Submission date: February 8, 2020

Program/s in this review: Global Supply Chain Management MS (MS GSCM)

Specialized accrediting agency (if applicable): Association to Advance Collegiate Schools of Business (AACSB)

Campuses where the program is delivered: Anchorage

Members of the program review committee:

- Dr. Sandra Ehrlich, Director Graduate Business Programs, CBPP, UAA
- Dr. Helena Wisniewski, Chair, Management & Marketing Department, CBPP, UAA
- Dr. Darren Prokop, Professor of Logistics, CBPP, UAA
- Janet Burton, CBPP Graduate Programs Coordinator, UAA

1. Centrality of Program Mission and Supporting Role (700 words or less)

- Relevancy of the program

Alaska is centrally located along the great circle route between the Pacific Rim countries and the Lower 48. With the fifth largest cargo airport in the world, Alaska serves as a gateway in U.S.-Asia trade flows. Logisticians in Alaska face challenges in weather, geography, and expansive yet fragile transportation infrastructure unparalleled in the world.

Alaska business partners have supported the MS in Global Supply Chain Management (MS GSCM) program since its launch in 2001. Working in concert with industry and government partners, the faculty is conquering the challenges of Alaskan global supply chain management. These lessons learned are applicable to business in the Lower 48 and to all U.S. trade partners. Therefore, the fully online MS GSCM degree uniquely taps into the global market to apply business theory and practice.

According to the Bureau of Labor Statistics, the number of jobs for logisticians will be driven by the “need for logistics in the transportation of goods in a global economy.” This worldwide demand for logistics professionals offers lucrative job opportunities, but it remains a highly competitive market to enter. With global operations becoming increasingly sophisticated, and the need to keep inventory tighter than ever in our newly minted, on-demand world, companies from all over are scrambling to hire supply chain specialists.

The MS GSCM targets mid-level professionals with years of experience in the field. There is constant demand for qualified professionals. MS GSCM graduates gain the core competencies, skills, and expertise to move into management and executive positions.

- Any role the program plays in supporting other academic programs;

Many of MS GSCM courses are electives in the Master of Business Administration (MBA) General Management program. Global Supply Chain Management is one MBA Emphasis.

- Partnerships with outside agencies, businesses, or organizations;

The MS GSCM partners with the following organizations to establish the UA Logistics Foundation: Alaska Airlines, FedEx, Horizon Lines (now Matson), Lynden, TOTE, UPS, and the Municipality of Anchorage.

Dr. Darren Prokop has extensive connections with industry executives. They assist him with his research, which he brings into the virtual classroom; and collaborate in the production of in-depth video interviews used as the basis for online discussion boards among graduate students. A sample of this growing video library is available on YouTube.
Featured organizations in the video series include: Alaska Railroad, Alyeska Pipeline Service Company, Anchorage Ted Stevens International Airport, Carlile Transportation Systems, and the Port of Alaska. The video series will be expanded to include key organizations along the supply chain into and out of Alaska.

- **Specific workforce development and employment opportunities relevant to the program;**
The MS GSCM is designed for global working professionals. According to the U.S. Bureau of Labor Statistics, the need for logisticians will grow by 7% from 2016 to 2026. A study conducted by *Supply Chain 247* found companies are willing to pay for this talent. The average base salaries for logistics managers and supply chain managers are $104,705 and $111,994 respectively.

Graduates of the MS GSCM are working as supply chain specialists, procurement officers, logistics managers, corporate directors, and company presidents in industries including transportation, procurement, oil and gas, medical and health services, national and state government, manufacturing, and third-party service providers.

