

**From:** [Grad School Curriculum Services](#)  
**To:** [Pruchnicki, Maria](#); [Reed, Katie](#)  
**Cc:** [Carpenter, Thomas J.](#); [Anthony, Anika](#)  
**Subject:** BUS\_New Master of Supply Chain Management  
**Date:** Wednesday, November 24, 2021 3:07:52 PM  
**Attachments:** [BUS\\_New\\_MasterOfSupplyChainMangement\\_Nov2021.pdf](#)

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Dear Maria and Katie,

Attached are materials for the proposal to establish a new **Master of Supply Chain Management** for distance delivery in the Fisher College of Business.

The program is a collaboration between the Department of Operations and Business Analytics and the Department of Marketing and Logistics. The purpose of the degree is to offer graduate education to individuals who have two-to-five years of supply chain work experience or who seek a career change into the supply chain field. The degree requires a minimum of 33 credit hours (25.5 credit hours of required coursework, 4.5 credit hours of elective coursework, and 3 credit hours of on campus learning experiences). The three campus learning experiences (one-credit hour each) will consist of workshops, tours, networking opportunities, and out-of-class assignments. The program has a projected enrollment of 25 – 30 new students per year. The proposal document includes a MOU with the Office of E-Learning and Distance Education. It has been approved by the Fisher College of Business. The GS/CAA subcommittee has recommended it for approval, and it has been approved by the Graduate Council.

Please let me know if you need any additional information to add this proposal to an upcoming CAA meeting agenda.

Sincerely,  
Anika

**Anika Anthony, PhD**

Associate Dean of Academic Affairs  
Associate Professor, Department of Educational Studies

**The Ohio State University**

**Graduate School**

250E University Hall, 230 North Oval Mall, Columbus, OH 43210

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[anthony.171@osu.edu](mailto:anthony.171@osu.edu) <https://gradsch.osu.edu/>

TO: Randy Smith, Vice Provost for Academic Programs  
FROM: Anika Anthony, Associate Dean of Academic Affairs, Graduate School  
DATE: November 24, 2021  
RE: Proposal for a new Master of Supply Chain Management in the Fisher College of Business.

The Fisher College of Business is proposing a new Master of Supply Chain Management.

The proposal was received by the Graduate School on September 22, 2021. The combined GS/CAA subcommittee first reviewed the proposal on September 29, 2021 and requested revisions. Revisions were received on October 20, 2021. GS/CAA conducted a second review of the proposal and recommended it for approval by the Graduate Council on October 27, 2021. The proposal was approved by the Graduate Council on November 15, 2021.



THE OHIO STATE UNIVERSITY

FISHER COLLEGE OF BUSINESS

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August 23, 2021

Randy Smith  
Vice Provost for Academic Programs  
The Ohio State University

Dear Randy:

Our Specialized Masters Committee and Associate Dean for Graduate Programs and Executive Education, Aravind Chandrasekaran, has endorsed a proposal for a new online program on supply chain management for the Fisher College of Business. This program is a collaboration between two departments namely the Operations and Business Analytics and Marketing and Logistics at Fisher.

The proposed new online Supply Chain management program is in keeping with the Fisher College's new strategic plan, which identifies distance learning as a priority for future graduate business programming. In particular, the program comes from the two departments that are ranked top 10 in the nation in the areas of supply chain management and Operations Management by the US News.

Please accept my deepest thanks for considering this proposal and for shepherding it through the levels of review in the OAA and in the Graduate School.

Sincerely,

*Anil K Makhija*

Anil Makhija  
Dean and John W. Berry, Sr. Chair in Business



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July 30 2021

Anil Makhija  
Dean of Fisher College of Business  
The Ohio State University

Dear Dean Makhija

The Specialized Masters Committee that includes Professors Tzachi Zach (MAAC), Elliot Bendoly and John Draper (SMBA), Ty Shepfer (MHRM), George Pinteris (SMF) and Jurriaan De Jong (MBOE) met on July 29<sup>th</sup> 2021 to discuss the new online program proposal for online Master in Supply Chain Management (MSCM). The committee unanimously endorsed the attached proposal to create the new online MSCM program.

I too support the proposal, which would allow the Fisher College of Business to cater to the growing learning needs for supply chain professionals within the state of Ohio and beyond.

Sincerely,

**Aravind Chandrasekaran, PhD**

Associate Dean for Graduate Programs and Executive Education  
Fisher Distinguished Professor of Operations  
Fisher College of Business  
The Ohio State University  
Columbus OH 43210



**THE OHIO STATE  
UNIVERSITY**

# Curriculum Proposal Checklist

**Title of Program:**

**Effective term:**

**College:**

**New/Establish:**

**Secondary Major Eligible:**

**Academic Unit:**

**Revise:**

**50% Revision:**

**Mark Up:**

**Program Contact:**

**Terminate:**

**Suspend:**

**Certificate Category\*:**

**Degree/Credential:**

**Program of Study :**

**Title:**

**Code:**

**Program Focus\*:**

**Credit hours to degree/credential:**

**Is this a change to the current total?**

**Yes No**

**Program offered only online?**

**Yes No**

**If yes, is there a signed MOU with ODEE?**

**Yes No**

**Campus(es) where offered:**

**Columbus**

**ATI**

**Lima**

**Mansfield**

**Marion**

**Newark**

**Rationale:**

**Student Curriculum Sheet Required:**

**Four Year (or appropriate) Plan:**

**Academic Unit Curriculum Committee approval date:**

**College Curriculum Committee approval date:**

**Graduate School Council approval date\*:**

**Regional Campus approval date\*:**

**Council on Academic Affairs approval date:**

**University Senate approval date\*:**

**Board of Trustees approval date\*:**

**ODHE approval date\*:**

\* If applicable

November 9, 2021

Dr. Anika Anthony  
Associate Dean for Academic Affairs  
The Ohio State University

Dear Anika,

Herein please find a revision of the Fisher College's request for approval to develop a new professional Master's (Tagged/Professional Degree) degree program in Supply Chain Management in an online format (Master of Supply Chain Management). In what follows, we have offered detailed response to the subcommittee's comments (our responses are bolded) in the email delivered on November 5.

We have also updated the proposal in this revision.

Please let us know if you have any questions,

Regards

Aravind Chandrasekaran  
Associate Dean for Graduate Programs and Executive Education  
Fisher College of Business  
The Ohio State University

1. PDF pp. 5, 13, 15, 31, and 32 describe the coursework and tours students will complete to earn one credit hour as a part of the on-campus experience. Please briefly describe any out-of-class assignments (approximately 1500 minutes) students may complete to address [ODHE's definition of a semester credit hour](#).

**Response: Thank you. Description has been added on pages 10-12 and in Appendix of this revised proposal.**

2. On PDF pp. 17 and 18, please state the projected tuition cost of this program in comparison to other programs.

**Response: We now state the projected tuition cost in the table.**

3. PDF p. 21 explains that the program will work with various organizations to support recruitment and retention of underrepresented groups. The subcommittee requested further elaboration on what the program will do when working with various professional organizations (e.g., How will the program collaborate with and leverage the organizations? Will they ask the organizations to provide access to contact lists? Will they work with the organization to advertise the program?)

**Response: Thanks for this question. We will include information about our program in professional organizations newsletters and emails. We will also ask these organizations to share contact information on the representatives from their member companies. We will then contact these individual members and will**

**conduct custom webinars as well as information sessions discussing how our program offers unique learning opportunity on supply chain function for women, veterans, and underrepresented minorities from their organizations.**

4. On PDF p. 22, please add to the description of the Assessment Plan the measure that will be used to determine whether students have met the four competencies of the program (e.g., grade of “B”).

**Response: Description has been added on page 23 of this revised proposal**

5. Please provide Appendix 2 (2-page faculty CV’s).

**Response: Done.**

6. Could you please move the letters of support from Dean Makhija and you to the pages 1 and 2 of the document (removing them from the appendix)? If you’d like, you can leave the Executive Committee Minutes in Appendix 6.

**Response: Done.**

7. In preparation for presenting this proposal at CAA, please be prepared to further elaborate on the logistics of the campus experiences, as committee members may have additional questions.

