makes maintaining the current collection difficult and subscribing to new titles challenging.

The Library currently subscribes to more than 200 electronic databases, which are the primary research tool for finding journal, magazine and newspaper articles. There are several of these databases that are used specifically for research in global supply chain management. The Library subscribes to ABI Inform Complete, Business Source Premier, EconLit, IEEE Xplore, Compendex and Science Direct which would cover business and economics related material as well as more technical material.

1. **Budget**

While the library’s core collection is robust it must also be noted that the Library is not able to augment the allocated funds for additional books and journal subscriptions for this program. In other words, while the library has been able to retain access to a healthy selection of expensive electronic databases available funds for books have been reduced drastically; and at this time the available amount does not meet the full book needs for the college as currently constituted. Needless to say the creation of a new program will strain that budget even further. One solution is for college to provide an annual library budget augmentation, when new programs are instituted to enable the library to acquire highly recommended books requested by the program.

**ATTACHMENT C**

**Relevant Journal Availability at CSULB Library**

|  |  |  |  |
| --- | --- | --- | --- |
| **Top Ranked Global Supply Chain Journals** | **Discipline** | **Avg. of 6 rankings**  | **Available Hard Copy or Electronically** |
| *Management Science*  | *MS* | 2 | Yes |
| *Mathematics of Operations Research*  | *OR* | 2.5 | Yes |
| *Operations Research*  | *OR* | 2.5 | Yes |
| *Mathematical Programming*  | *OR* | 4 | Yes |
| *Manufacturing and Service Operations Management* | *OM* | 4 | Yes with 3-year delay |
| *Transportation Science*  | *OR* | 4.5 | Yes |
| *Journal of the American Statistical Association*  | *ST* | 5 | Yes |
| *IIE Transactions*  | *OR/OM* | 6.75 | Yes with 1.5-year delay |
| *Production and Operations Management*  | *OM* | 7.25 | Yes with 1-year delay |
| *Journal of Operations Management*  | *OM* | 7.8 | Yes |
| *Interfaces*  | *MS* | 8.4 | Yes |
| *IEEE Transactions on Engineering Management*  | *OR* | 9 | Yes |
| *Naval Research Logistics*  |  | 9.25 | Yes |
| *SIAM Review*  | *MS* | 10 | Yes with 1-year delay |

MS=Management Science; OR=Operations Research; OM=Operations Management; ST=Statistics

1. AACSB (2012) Eligibility Procedures and Accreditation Standards for Business Accreditation retrieved Jan 19, 2013 from http://www.aacsb.edu/accreditation/standards-busn-jan2012.pdf [↑](#footnote-ref-1)
2. Title 5 of the California Code of Regulations, Section (b)(3)(B): “A project is a significant undertaking appropriate to the fine and applied arts or to professional fields. It evidences originality and independent thinking, appropriate form and organization, and a rationale. It is described and summarized in a written abstract that includes the project's significance, objectives, methodology and a conclusion or recommendation. An oral defense of the project may be required.” [↑](#footnote-ref-2)
3. Course sequence is expected to require 18 months for completion. [↑](#footnote-ref-3)
4. This plan can be viewed at http://www.csulb.edu/colleges/cba/dean/plan/. [↑](#footnote-ref-4)
5. http://www.marshall.usc.edu/msgscm/curriculum [↑](#footnote-ref-5)
6. http://www.sandiego.edu/business/centers/supply\_chain\_management/MS-SCM/ [↑](#footnote-ref-6)
7. http://www20.csueastbay.edu/cbe/mba-options/index.html [↑](#footnote-ref-7)
8. http://mba.csusb.edu/traditionalMBA/concentrationSelection.html [↑](#footnote-ref-8)
9. http://cbaweb.sdsu.edu/mba/requirements [↑](#footnote-ref-9)
10. http://www.bls.gov/opub/mlr/2012/01/art4full.pdf [↑](#footnote-ref-10)
11. Bureau of Labor Statistics, 2010 [↑](#footnote-ref-11)
12. State of California Employment Development Department (First Quarter, 2012) [↑](#footnote-ref-12)
13. State of California Employment Development Department (First Quarter, 2012) [↑](#footnote-ref-13)
14. www.iie.org [↑](#footnote-ref-14)
15. Institute of International Education, 2012 (http://www.iie.org/Research-and-Publications/Open Doors/Data/International-Students) [↑](#footnote-ref-15)
16. ACSB 2012. [↑](#footnote-ref-16)
17. See http://www.ccpe.csulb.edu/ContinuingEd/About.aspx?pID=59. [↑](#footnote-ref-17)
18. For example, the “Transportation” research guide at http://csulb.libguides.com/transportation?hs=a provides databases and additional resources of use to the program. [↑](#footnote-ref-18)
19. Source: http://www.csulb.edu/divisions/aa/academic\_technology/ [↑](#footnote-ref-19)
20. The most complete list of available software in CBA Computer Labs is available online at http://www.csulb.edu/colleges/cba/it/software/ [↑](#footnote-ref-20)