**UAA’s MS GSCM alumni are employed in their field in management and executive positions.** Below are a few examples:
- Manager, L48 Supply Chain at CONOCO PHILIPS
- Sr. Contracting Officer, Alyeska Pipeline Service Company
- V.P. Freight Operations, Carlile Transportation Systems, Inc.
- Senior Purchasing Manager, Flying Food Group
- Director, Freight Sales & Marketing, Alaska Railroad Corporation
- Project Manager, Crowley Fuels, LLC
- Manager, Import Customs Compliance, PSEB/Eddie Bauer
- Senior Project Manager EPC, NANA WorleyParsons
- Logistics Operations Officer, United States Air Force
- Operations Manager, Bering Straits Aerospace Services
- Supply Chain Specialist, The Boeing Company
- Supply Chain & QA Manager, Denali Universal Services
- VP of Logistics and Terminal Operations, Petro Star Inc.
- Managing Director, FedEx Express
- General Manager, Commercial Products Division, Reynolds Polymer Technology

- **Sources of extramural support and funding for the program;**
The MS GSCM was created to meet the needs of industry. Over the years, it has received $476,000 in funding and support from the following:
- Air Cargo Association
- Alaska Airlines
- FedEx
- Horizon Lines (Matson)
- Lynden Air Freight
- Tote Marine
- UPS Foundation

In addition, in 2005, Saltchuck gave $249,000 to the CBPP Excellence Fund for Logistics program growth. The majority of those funds were used to reengineer the face-to-face MS GSCM program to an online format. The Director of Graduate Programs is working with UAA Lead Development Officer, Roberta Rinehart, to secure additional program funding.

- **Any high demand job designation for the program.**
Yes. **Logistics is big business.** According to *U.S. News & World Report*, logistician ranks #18 in “Best Business Jobs 2020.” The U.S. Department of Transportation noted the transportation system moved a daily average of 55 million tons of freight in 2013, which was valued at nearly $50 billion. U.S. business logistics costs rose to $1.48 trillion in 2015, which shows the sheer magnitude of this vital industry.
Economic conditions continue to shape the logistics landscape. The Council of Supply Chain Management Professionals (CSCMP) 30th Annual “State of Logistics Report” (2019) stated the importance of logistics has been elevated in the C-suite as the profession has been “thrust into the spotlight to manage rising freight rates, tight capacity and driver shortages amidst rising customer service demands. All of a sudden, CEOs are aware of not just what they spend, but what they actually do to keep costs as low as they do—and that’s a huge win for the profession.”

This report, authored by A.T. Kearney, was sponsored by CSCMP and presented by Penske Logistics. The report stated, U.S. business logistics costs rose 11.45% to reach $1.64 trillion, or 8% of 2018’s $20.5 trillion gross domestic product (GDP)—the highest cost as a segment of GDP since 2014.

Moreover, “…fueled by the 14.2% increase in ecommerce through online purchases last year, the autonomous auto robot market is growing exponentially to meet demand. In technological trends, over the next 3 years 5G will improve supply chain visibility and the way robotics operate.”

The energy, transportation, mining, and tourism sectors, critical for Alaska’s economic development, all rely on various aspects of logistics and supply chain management. Managers in charge of purchasing, inventory control, production, transportation, and distribution all benefit from the targeted MS GSCM curriculum. The CBPP website also gives students access to the current state of the job market.

2. Program Demand (including service to other programs), Efficiency, and Productivity (7 year trend; 1400 words or less)

Program Demand. The MS GSCM program was launched in spring 2001 to meet industry demands. In fall 2018, the revised online delivery model was implemented to meet the needs of working professionals. This innovative online program was designed to increase enrollment and attract international students. The Logistics and Global Supply Chain Management Emphasis in the MBA program is accomplishing this goal. Enrollment has doubled and student satisfaction has been extremely high since the program was reengineered from face-to-face to online delivery. In May 2020, the first cohort of online master’s students will graduate.

Online Delivery. The five-semester, online 20-month program is designed for global working professionals.

3. Program Quality, Improvement and Student Success (1500 words or less)

• Specialized accreditation process and status;

The MS GSCM is an accredited graduate program by the Association to Advance Collegiate School of Business (AACSB). It is one of a few accredited graduate programs in supply chain management in the U.S. that is 100% online.

AACSB International is a nonprofit organization devoted to fostering engagement, accelerating innovation, and amplifying impact in business education. Through its accreditation standards and processes, AACSB recognizes institutions that uphold its mission and core values, work to advance the interests of global management education, and participate in AACSB’s community of leading business schools. In this context, AACSB focuses on continuous quality improvement in management education through engagement, innovation, and impact.