**Response: We will be happy to answer any remaining questions during the CAA meeting**

October 20 2021

Dr. Anika Anthony

Associate Dean for Academic Affairs

The Ohio State University

Dear Anika,

Herein please find a revision of the Fisher College's request for approval to develop a new professional Master's (Tagged/Professional Degree) degree program in Supply Chain Management in an online format (Master of Supply Chain Management). In what follows, we have offered detailed response to the subcommittee's comments (our responses are bolded). We have also updated the proposal in this revision.

Please let us know if you have any questions,

Regards

Aravind Chandrasekaran  
Associate Dean for Graduate Programs and Executive Education  
Fisher College of Business  
The Ohio State University

1. Thank you for confirming in the attached Curriculum Checklist that the proposed degree is a Master of Science (M.S.) instead of a professional/tagged degree (e.g., Master of Supply Chain Management). Please provide the following information about the degree name:
  - a. Please edit the proposal document and cover letters to provide the full name of the proposed degree (e.g., Master of Science in Supply Chain Management), degree abbreviation (e.g., MSSC), and rationale for the degree designation. Since this will be a research graduate degree (i.e., Master of Science or Master of Arts), please explain how the degree program involves preparation to carry out significant research and to discover new knowledge. If this will be a professional/tagged degree (e.g., Master of Supply Chain Management), please explain how theory and practice are integrated in the curriculum and how the program will contribute to the enhancement of students' professional preparation.

**Response:**

**Thank you for allowing us to clarify the naming of the proposed degree. After consulting the OAA Handbook and the definitions of the master's degree, we agree that our program qualifies as a Tagged or Professional Degree and hence we renamed the degree to Master of Supply Chain Management (MSCM). This change is made throughout the proposal. The following reasons support the idea to classify it as a tagged master's degree:**



1. **The MSCM program is developed to help practitioners gain skills that are required to succeed in the area of supply chain management. The program specifically has two learning needs. 1) It allows working professionals who have 2-5 years of work experience in the supply chain field seek more formal education to advance more quickly or to assume positions at higher levels within their own or other organizations. 2) Individuals who have professional experience in other fields but are looking to change career paths and move into the field of supply chain.**
2. **The curriculum for the MSCM program will blend theoretical insights from our faculty with experiential learning from capstones, company visits and other Gemba learning (Gemba refers to the place where the actual work is done). Hence the students can better integrate theory and practice and apply them immediately back in their organizations.**

**We have clarified this point in our proposal and made appropriate changes to the other documents.**

2. Letters
  - a. PDF p. 2 mentions letters from the executive committee and the specialized program committee. Please provide the letters after the proposal cover letters or place them in the Appendix.

#### **Response**

**Thank you. We now have the letter summarizing the committee discussion to the Dean of Fisher College of Business included in the appendix. The executive committee (EC) does not have any voting rights according to the College patterns of administration. Several faculty and staff that are not part of the specialized Master's committee attend the EC meeting. We brought the proposal to discussion during the EC meeting to get feedback from the larger faculty and staff. The meeting minutes distributed to the college are now included in the appendix of the proposal.**

3. Basic Characteristics of the Educational Program
  - a. PDF p. 4 describes the target audience of the degree. Since the target audience is working professionals, please explain how the program will be structured to enable students to complete the degree within the estimated timeframe while employed.

#### **Response**

**The program is offered 100% online with approximately 50% of the content delivered asynchronously in the form of short video lectures, focused group interviews, podcasts as well as recorded case discussions. The remaining 50% synchronous discussions will be delivered in the evening or weekend to meet the demands of working professionals. These lectures will also be recorded and available for the students in case they are missing the class time due to professional obligations. We will also ensure that the exams and learning assessments have flexibility (i.e. take-home / reflection papers) so that students are able to complete them despite their busy schedules. Our recruiting efforts will also ensure that the prospective students understand the design of our curriculum (50% - 50% - asynchronous and synchronous mix) and are self-selecting to the program.**

**All of these will allow our working professional students to balance between work, family and school and complete the degree on time.**

- b. Provide information about special efforts that will be used to enroll and retain underrepresented groups in the program or discipline. The attached CCGS Proposal Template provides information on what this section should address.

### **Response**

**The MSCM program prioritizes recruiting, retaining, and training underrepresented groups to serve as future supply chain leaders. The Office of Distance Education and E-Learning (ODEE) will work closely with the graduate programs office (GPO) to promote the program to a variety of professional organizations within and outside the state of Ohio. Specifically, ODEE and the GPO will work closely with groups such as the Columbus Council of Supply Chain Management professional (CSCMP) and Ohio Minority Supplier Development Council (OMSDC) to encourage diversity of applicants. We will conduct numerous webinars as well as information sessions discussing the role of women, veterans, and underrepresented minorities in leading supply chain functions within organizations. We will also work closely with the centers at Fisher College of Business including the Center of Operational Excellence (COE) that includes members such as Cardinal Health, DHL Supply Chain, Honda, Parker Hannifin to actively recruit students for the program. It is also important to note that some of our faculty teaching in the program (Professor James Hill, Professor Terry Esper, and Professor Steve DeNunzio) are heavily involved in working with these organizations.**

**Second, there is rich diversity in terms of faculty teaching in our MSCM program. About 40% of the faculty teaching in the program are women or URM faculty. This will ensure that we are able to retain and train the underrepresented groups in our program.**

4. Institutional Planning for the Program
  - a. Please describe the physical facilities and equipment needed to support the program. Indicate the impact that the proposed program will have on the physical resources that currently accommodate existing programs and services, or identify new laboratory and facility needs (see CCGS Proposal Template attached)

### **Response**

**The MSCM program is 100% online. We will work closely with the ODEE to develop the asynchronous learning content for our program. This will take multiple forms such as short video lectures, recorded case discussions, podcasts and interviews to offer rich diversity in learning styles. The faculty will also use delivery room spaces at the Gerlach Hall & Mason Hall when doing their synchronous learning. Specifically, there are delivery rooms in Mason Hall (140A – 140F) as well in Gerlach Hall (GE 203, GE 271, GE 208) that will be used by the MSCM faculty. The Graduate Programs Office (GPO) will work closely with the MSCM faculty to schedule these delivery room spaces to avoid any conflicts with other online programs such as Online WPMBA.**

- b. Please provide evidence that a market need for the new program exists (e.g., market analysis via the Bureau of Labor Statistics projections, software such as Burning Glass/Labor Insight, consultant or professional association report, summarized data from any survey). How has estimated program demand been factored into enrollment projections and used in planning and budgeting

processes? Descriptive information can be provided in the proposal narrative, and any detailed information can be included in the Appendix (see CCGS Proposal Template attached).

**Response:**

Thanks for bringing this point. Before we developed the proposal, we collaborated with ODEE to do market research for the need for a new supply chain master’s program at the Ohio State University. ODEE used EAB to conduct this research. Please find below two important data measures from the EAB survey. Figure 1 shows the trends in local demand (within Columbus region) for Master’s Level Jobs for Supply chain management professionals and Figure 2 shows similar trends for the region (Ohio and neighboring states). As seen from both Figures, OSU and Fisher College of Business has a potential opportunity in contributing to these demands from the market through the new MSCM program. Given that our program is intentionally capped at 50, we are confident fulfilling the demands from the market. Independent of the EAB’s assessment, we also conducted numerous focus groups through our center of operational excellence with companies like Honda, Abbott Nutrition, DHL Supply Chain to obtain additional insights on the demands from the regional markets. We include the EAB Market Research as an additional document with this proposal.

**Figure 1: Local Job Postings for Positions Requiring Master’s Supply Chain Degrees**

**Local Demand over Time for Master’s-Level Supply Chain Management Professionals**

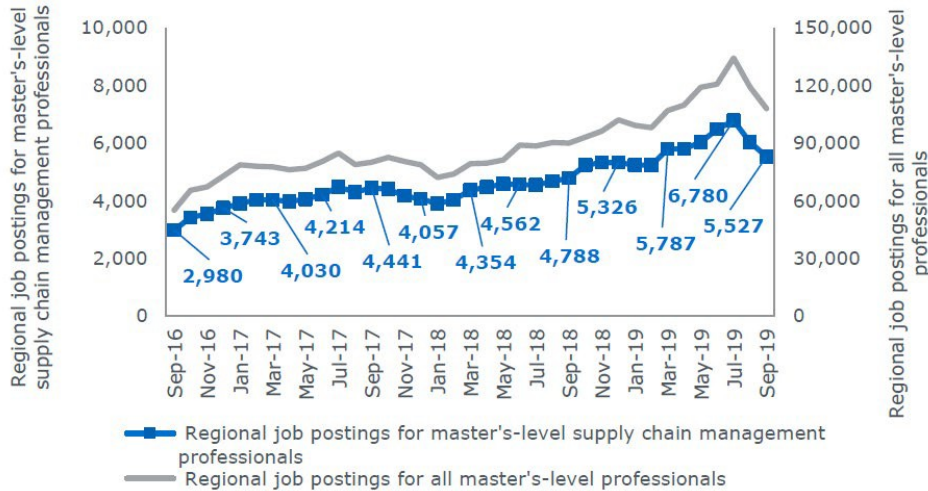
*Local Data, September 2016-September 2019<sup>3</sup>*



**Figure 2: Regional Job Postings for Positions Requiring Master’s Supply Chain Degrees**

**Regional Demand over Time for Master’s-Level Supply Chain Management Professionals**

Regional Data, September 2016-September 2019<sup>4</sup>



5. Statewide Alternatives

- a. PDF p. 7 discusses programs located across the U.S. Please also discuss statewide alternatives by providing a table that summarizes programs offered at [Ohio CCGS participating member institutions](#) and explaining how the existing programs across Ohio may differ from the program being proposed (see CCGS Proposal Template attached).

**Response**

Table 1 gives the details of some of the alternative Master of Science or Tagged Master’s programs offered by other Universities belonging to the Chancellor’s Council on Graduate Studies. As seen from Table 1, while some of the neighboring institutions offer alternative programs, they have varied concentration (e.g. Bowling Green in Logistics System Engineering) or offered in a different modality (e.g. Case Western Reserve – In-Person Program). Other programs such as the University of Akron’s program involves a generic master’s program with supply chain concentration. While these are very good programs, the proposed MSCM program is different in the modality offerings (e.g. Online) and the focus (combining the expertise of production/operations with supply chain and logistics). The proposed MSCM program will also draw on the strengths of other initiatives such as the center of operational excellence and Risks Institute to develop curriculum that involves lean supply chains and Supply Chain Resiliency and Risk Management which would offer other learning benefits to the participating students.

**Table 1: Supply Chain or Related Programs Offered by CCGS Institutions**

Institution	Specialized Master's Program in SCM or Related Fields	Name of the Degree Conferred	Type of Instructional Offering (Online/In-person)
University of Akron	Yes	MS in Management – SCM concentration	In-Person
Bowling Green	Yes	MS in Logistics System Engineering	Online
Case Western Reserve	Yes	Master of Supply Chain Management	In-Person
Central State University	NA <sup>1</sup>		
University of Cincinnati	NA		
Cleveland State University	No		
University of Dayton	NA		
Kent State University	No		
Miami University	NA		
Northeast Ohio Medical University	NA		
Ohio University	Yes	MS in Management (Operations & SCM)	Online
Shawnee State University	NA		
University of Toledo	No		
Wright State University	Yes	MS in Logistics and SCM	Hybrid
Youngstown State University	NA		

6. Curriculum and Instructional Design

- a. PDF p. 5 indicates that students will not necessarily meet the pre-requisites for many of the MBA electives. How will the program handle the navigation of this? Please consider listing MBA electives that students in this program may most likely be eligible to take.

**Response**

**The following electives from our online WP MBA program are getting prepared for the Online WP MBA launch in Fall 2022. Several of these electives are well suited for the MSCM students and the pre-requisites for taking these electives will involve foundational operations and supply chain management courses which are the core courses for the MSCM program. These electives along with**

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<sup>1</sup> NA – Information not available through Public Search

**the credits (in parentheses) are given below. The students can take 4.5 credits worth of these electives to meet the requirements of the MSCM program.**

**OBA 7223 – Project Management (3)**

**OBA 7242 – Six Sigma (3)**

**MHR 7244 – Negotiations (3)**

**MHR 7610 - Business Ethics (1.5)**

**ML 7387 - Lean Logistics (1.5)**

**OBA 7241: Lean Enterprise Leadership (1.5)**

**OBA 7257: Data Analysis and Visualization (3)**

**ML 7218: New Product Management (1.5)**

**ML 7202: Consumer Behavior (1.5)**

**MHR 7222: Leadership Legacy (1.5)**

**OBA 7259: Operations and Technology Strategy (1.5)**

- b. PDF p. 5 describes on-campus experiences. How do the on-campus experiences fit into the curriculum plan and coursework? How will the program offer and logistically track the completion of the on-campus experiences during the beginning, middle, and end of each student's program? Are there prerequisites for the on-campus experiences? Will each experience be offered multiple times during the same academic year, or will they be one-time offerings once per academic year? How will the program accommodate students who are unable to attend the weekend on-campus experiences due to religious observance, scheduling conflicts, and/or travel limitations?

## **Response**

**The three on-campus experiences are worth 1-credit each and will involve the program kickoff, mid-program and final learning experience. Each of these experiences will involve 2-3 days of learning as well as networking activities (Typically Thursday – Saturday). For instance, the program kickoff experience will involve introduction to finance and accounting classes (3 hours long) as well as discussion on the capstone foundations (3 hours long). The proposal has details on these three experiences.**

**These on-campus experiences are offered once a year and are scheduled to take place at fixed times. For instance, the Program Kickoff experience occurs in the first weekend of Summer semester (Thursday-Saturday), the Mid-Program Experience will take place in the first weekend in Spring semester (Thursday-Saturday) and the Final experience will take place in the first weekend in fall semester of the following year (Thursday-Saturday). They are scheduled to take place at fixed times and students can attend these experiences and graduate in either 15-month or 24 month tracks.**

**We will make sure that the students enrolling in the MSCM program are aware of these requirements to take part in these three learning sessions so that they can self-select to enroll in our program and minimize any scheduling conflicts. For students who are unavailable due to**

unforeseen circumstances (e.g. health or travel issues), we will plan on delivering the learning content (e.g. Accounting and Finance Minicourses) asynchronously. Assessments of each of these experiences will involve a reflection essay on the learning content. We have provided a brief template of the courses with learning objectives for these experience that clarifies how students will earn their course credits)

- c. PDF p. 5 mentions that each on-campus experience will earn one credit hour. Please explain how the on-campus experience will adhere to the [Ohio Department of Higher Education's definition of a semester credit hour](#).

## Response

We have now included a course delivery plan for each of these experiences that involves details on the instructions on various topics (e.g. Accounting/ Finance/ Leadership) as well as the learning assessments used to evaluate the student's performance. Following the Ohio Department of Higher Education guidelines, each one-credit experience will involve a minimum of 750 minutes of instruction and out of class assignments. Please refer to the course description document that has details on these experiences. We have included them here for your reference:

**Course Title:** Kickoff Experience (NEW)

**Credits:** 1

**Course Description:** This 2-day on-campus experience will include a mini-course (8 instructional hours) on Finance and Accounting, and two company visits (8 instructional hours) to include facility tours and executive presentations.

**Course Title:** Mid-program Experience (NEW)

**Credits:** 1

**Course Description:** This 2-day on-campus experience will include a mini-course (8 instructional hours) on Relationship Management and Negotiations, and two company visits (8 instructional hours) to include facility tours and executive presentations.

**Course Title:** Final Experience (NEW)

**Credits:** 1

**Course Description:** This 3-day on-campus experience will include a mini-course (8 instructional hours) on Leadership, two company visits (8 instructional hours) to include facility tours and executive presentations, and final presentations of the graduating class's capstone projects.

- d. What will be the synchronous commitments for students? Working professionals may want to consider the synchronous commitments as they consider applying to the program (e.g., Is there a mechanism that will enable students to complete the program completely asynchronously? Have details about delivery been considered, such as lectures provided asynchronously, and integrated project meetings held synchronously? Is there an existing program offered through Fisher that may provide example details about how the program will be delivered?)

## Response

**We will record all the lectures and synchronous delivered sessions so that the students can make up for their class times if they are unavailable. All our lectures in the SMBA online program as well as the discussions with the faculty are recorded and made available to all our students. This will be followed in our Online WPMBA program that is set to launch in Fall 2022. We will follow similar standards in the MSCM program.**

- e. Provide information about the required culminating, or integrated learning, assessment for completion of the degree (e.g., thesis, non-thesis exam, non-thesis capstone project). Please explain how this assessment aligns with the degree name (e.g., Master of Science or professional/tagged Master of ...).