To earn and sustain business accreditation, CBPP and the MS GSCM curriculum must align with a set of 15 business accreditation standards that focus on mission and strategic management; support for students, faculty, and staff; learning and teaching; and academic and professional engagement of students and faculty. Please see the AACSB website for addition information.
To take the online MS GSCM to the next level—to achieve its full potential—it needs to enroll cohorts of students from locales familiar with Alaska’s role in U.S-Asia trade. This means the Pacific Rim nations. To achieve this, the Director of Graduate Business Programs and the MS GSCM faculty are undertaking a two-pronged approach:

1. Develop cutting-edge teaching content that features CBPP’s competitive advantage; and
2. Launch a targeted marketing campaign with the compelling message that Alaska is at the heart of where many logistical innovations, challenges, and opportunities lie.

Points (1) and (2) will be leveraged in tandem on our website and in other social media outlets.

- **Currency of the curriculum;**
  To meet the needs of working students, the curriculum was entirely reengineered from a face-to-face to an online program between 2018 and 2019. The MS GSCM program was created in tandem with industry experts to meet the need for highly trained logistics professionals in Alaska and globally.

The revised curriculum delivers cutting-edge content. As an exemplar, according to IBISWorld, the Automated Guided Vehicle (AGV) manufacturing industry is number 2 in the Top 10 Fastest Growing Industries in the US in 2020. The 2018-2019 revenue growth was 48.2%. In response, Artificial Intelligence (AI) and Information Technology have been added to the course curriculum. These disciplines are at the forefront of the logistics field.

**5 core areas of the MS GSCM:**
1. Logistics and Global Supply Chain Management: Applications and Strategy
2. Supply Chain Technology and Systems
3. The Role of Supply Chain Management in International Trade
4. Leadership Principles and Management Skills for Global Supply Chain Managers
5. Quantitative and Financial Performance Metrics for Global Supply Chain Management

- **Innovative program design;**
  The five, six-credit courses are conducted 100% online through Blackboard, the UAA learning management system. Courses are built around readings, interactive videos, discussion boards, essays, research, interactions with industry experts, presentations, and Harvard Business Publishing gaming simulations.

- **Availability and indications of quality of distance offerings (e.g., Quality Matters, C-RAC standards, etc.);**
  Starting in May 2017, Global Supply Chain Management (MS GSCM) worked with AI&e on a complete program revision. After creating a preliminary program profile to obtain baseline data and information, the program was comprehensively redesigned for hybrid and online course delivery.

  This included academic and student supports; faculty support and training; sequence and availability of courses; technology requirements; and data to be collected and used for program improvement. In addition, the revised program integrated ePortfolios, a High Impact Practice, across the courses to capture student growth and progress through the program.

  The revised courses are based on Quality Matters standards and contain interactive and multimedia components to increase student engagement. Natalie Harrison, who did much of the development work, was trained in the use of the Quality Matters rubric for online course design. Courses were designed and developed to meet accessibility requirements according to WCAG 2.0 guidelines, including a full accessibility review for LOG A661 as a representative course.
Program Student Learning Outcomes assessment: Describe your key findings, actions taken to improve student learning, and evidence that these actions are working.

The following Learning Outcomes were selected for MS GSCM assessment in 2018-2019 as part of the CBPP Assurance of Learning Committee’s findings for AACSB accreditation:

- **Learning Outcome #1**: Collect and synthesize inbound, internal, outbound, and flow information from a real world supply chain setting; identify strategic challenges observed; and propose corresponding strategic directions in supply chain management. *(full outcome assessed)*
- **Learning Outcome #3**: Outline the trade agreements, market entry strategies, risks, international commercial documents and export packaging requirements, customs clearance procedures, and physical distribution factors in a global supply chain. Assessed trade agreements and market entry strategies. *(outcome partially assessed - assessed trade agreements and market entry strategies)*
- **Learning Outcome #5**: Explain and evaluate multiple factors that impact the cost of logistics and supply chain management. *(full outcome assessed)*

Findings for MS Learning Outcome #1
- All students in the MS GSCM met the learning outcome in either one or both assignments of the two used to assess MSLO#1. For the first assignment, a Blackboard Blog in LOG A661, **13 out of 14** students met the criteria needed. One student did not complete the assignment. For the second assignment, the ePortfolio project in LOG A661 and LOG A665, **13 out of 13** students met the criteria needed for MSLO #1.