## Response

**The MSCM program will be a tagged master's degree program. The Supply Chain Capstone Project (Non-Thesis) will be used as an assessment for the completion of the degree in addition to the standard graduate degree requirements (min GPA of 3.0 over the course of the program). These capstone projects will be student-led but faculty-guided and will give students an opportunity to provide a valuable contribution to their organization while practicing the application of the concepts and learnings they have obtained during the program.**

- f. PDF p. 10 provides the Assessment Plan. What measure(s) will be used to determine whether students have met the four competencies for the program (e.g., percentage of students earning a minimum course grade)?

## Response

**Students enrolled in the MSCM courses will have several assessments in the form of individual exams, case analyses, problem sets and reflection papers that are derived from the four competencies. We will require students to earn a minimum course grade of B to demonstrate successful assimilation of these competencies.**

- g. Please provide brief descriptions for new courses that will be developed so that reviewers can consider the nature of the subject and course content. Per the attached CCGS Proposal Template, each course description should maximally be a paragraph in length.

## Response

**The following courses are new to the MSCM program. A short paragraph of the course description is included below.**

**Course Title:** Introduction to Supply Chain (NEW)

**Credits:** 3



**Course Description:** This course will provide an overview of the key components of managing and operating a supply chain, including the strategic role of supply chain management in determining both the firm's financial performance and the customer experience.

**Course Title:** Contemporary Supply Chain Issues (NEW)

**Credits:** 1.5

**Course Description:** This course will provide an examination of emerging challenges and opportunities in today's dynamic business environment, Topics such as blockchain, greater emphasis on triple bottom line, network layouts following the Covid pandemic and digitilization will be discussed and assessed. This course will be agile to examine emerging topics within the past two to three years and will build off engaged faculty research.

**Course Title:** Consumer-Centric Supply Chain Management (NEW)

**Credits:** 3

**Course Description:** Focuses on how the supply chain delivers on the promises made by the marketing function and the role it plays in defining the end-consumer's experience. Explores omni-channel and last-mile delivery, consumer-expectations, how consumer insights affect decision-making throughout the supply chain.

**Course Title:** Capstone Project (NEW)

**Credits:** 3

**Course Description:** Students will work on a real-life business problem, either with their current employer or with a company assigned to them. These projects will be student-led but faculty-guided and will give students an opportunity to provide a valuable contribution to their organization while practicing the application of the concepts and learnings they have obtained during the program.

**Course Title:** Kickoff Experience (NEW)

**Credits:** 1

**Course Description:** This 2-day on-campus experience will include a mini-course (8 instructional hours) on Finance and Accounting, and two company visits (8 instructional hours) to include facility tours and executive presentations. Students will be assigned a five-page paper. Students will be asked to reflect on one of the tours/visits they experienced and to note key supply chain challenges faced by the presenting company. Students will be asked to provide a strategy for addressing the identified challenges. Following the session students will also be given an assessment exam on the topics covered regarding Finance and Accounting.

**Course Title:** Mid-program Experience (NEW)

**Credits:** 1

**Course Description:** This 2-day on-campus experience will include a mini-course (8 instructional hours) on Relationship Management and Negotiations, and two company visits (8 instructional hours) to include facility tours and executive presentations. Students will be assigned a five page paper. Students will be asked to reflect on one of the tours/visits they experienced and to note key supply chain challenges faced by the presenting company. Students will be asked to provide a strategy for addressing the identified challenges. Following the session students will also be assigned a short paper reflecting on lessons in relationship management and Negotiations.

**Course Title:** Final Experience (NEW)

**Credits:** 1

**Course Description:** This 3-day on-campus experience will include a mini-course (8 instructional hours) on Leadership, two company visits (8 instructional hours) to include facility tours and executive presentations, and final presentations of the graduating class's capstone projects. Students will be assigned a five page paper. Students will be asked to reflect on one of the tours/visits they experienced and to note key supply chain challenges faced by the presenting company. Students will be asked to provide a strategy for addressing the identified challenges. Following the session students will also be assigned a short paper reflecting on lessons in Leadership.

7. Institutional Staffing, Faculty, and Student Support

- a. Please provide a Faculty Matrix that displays information about program faculty (full-time and part-time) who will teach in the program. Will any new faculty be hired for the program? The attached CCGS Proposal Template provides information on what should be included in the Faculty Matrix. Please also provide a 2-page CV for each program faculty member.

**Response**

**Please find information about the program faculty who will teach in the MSCM program provided in the faculty matrix. All the courses will be taught by our existing faculty from the Marketing and Logistics and Operations & Business Analytics Department. We are not planning on hiring any new faculty to specifically teach in the MSCM program.**

8. Minor edits

- a. Since this proposal will be reviewed by individuals beyond Fisher College of Business and Ohio State University, on PDF p. 3, please write out the full name, rather than abbreviations, for the first mention of ODEE and EAB.

**Response**

**We have carefully rewritten the proposal to spell out these acronyms before they are used in the proposal.**

- b. Please insert an apostrophe so that "Master's" is changed to "Master's".
- c. Please provide a table of contents for the Appendix (e.g., faculty matrix, faculty CVs, course descriptions, fiscal impact statement, market analysis and/or needs survey if applicable, additional letters).

**Response**

**Thank you. We have now provided the following details in the proposal:**

1. Faculty Matrix
2. Faculty CVs
3. Course Description
4. Financials

- 5. Market Analyses through external firm**
- 6. Letters of Support**

# A Proposal to Create a Master of Supply Chain Management (MSCM)

Submitted by the Fisher College of Business  
The Ohio State University

**Introduction.** The Fisher College of Business proposes to add a tagged professional degree on Master of Supply Chain Management (MSCM). We believe the demand for supply chain education is growing and we already have a very strong reputation in supply chain through our MBA and undergraduate programs which include two highly regarded specialty areas with connections to supply chain.<sup>1</sup> Adding a specialized masters is overdue. This program will serve two growing markets. One, individuals who have 2-5 years of work experience in the supply chain field but seek more formal education to advance more quickly or to assume positions at higher levels within their own or other organizations. Two, individuals who have professional experience in other fields but are looking to change career paths and move into the field of supply chain.

With the help of Office of Distance Education and E-Learning (ODEE) and Education Advisory Board (EAB), we have designed an on-line master's program that we are confident will take advantage of our strengths and be successful in the market. The following summarizes a few key characteristics of the program:

- It has been designed and will be managed by two highly ranked specialty departments within the Fisher College, the Marketing & Logistics Department and the Operations & Business Analytics Department. This cross-functional perspective is in-line with emerging approaches towards managing supply chains.
- Courses will be 100% online with approximately 50% delivered synchronously and 50% delivered asynchronously. We believe this will be a desirable design for working professional students.
- The program is 33 credit hours; 30 credit hours will be courses: 25.5 required courses, 4.5 elective courses. We will have three special on-campus sessions focused on networking and experiential learning, making up the remaining 3 credits.
- We anticipate most students will be working professionals who will take 2 years to complete the program while continuing to work full-time, however students will also have a path to complete the program in just 15 months.
- The curriculum includes a capstone project that will have students working on real-life business problems, either with their current employer or with an assigned company. This capstone project is viewed as a value differentiator for candidates seeking company financial support for the program.
- The program includes 3 opportunities for students to come to campus. These are intended to provide a more personal experience and enhance their education with workshops, industry tours and networking. Each of these opportunities will be worth 1-credit hour of

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<sup>1</sup> The 2022 U.S. News Graduate Business School specialty rankings has logistics/supply chain as #4 and production/operations as #9.

learning. Students will be informed about these experiences during recruiting so that they can plan well in advance for these trips.

- An important goal is to give students an educational experience that although online, feels intimate and personalized. This is consistent with Fisher College’s mission statement and allows us to take advantage of our strong global reputation in both specialty areas. We will accomplish this goal through the capstone, the campus visits and keeping the class size to less than 50 students per cohort. If the demand is higher than that, we will run the program with multiple cohorts each year.

**The Curriculum.** As already noted, the MSCM will consist of 33 credit hours, of which 25.5 are required, 4.5 are elective, and 3.0 are given for participating in the 3 on-campus sessions. The curriculum is as follows as shown in Table 1:

<b>Coursework</b>			
<b>Supply Chain Overview (4.5 CH)</b>	<b>Supply Chain Components (9 CH)</b>	<b>Supply Chain Depth (9 CH)</b>	<b>Supply Chain Experience (3 CH)</b>
<ul style="list-style-type: none"> <li>• Introduction to SC (3)</li> <li>• Contemporary SC Issues (1.5)</li> </ul>	<ul style="list-style-type: none"> <li>• Operations Management (3)</li> <li>• Logistics Management (3)</li> <li>• Sourcing (3)</li> </ul>	<ul style="list-style-type: none"> <li>• SC Analytics (3)</li> <li>• SC Sustainability &amp; Resilience (1.5)</li> <li>• SC Technology (1.5)</li> <li>• Consumer-centric SCM (3)</li> </ul>	<ul style="list-style-type: none"> <li>• Capstone Project (3)</li> </ul>
<b>+ 4.5 credit hours of electives (primarily from the On-line MBA curriculum)</b>			

<b>On-campus Experiences, 2-3 days each (1 CH each)</b>		
<b>Program Kickoff</b> <ul style="list-style-type: none"> <li>• Mini-course: Finance/Accounting</li> <li>• Tours / Speakers</li> <li>• Introduction of Capstone</li> </ul>	<b>Mid-Program</b> <ul style="list-style-type: none"> <li>• Mini-course: Relationship Management and Negotiations</li> <li>• Tours / Speakers</li> <li>• Capstone Discussion</li> </ul>	<b>Final</b> <ul style="list-style-type: none"> <li>• Mini-course: Leadership</li> <li>• Tours / Speakers</li> <li>• Capstone presentations</li> <li>• GRADUATION</li> </ul>

Table 1: Curriculum for the MSCM Program

At the launch of the program, students will begin their coursework in the summer, and we will provide two program completion timelines. Students can complete the program in 24 months (taking 3-6 credit hours each semester) or in 15 months (taking 4.5-9 credit hours each semester). Both program plans are provided in the Appendix. If there is demand for it and the program is profitable enough, we can also offer an 18-month timeline, which would just require offering

another section of a couple courses. Based on EAB input, we would also like to offer an option to start the program in January, as they believe this flexibility will be important in the market. We will continue to assess ways to make this feasible.

**Elective Courses.** Based on their research and experience, the EAB team advised us to include some room for elective courses in the curriculum. Based on this advice, we have included 4.5 credit hours for electives. This allows students to take either three 1.5 credit hour courses or a 3.0 and a 1.5 hour course. As the program grows, we would like to add some more advanced supply chain-focused courses, but even before that, there will be plenty of electives for our students to choose because we can take advantage of our on-line working professional MBA curriculum. Students can choose to take MBA core courses such as finance, economics, marketing, leadership, and organizational behavior. In addition, the college plans to offer multiple MBA electives in an online format – some of which will have prerequisites that our students will not meet, but many of which will be available and appropriate for the MSCM students to consider as part of their program. In addition, MSCM students will be able to apply for program approval to take relevant elective coursework from outside the Fisher College. In short, the Fisher College will offer a diverse selection of electives from which MSCM students will be able to complete their required 4.5 hours of elective work.

**On-campus Experiences.** The program includes 3 opportunities for students to come to campus to provide a more personal experience and enhance their education with workshops, industry tours and networking. Each of these sessions will be 2-3 days, utilizing weekends such that the 3 together require students to be away no more than 5 weekdays during entirety of the program (which they will presumably have to take as vacation days from work), and students will receive 1 credit hour for attending each session (3 total). Each of these on-campus experiences are offered once a year and are scheduled to take place at fixed times. For instance, the Program Kickoff experience occurs in the first weekend of Summer semester at the beginning of the program (Thursday-Saturday), the Mid-Program Experience will take place in the first weekend in Spring semester (Thursday-Saturday) and the Final experience will take place towards the end of the summer semester of the following year (Thursday-Saturday). They are scheduled to take place at fixed times and students can attend these experiences and graduate in either 15-month or 24 month tracks.

Feedback from EAB indicated that having these on-campus experiences (three-times in our program) would be a differentiator for our offering. These experiences will enable us to give students an experience that although online, feels intimate and personalized, in spite of the fact that most of the program will be online. This is consistent with Fisher College's mission statement and allows us to take advantage of the Columbus region as a critical link in industrial and consumer supply chains.<sup>2</sup> These on-campus experiences will include learning workshops focused on topics such as accounting/finance for supply chain, leadership, negotiation, and relationship management. In addition, executive speakers, company tours and networking events will be offered. These experiences will also provide an opportunity for the students to interact with each

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<sup>2</sup> <https://columbusregion.com/industries/logistics/>

other and the faculty in-person. We will make sure that the students enrolling in the MSCM program are aware of these requirements to take part in these three learning sessions so that they can self-select to enroll in our program and minimize any scheduling conflicts. For students who are unavailable due to unforeseen circumstances (e.g. health or travel issues), we will plan on delivering the learning content (e.g. workshops on topics such as accounting, finance and negotiations) asynchronously. Assessments of each of these experiences will involve a reflection essay on the learning content. Appendix A3 includes a brief template of the syllabi with learning objectives for these experience that clarifies how students will earn their course credits)

**Rationale for Distance Delivery of the MSCM.** Designing the MSCM for distance delivery is in keeping with the Fisher College's strategic goal of enhancing its presence in the online graduate business space. An online MSCM program will appeal to three groups of student prospects:

- Columbus-based rising professionals who would like to pursue a graduate-level supply chain program but do not have the flexibility in their work and/or personal schedules to commit to an in-person program.
- Ohio rising professionals located outside of the Columbus metro area. In 2015, the Fisher College launched the "weekend WPMBA option," which involved bussing students to Columbus from Cleveland, Cincinnati, and Dayton on Saturdays (and on Sundays during home football weekends). The program has been successful, bringing to Columbus approximately 50 students per term. The popularity of this program provides indication that the online format will give potential students an attractive alternative to access our highly ranked program without the barrier of commuting each week to campus.
- Rising professionals located outside of Ohio. While there are many other options for individuals who are interested in pursuing a supply chain graduate degree at distance, we believe OSU's overall reputation, and our specific reputation in supply chain education, will be a draw to students throughout the country. With half of the content being asynchronous, it is also more feasible for students in other time zones to complete the program than some of the competition.

**Specifics Pertaining to the Mode of Delivery:** Distance programs can involve asynchronous instruction, synchronous instruction, or a combination of both. It is anticipated that the delivery mode for the MSCM classes will be an even split between synchronous and asynchronous instruction. Most classes will meet 'live' for 1.5-2 hours each week, and other material will be pre-recorded and students can listen to it on their own schedule. We believe this creates the best balance between providing flexibility to the students, many of whom will be working full-time while enrolled in the program, and still providing opportunities to network with and collaborate with other students and faculty in real-time. It is conceivable that this mix will change (in the direction of a higher percentage of the program being delivered asynchronously) as the MSCM faculty spend more time working with ODEE and with Fisher's own information technology team. For now, however, a 50/50 approach is in keeping with the goals for the program and the preferences of its faculty. Recognizing that this will affect the attractiveness of the program to some working professionals (e.g., those whose work schedules would make an asynchronous form of delivery more attractive, and those who reside outside the Eastern Standard Time Zone), Fisher's marketing efforts will be adapted accordingly.

The MSCM program is 100% online. We will work closely with the ODEE to develop the asynchronous learning content for our program. This will take multiple forms such as short video lectures, recorded case discussions, podcasts and interviews to offer rich diversity in learning styles. The faculty will also use delivery room spaces at the Gerlach Hall and Mason Hall when doing their synchronous learning. Specifically, there are delivery rooms in Mason Hall (140A – 140F) as well in Gerlach Hall (GE 203, GE 271, GE 208) that will be used by the MSCM faculty. The Graduate Programs Office (GPO) will work closely with the MSCM faculty to schedule these delivery room spaces to avoid any conflicts with other online programs such as Online WPMBA.