Findings for MS Learning Outcome #3
- Only a portion of MSLO#3 has been assessed to date - the requirement for students to “assess trade agreements and market entry strategies” - because students will not fully be introduced to all the content involved in this assessment until later semesters. For the one assignment used so far, a Knowledge Check Quiz, **13 out of 14** students met the criteria needed. One student did not receive a passing grade and only utilized one attempt to complete this assignment. (This was an auto-graded assignment that allowed for multiple student attempts.)

Findings for MS Learning Outcome #5
- All students in the MS GSCM met the learning outcome in either one or both assignments of the two used to assess MSLO#5. For the first assignment, a Blackboard Discussion Board assignment in LOG A661, **12 out of 13** students met the criteria needed. One student did not complete the assignment. For the second assignment, a technical math-based assignment in LOG A665, **11 out of 13** students met the criteria needed for MSLO #5. One student did not fully complete the assignment and another did not attempt the assignment.

Recommendations for Improvements
Dr. Darren Prokop is renown for breaking down pedagogical silos. Logistics and supply chain management are multidisciplinary, and must be taught that way. He and other MS GSCM faculty will collaborate across the courses they teach so that students will approach a problem from various angles and examine all the issues necessary to create workable solutions. An example of this concerns developing a viable, long-term solution to the challenges facing the Port of Alaska. The MS GSCM faculty will develop additional case studies to challenge their students to solve real-world problems.

One of the assignments for MS Learning Outcome #5 was a meaningful and highly challenging technical assignment. MS GSCM instructors will need to work with students closely to make sure they understand the content. Revised assignment submissions will be offered. Clarity on required assignments will be made explicit in the course syllabus. In online classes, professors must engage students with challenging assignments and monitor their attempts to identify where additional instruction on the content is warranted.
Presented below are brief descriptions of four high-impact practices utilized in the MS GSCM program to increase student engagement and retention.

1. **Learning Communities—Graduate Cohort Model**
   “The key goals for learning communities are to encourage integration of learning across courses and to involve students with “big questions” that matter beyond the classroom. Students take two or more linked courses as a group and work closely with one another and with their professors. Many learning communities explore a common topic and/or common readings through the lenses of different disciplines.” (AAC&U)

   The MS GSCM utilizes a graduate cohort model. The students in the global classroom come from a variety of undergraduate degrees. Over time, they build a network of peers across the globe through interactions with course colleagues and leading industry professors.

2. **Collaborative Assignments and Projects—Industry Leader Videos, Blackboard Discussion Blogs, Team Projects, & Simulations**
   “Collaborative learning combines two key goals: learning to work and solve problems in the company of others, and sharpening one’s own understanding by listening seriously to the insights of others, especially those with different backgrounds and life experiences. Approaches range from study groups within a course, to team-based assignments and writing, to cooperative projects and research.” (AAC&U)

   Students in the MS GSCM program study logistics and supply chain management in a variety of global settings. They interact with industry leaders in oil and gas, mining, Arctic transportation and security, military logistics, air cargo and free trade zones, transportation modes—trucking, air, sea, and railroad—and big data in supply chain management.

   As an exemplar, interviews with industry leaders are videotaped. Students review the video and later log in to a “live” question and answer session with the industry leader and expert. Students then log their “lessons learned” on Blackboard and respond to three of their peers in the Discussion Board on Blackboard. In addition, in many of the Harvard Business simulations, individuals and teams challenge one another. They later respond to “lessons learned” from this process on Blackboard.

   In some courses, graduate students are divided into teams. Team projects facilitate networking and interactions.