**Our Place in The Market.** While there are several competing programs already in the market, we believe we can compete favorably based on Fisher’s existing reputation in supply chain education and the specific features of our program design. We think the most compelling features will be:

- The opportunity to get a degree from a highly regarded university that already has top-ranked undergraduate and MBA programs in supply chain.
- The relatively small class-sizes, creating a feeling of intimacy and cohesion among and between students and faculty.
- The opportunity to learn directly from some of the leading faculty in the world in supply chain management, who are producing research<sup>3</sup> that will not reach textbooks for years.
- The opportunity to complete a supply chain related project for a company.
- The flexibility created by having half of each class delivered asynchronously.
- The opportunities to come to Columbus to network, interact in person, and experience supply chain operations in action through tours of local facilities.

The market research provided by EAB provides data on our primary competition, both inside Ohio and across the country. The appendix includes a full comprehensive report regarding the market statistics for supply chain programs.

MS Supply Chain Program	Total Program Cost	Credit Hours	Cost/Credit	Estimated Enrollment
U. of Southern California	\$63,000	30	\$2100	NA
U. of Maryland – College Park **Some in-person courses	\$60,450 nonres \$47,460 res	30	\$2015 nonres \$1582 res	~40
Michigan State U.	\$55,800	31	\$1800	~70
Arizona State U.	\$18,000	30	\$600	NA
U. of Minnesota **some in-person courses	\$47,904	32	\$1497	NA
U. of Tennessee	\$38,250	30	\$1275	6
U. Wisconsin ** Full time in-person	\$42,703 nonres \$21,116 res	30	\$1423 nonres \$706 res	0
Ohio State University	\$41,000	33	\$1242	25 first year, 30 steady state

Table 2: Supply Chain Programs from Other Universities

<sup>3</sup> Ohio State ranks #6 on the SCM journal lists ranking including all journal types (2010-2020), behind MIT, Columbia, Stanford, Michigan, and UT Dallas; and #2 (2016-2020) in empirically-focused journals (behind Michigan State); both time ranges are the default time ranges for the respective searches.



In addition, we added the following data from 5 additional fully on-line programs in the Big Ten as shown in Table 3.

<b>MS Supply Chain Program</b>	<b>Total Cost</b>	<b>#months</b>
University of Illinois	\$10,872	12
Rutgers U.	\$37,920	12
Indiana U.	\$41,000	15
Purdue U.	\$32,064	18
Penn State U.	\$33,630	24

Table 3: Online Supply Chain Program

These data indicate a varied field of schools offering online Master’s in Supply Chain programs. We did not include in the comparison in-person programs from Northwestern, Michigan, U. Washington, U. Tennessee (tri-continent), or Syracuse; these programs ranged 9-15 months and cost from \$46.5K-(U. Washington) - to \$63.6K (U. Tennessee). Considering the online only offerings, the tuition range is quite wide. At the low end is U. Illinois at \$10.9K, but it has an online-only strategy for its entire MBA, and is not particularly strong in supply chain. Arizona State is well-known for supply chain education and is only charging \$18K; the program appears to be entirely asynchronous and does not provide access to world-class faculty as we do, nor do they appear to provide student networking (through synchronous classes or on-campus time). We need to be sure to differentiate our program from these two cheaper offerings, particularly Arizona State which does have a strong reputation in supply chain. We believe our program features and delivery mode will do this.

### **Regional Market Data**

Finally, we also looked at some of the alternative programs to MSCM offered by other Universities within the state of Ohio belonging to Chancellor’s Council on Graduate Studies (CCGS). Table 4 gives the details of these programs. As seen from Table 4, while some of the neighboring institutions offer alternative programs, they have varied concentration (e.g. Bowling Green in Logistics System Engineering) or offered in a different modality (e.g. Case Western Reserve – In-Person Program). Other programs such as the University of Akron’s program involves a generic master’s program with supply chain concentration. While these are very good programs, the proposed MSCM program is different in the modality offerings (e.g. Online) and the focus (combining the expertise of production/operations with supply chain/logistics). The proposed MSCM program will also draw on the strengths of other initiatives such as the Center of operational excellence and Risks Institute to develop curriculum that involves lean supply chains and Supply Chain Resiliency and Risk Management which would offer other learning benefits to the participating students.

Institution	Specialized Masters Program in SCM or Related Fields	Name of the Degree Conferred	Type of Instructional Offering (Online/In-person)
University of Akron	Yes	MS in Management – SCM concentration	In-Person
Bowling Green	Yes	MS in Logistics System Engineering	Online
Case Western Reserve	Yes	Master of Supply Chain Management	In-Person
Central State University	NA <sup>4</sup>		
University of Cincinnati	NA		
Cleveland State University	No		
University of Dayton	NA		
Kent State University	No		
Miami University	NA		
Northeast Ohio Medical University	NA		
Ohio University	Yes	MS in Management (Operations & SCM)	Online
Shawnee State University	NA		
University of Toledo	No		
Wright State University	Yes	MS in Logistics and SCM	Hybrid

Table 4: Related Offerings in the state of Ohio

Figures 1 and 2 below shows the local job postings (within Columbus region) and regional (within Midwest) for positions requiring Master’s level education in Supply chain degrees. It is notable that this data ends in 2019 before the COVID-19 pandemic. The rising demand in jobs for supply chain professionals<sup>5</sup> during the COVID-19 pandemic reinforces the need to offer the MSCM education from the Ohio State University.

<sup>4</sup> NA – Information not available through Public Search

<sup>5</sup> <https://www.bloomberg.com/news/articles/2021-09-03/business-school-mba-students-forgo-finance-for-supply-chain-management-degree>

Figure 1: Local Job Postings for Positions Requiring Master’s Supply Chain Degrees (Source: EAB Report)



Figure 2: Regional Job Postings for Positions Requiring Master’s Supply Chain Degrees (Source: EAB Report)



**Program Administration.** Administrative oversight will run through two dean-appointed Academic Directors, to the Fisher College’s Associate Dean for Graduate Programs and Executive Education, and on to the Dean of the Fisher College. As this is a program that crosses two departments, we feel it is important we maintain two academic directors, one from each department. The Academic Directors will also work closely with:

- the Fisher College's Graduate Program Office (GPO) on matters related to recruiting, admissions, advising, and correspondence with current students and alumni.
- the Ohio State Office of Distance Education and E-learning (ODEE) which works with faculty on distance course design and assessment, and provides marketing and state authorization services.
- the Fisher College's Office of Information Technology Services, which also plays a critical role in adapting the program content to a distance format.
- the department chairs of the Marketing & Logistics and Operations & Business Analytics departments who have ultimate responsibility for staffing the program's courses.
- the Fisher College's Office of Career Management (OCM), Office of Global Business, Office of Diversity & Inclusion Student Services and Corporate and Community Outreach, and Assurance of Learning Coordinator.

### **Plans to Enroll Students and Prospective Enrollment:**

We plan to start the program in summer 2023, with classes starting in June. We will promote the program as soon as it is approved, working with ODEE, Fisher marketing, the GPO, our own network (online social and otherwise) and through other outreach entities such as the centers of excellence (e.g. Center of Operational Excellence, Risk Institute). We recognize that these master's programs often do take a personalized effort to recruit students, and the academic co-directors will consider this part of their role.

As previously mentioned, our current course schedule only allows students to begin the program in June. However, per EAB's recommendation, we will try to figure out before launch, and at a minimum by the second year (AY 24-25) how to admit students one additional time (January), or possibly even two additional times (adding August).

With respect to prospective enrollment, we expect that there should be good demand for our program due to our reputation, opportunities for students to network with each other and our faculty, and the ability to complete the degree online. We believe that, with appropriate marketing effort, there should be sufficient interest to yield a first cohort of at least 30 high-quality students. The MSCM program prioritizes recruiting, retaining, and training underrepresented groups to serve as future supply chain leaders. The Office of Distance Education and E-Learning (ODEE) will work closely with the graduate programs office (GPO) to promote the program to a variety of professional organizations within and outside the state of Ohio. Specifically, ODEE and the GPO will work closely with groups such as the Columbus chapter or the Council of Supply Chain Management Professional (CSCMP) and Ohio Minority Supplier Development Council (OMSDC) to encourage diversity of applicants. We will include information about our program in their newsletters and emails. We will also ask these organizations to share contact information on the representatives from their member companies. We will then contact these individual members and will conduct custom webinars as well as information sessions discussing how our program offers unique learning opportunity on supply chain function for women, veterans, and underrepresented minorities from their organizations. We will also work closely with the centers

at Fisher College of Business including the Center of Operational Excellence (COE) that includes members such as Cardinal Health, DHL Supply Chain, Honda, Parker Hannifin to actively recruit students for the program. It is also important to note that some of our faculty teaching in the program (Professor James Hill, Professor Terry Esper, and Professor Steve DeNunzio) are already heavily involved in working with these organizations.

**Financials**

The estimated financials, shown in the appendix, provide projected contribution margins, assuming that we achieve enrollment of 25 in our first year and then maintain a cohort size of 30. This is a conservative estimate, as we believe we can recruit more than 30 students if we invest in marketing the program and develop the high-quality program we envision. If demand exceeds 50, we would run multiple sections of the courses so as to keep a personal and intimate feel to the classroom experience.

**Budget Model:** Revenue estimates have been prepared that reflect the enrollment goal of 30 for four years. Please see the budget model prepared with other explanations in Appendix A4 of the proposal.

**Assessment Plan:** The key competencies for the MSCM will be:

Competency 1: Design integrated supply chain processes with internal and external partners to improve performance and co-create value.

Competency 2: Apply knowledge and skills to design a supply chain strategy aligned with an organization’s business objectives.

Competency 3: Have an analytical tool set necessary to justify decisions under risk and ambiguity.

Competency 4: Develop the leadership and managerial skills to effectively implement any needed changes across multiple separate organizations.

The Fisher College of Business will continuously assess student learning in the MSSC courses and program overall. Curriculum mapping ensures that competencies are reflected in a program’s curriculum so that each goal is taught and assessed. The curriculum map shows the relationships between the program’s courses and learning. The Fisher College assesses, and compares year-to-year, the proportion of students that meet and exceed expectations on these competencies.

- 1 = Beginning
- 2 = Intermediate
- 3 = Advanced

Course Name	Competency #1	Competency #2	Competency #3	Competency #4
Introduction to Supply Chain	1	1	1	1
Contemporary Supply Chain Issues	2	2	1	1

Operations Management	2	2	2	2
Logistics Management	2	2	2	2
Sourcing	2	2	2	2
Supply Chain Analytics	2	2	3	2
Supply Chain Sustainability and Resilience	3	2	2	3

Supply Chain Technology	3	2	3	2
Consumer-Centric Supply Chain Management	3	3	2	2
On-campus Program Kickoff Experience	1	1	2	2
On-campus Mid-Program Experience	2	2	1	2
On-campus Program Final Experience	3	3	1	3
Capstone Project	3	3	3	3

Table 5: Competencies Gained in MSCM Program

**Students enrolled in the MSCM courses will have several assessments in the form of individual exams, case analyses, problem sets and reflection papers that are derived from the four competencies. We will require students to earn a minimum GPA of 3.0 demonstrate successful assimilation of these competencies. In addition, the supply chain capstone project (Non-Thesis) will be used as an assessment for the completion of the degree in addition to the standard graduate degree requirements (min GPA of 3.0 over the course of the program). These capstone projects will be student-led but faculty-guided and will give students an opportunity to provide a valuable contribution to their organization while practicing the application of the concepts and learnings they have obtained during the program.**

In addition to the Assurance of Learning data, the Fisher College conducts indirect assessments of its' programs' effectiveness. This includes systematically tracking the raw count, quality (i.e., GMAT/GRE, GPA), and diversity (% women and under-represented minority) of its applicant, admissions, and matriculation pools. It also includes ongoing assessment of student satisfaction with coursework (i.e., SEI's) and with their program overall (i.e. the pre-graduation survey).

It will be critical that program quality and student satisfaction remains strong. To ensure this, the college will closely monitor

- Enrollment in class sections so that additional sections can be added when class sizes exceed targets
- Retention rates and time to completion (which we are aware can be a problem in on-line Masters programs), and
- Employment status after graduation.

**Timeline for Core Course Development:**

There are seven new courses that will be developed by our existing faculty for the MSCM program. Other courses are adapted from existing MBA courses or the courses that were used in the Master of Business in Logistics Engineering (MBLE) program. The MBL program was terminated in Fall 2020 in response to the market changes and the faculty who taught in this program will be teaching in our MSCM program. Appendix contains the faculty matrix that outlines the faculty responsible for the teaching in our MSCM program. Appendix also contains details on the individual course descriptions for the MSCM program. All courses will be fully developed in partnership with ODEE and resources with the Fisher college of Business.

<b>Course Name</b>	<b>New or Existing</b>	<b>Developed</b>	<b>Delivered</b>
Introduction to Supply Chain	New	Spring 2023	Summer 2023
Contemporary Supply Chain Issues	New	Spring 2023	Summer 2023
Operations Management	Existing	Spring 2023	Autumn 2023
Logistics Management	Existing	Spring 2023	Autumn 2023
Supply Chain Analytics	Existing	Spring 2023	Autumn 2023
Strategic Global Sourcing	Existing	Autumn 2023	Spring 2024
Supply Chain Sustainability and Resilience	Existing	Autumn 2023	Spring 2024
Supply Chain Technology	Existing	Autumn 2023	Spring 2024
Capstone Project	New	Autumn 2023	Spring 2024
Consumer-Centric Supply Chain Management	New	Spring 2024	Summer 2024
Kickoff On-campus Experiences	New	Spring 2023	1 <sup>st</sup> one Summer 2023
Mid-Term On-campus Experiences	New	Spring 2023	Spring 2024
End-of-Term On-campus Experiences	New	Autumn 2023	Autumn 2024

Table 6: MSCM Courses and Timeline

# Appendix

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## Appendix 1 - Faculty Matrix Describing Instructors for the MSCM Program

Instructor Name	Rank or Title	Full-Time (FT) or Part-Time (PT)	Instructor Qualification			Courses taught in the proposed program (Include course number and title)
			Degree Title, Discipline Institution, Year	Years of Teaching Experience In the Discipline/Field	Additional qualifications (e.g., licenses, certifications)	
Elliot Bendoly	Professor of Operations & Business Analytics	FT	PhD., Indiana University, 2001	20	None	Operations Management SC Analytics
Christian Blanco	Assistant Professor of Operations & Business Analytics	FT	PhD. UCLA, 2017	4	None	SC Sustainability & Resilience
Kenneth Boyer	Professor of Operations & Business Analytics	FT	PhD., Ohio State University, 1994	27	None	Operations Management SC Technology Mid-Program Experience
Vince Castillo	Assistant Professor of Logistics	FT	PhD. Supply Chain Management, University of Tennessee, 2018	3	none	SC Sustainability & Resilience  SC Analytics
Aravind Chandrasekaran	Professor of Operations & Business Analytics	FT	PhD., University of Minnesota, 2009	12	None	Operations Management  Kickoff Experience
Nathan Craig	Assistant Professor of Operations & Business Analytics	FT	PhD. Harvard University, 2014	7	None	SC Analytics
Keely Croxton	Professor of Logistics	FT	7PhD. Operations	22	none	Introduction to SC

			<i>Research, MIT, 1999</i>			<i>Contemporary SC Issues</i> <i>SC Analytics</i> <i>SC Sustainability &amp; Resilience</i> <i>Capstone Project</i>
<i>Steve DeNunzio</i>	<i>Senior Lecturer in Logistics</i>	<i>FT</i>	<i>MBA, University of Cincinnati, 1992</i>	<i>9</i>	<i>Six Sigma Green Belt</i> <i>Project Management Professional</i>	<i>Contemporary SC Issues</i> <i>SC Technology</i> <i>Capstone Project</i>
<i>Terry Esper</i>	<i>Associate Professor of Logistics</i>	<i>FT</i>	<i>PhD. Marketing, Logistics, &amp; Supply Chain Management, University of Arkansas, 2003</i>	<i>18</i>	<i>none</i>	<i>Contemporary SC Issues</i> <i>Logistics Management</i> <i>Consumer-centric SCM</i> <i>Capstone Project</i>
<i>John Gray</i>	<i>Professor of Operations &amp; Business Analytics</i>	<i>FT</i>	<i>PhD, University of North Carolina, 2006</i>	<i>15</i>	<i>None</i>	<i>Sourcing Management</i> <i>Mid-Program Experience</i>
<i>James Hill</i>	<i>Assoc. Professor of Operations &amp; Business Analytics</i>	<i>FT</i>	<i>PhD. Ohio State University, 1999</i>	<i>22</i>	<i>None</i>	<i>Sourcing Management</i> <i>Kickoff Experience</i>
<i>Michael Knemeyer</i>	<i>Professor of Logistics</i>	<i>FT</i>	<i>Ph.D. Logistics, University of Maryland, 2000</i>	<i>21</i>	<i>none</i>	<i>Introduction to SC</i> <i>Contemporary SC Issues</i> <i>Logistics Management</i> <i>Mini-course – Relationship Management &amp; Negotiation</i>