3. **ePortfolios—Each Student Maintains a Personal ePortfolio Site**
   “ePortfolios are the latest addition to AAC&U’s list of high-impact educational practices, and higher education has developed a range of ways to implement them for teaching and learning, programmatic assessment, and career development. ePortfolios enable students to electronically collect their work over time, reflect upon their personal and academic growth, and then share selected items with others, such as professors, advisors, and potential employers. Because collection over time is a key element of the ePortfolio process, employing ePortfolios in collaboration with other high-impact practices provides opportunities for students to make connections between various educational experiences.” (AAC&U)

   One of the tenets of the MS GSCM program is hosting each graduate student’s ePortfolio on the eWolf Digication site. Students collect and curate artifacts from each of their six courses. The ePortfolio assignment provides students an opportunity to showcase their academic work, career goals, and professional experience on a personal website. Online portfolios serve as locations where students can collect and curate “artifacts” from their educational experience.
• Required in the ePortfolio are a **Home** page, an **About Me** page, a **Professional Portfolio** page, an **Academic Portfolio** page, a **Leadership Portfolio** page and a **Contact** page. These sections are updated and modified throughout the degree program.

4. **Capstone Courses and Projects—Each Student Makes a Capstone Presentation Based in Part, on their ePortfolio**

   “Whether they're called “senior capstones” or some other name, these culminating experiences require students nearing the end of their college years to create a project of some sort that integrates and applies what they’ve learned. The project might be a research paper, a performance, a portfolio of “best work,” or an exhibit of artwork. Capstones are offered both in departmental programs and, increasingly, in general education as well.” (AAC&U)

• Students enrolled in the MS GSCM program must maintain and present an ePortfolio demonstrating their professional competencies and highlights of work completed throughout the program.

• **Student support (e.g. How does your program handle academic advising?);**

  Academic advising in the MS GSCM program has a three-tiered structure.

1. Typically, the first point of contact is the College of Business and Public Policy, Graduate Programs Coordinator, Janet Burton, for pre-application advising.
2. Second, is the Director of Graduate Programs, Dr. Sandra Ehrlich, to provide a holistic view of the degree and career opportunities.
3. Third, the graduate faculty in the MS GSCM program works directly with the students in their respective courses and throughout the program to connect students with industry professionals to solve “real-world” problems.

   In addition, the Chair of the Management and Marketing Department, Dr. Helena Wisniewski, serves as a MS GSCM faculty member and a valuable student point of contact.

4. **Program Duplication / Distinctiveness (300 words or less)**

   The MS GSCM is a distinct program. **No program duplication** exists in the University of Alaska statewide system.

5. **Summary Analysis (500 words or less)**

   The strengths of the MS GSCM program include the following:

   • AACSB-accredited graduate program
   • One of a handful of graduate programs in the US in Global Supply Chain Management
   • Responsive to distinct industry needs
   • Industry professionals are engaged and collaborate with MS GSCM faculty
   • MS GSCM faculty integrate their research into the classroom
   • Global economy is fueling the need for logisticians, the MS GSCM helps meet that demand
   • Innovation is driving state-of-the-art supply chains changes
   • Our faculty are conquering those challenges
   • The cohort model provides a learning community that engages and encourages integration of learning across courses
   • 5-semester, 20-month program is entirely online
   • Flexible, online schedule meets the needs of working students and mid-level professionals
   • Students interact and collaborate with industry leaders to solve real-world problems
   • Students develop critical leadership skills to advance their management career
   • Alumni are employed successfully in key executive management positions
Momentum Moving Forward
The MS GSCM program will complete its first cycle in the revised online delivery model in May 2020. Moving forward, there is tremendous momentum and untapped potential.

1. First, a new Director of Graduate Programs is at the helm in CBPP. The Dean, the Chair of Management and Marketing and the new Director will collaborate as a team to draft and implement recruitment and communication plans to promote the program. This plan will respond strategically to the changes in the growing logistics landscape.

2. Second, Dr. Darren Prokop’s re-engagement with the MS GSCM will serve to keep the program above AACSB standards for faculty sufficiency. Using his books in the courses raises the quality of the pedagogy.

3. Third, a new position was approved and a faculty search for an assistant or associate professor in the field was recently launched. The successful candidate will complement the talents of the faculty teaching in the program and play a major role in taking the MS GSCM to the next level.