						<i>Capstone Project</i>
<i>Telesilla Kotsi</i>	<i>Assistant Prof. of Operations &amp; Business Analytics</i>	<i>FT</i>	<i>PhD Indiana University, 2020</i>	<i>1</i>	<i>None</i>	<i>Supply Chain Technology</i>
<i>Erin McKie</i>	<i>Assistant Prof. of Operations &amp; Business Analytics</i>	<i>FT</i>	<i>PhD. University of South Carolina, 2016</i>	<i>5</i>	<i>None</i>	<i>SC Sustainability &amp; Resilience</i>
<i>Kate Ren</i>	<i>Assistant Professor of Logistics</i>	<i>FT</i>	<i>Ph.D. Supply Chain Management, University of Maryland, 2020</i>	<i>1</i>	<i>none</i>	<i>Introduction to SC</i> <i>Logistics Management</i>
<i>Annibal Sodero</i>	<i>Assistant Professor of Logistics</i>	<i>FT</i>	<i>Ph.D. Supply Chain Management, Arizona State University, 2012</i>	<i>9</i>	<i>none</i>	<i>Introduction to SC</i> <i>SC Technology</i>
<i>Sean Wan</i>	<i>Associate Professor of Logistics</i>	<i>FT</i>	<i>Ph.D. Supply Chain Management, University of Maryland, 2011</i>	<i>10</i>	<i>none</i>	<i>SC Analytics</i> <i>Contemporary Issues in SC</i> <i>Capstone Project</i>
<i>Walter Zinn</i>	<i>Professor of Logistics</i>	<i>FT</i>	<i>Ph.D. Logistics, Michigan State University, 1985</i>	<i>36</i>	<i>none</i>	<i>Introduction to SC</i> <i>Contemporary SC Issues</i> <i>Logistics Management</i> <i>Capstone Project</i>

## Appendix – 2 Faculty Profiles of Instructors teaching in MSCM Program

### **Annibal Sodero**

Assistant Professor of Marketing and Logistics

Fisher College of Business, The Ohio State University Columbus, Ohio, 43210 E-Mail:  
[sodero.1@osu.edu](mailto:sodero.1@osu.edu)

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### **PROFESSIONAL PREPARATION**

UFMG	Computer Science	B.Sc. (1996)
Warwick University	Supply Engineering and Logistics	M.Sc. (2003)
Arizona State University	Supply Chain Management	Ph.D. (2012)

### **APPOINTMENTS**

2019-Present	Assistant Professor - Marketing and Logistics Fisher College of Business, The Ohio State University
2013-2019	Assistant Professor Sam M. Walton College of Business, University of Arkansas

### **PUBLICATIONS**

1. Mark Barratt, Henry J., Annibal Sodero, 2019. The Social Process of Big Data and Predictive Analytics Use for Logistics and Supply Chain Management. *International Journal of Physical Distribution and Logistic Management*.
2. Annibal Sodero, Elliot Rabinovich, 2013. Drivers and outcomes of open-standard interorganizational information systems assimilation in high-technology supply chains. *Journal of Operations Management*.

### **Other Significant Publications:**

1. Annibal Sodero, Elliot Rabinovich, 2017. Demand and Revenue Management of Deteriorating Inventory on the Internet: An Empirical Study of Flash Sales Markets. *Journal of Business Logistics*.
2. Annibal Sodero, Elliot Rabinovich, Marlene Amorim, Rui Soucasaux Sousa, 2015. Customer Use of Virtual Channels in Multichannel Services: Does Type of Activity Matter? *Decision Sciences Journal*.

### **SYNERGISTIC ACTIVITIES**

1. Member of the Editorial Review Board for Journal of Supply Chain Management (Mar 2017-Present)
2. Associate Editor for Journal of Operations Management (Sep 2017-Present)
3. Associate Editor for Decision Sciences Journal (Oct 2017-Present)

**Aravind Chandrasekaran**

Professor of Operations

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Columbus, Ohio, 43210

Telephone: (614) 292 4223

E-Mail: [chandrasekaran.24@osu.edu](mailto:chandrasekaran.24@osu.edu)**PROFESSIONAL PREPARATION**

College of Engineering, Anna University, India	Mechanical Engineering	B.S. (2002)
University of Minnesota	Industrial Engineering	M.S. (2004)
University of Minnesota	Business Administration, Operation and Management Science	Ph.D. (2009)

**APPOINTMENTS**

2021-Present	Distinguished Professor Fisher College of Business, The Ohio State University
2020-Present	Professor of Operations (with tenure) Fisher College of Business, The Ohio State University
2020-Present	Associate Dean of Graduate Programs and Executive Education Fisher College of Business, The Ohio State University
2015-2020	Associate Professor (with tenure) Fisher College of Business, The Ohio State University
2009-2015	Assistant Professor Fisher College of Business, The Ohio State University
2017-Present	Research Fellow Mayo Clinic
2002	Programmer Analyst Cognizant Technology Solutions

**PUBLICATIONS**

1. Choo, A.S., Chandrasekaran, A. and Chinaprayoon, C., 2020. The Role of Domestic and Foreign Knowledge Inflows on the Relationship between R&D Portfolio Mix and Innovation Outcomes: An Empirical Study of Manufacturing Firms in an Emerging Economy. *Decision Sciences*, 51(2), pp.349-394.
2. Anderson, E., Chandrasekaran, A., Davis-Blake, A. Parker, G. 2018. Managing Distributed Product Development Projects: Integration Strategies for Language and Time-Zone Barriers. *Information Systems Research*, 29 (1) 42-69.
3. Salvador, F., Chandrasekaran, A., Sohail, T., 2014. Product Configuration, Ambidexterity and Firm Performance in the context of Industrial Equipment Manufacturing. *Journal of Operations Management*, 32(4) 138-153.
4. Linderman, K., Chandrasekaran, A., 2010. The Scholarly Exchange of Knowledge in Operations Management. *Journal of Operations Management*, 28(4), 357-366.

5. Shah, R., Chandrasekaran, A., Linderman, K., 2008. In pursuit of implementation patterns: The context of lean and Six Sigma. *International Journal of Production Research*, 46 (23), 6679-6699.

### **Other Significant Publications**

1. Lampman, M., A. Chandrasekaran, Shah, N., Brenda M., Giblon R., M. Tumerman, B. Staats., P. Ward, D. Rushlow., 2021. Optimizing huddle engagement through leadership and problem solving within primary care: results from a cluster-randomized trial. *Journal of General Internal*, forthcoming.
2. Anand, G., A. Chandrasekaran, L. Sharma. 2020. Sustainable Process Improvements: Evidence from Intervention-Based Research. *Journal of Operations Management*, forthcoming.
3. Madiedo, J.P., Chandrasekaran, A. and Salvador, F., 2020. Capturing the Benefits of Worker Specialization: Effects of Managerial and Organizational Task Experience. *Production and Operations Management*, 29(4), pp.973-994.
4. Chandrasekaran, A., De Treville, S., Browning T., 2020. Intervention Based Research – What, Where and How to Use in Operations Management. *Journal of Operations Management*, 66(4) 370-378.
5. Sharma, L., Chandrasekaran, A. and Bendoly, E., 2020. Does the Office of Patient Experience Matter in Improving Delivery of Care? *Production and Operations Management*, 29(4), pp.833-855.

### **SYNERGISTIC ACTIVITIES**

1. Department Editor (Intervention Based Research) for Journal of Operations Management (2017-Present)
2. Senior Editor for Productions and Operations Management (Aug 2015-Present)
3. Guest Associate Editor for Information Systems Research (Special Issue)
4. Facebook & Risk Institute Grant for studying Data Ethics (Role- Co-PI, Other PIs – Dennis Hirsch, Srini Parthasarathy and Tim Bartley) (\$100,000)

**Christian Blanco**

Assistant Professor of Operations and Business Analytics  
 Fisher College of Business, The Ohio State University  
 Columbus, Ohio, 43210

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 E-Mail: [blanco.58@osu.edu](mailto:blanco.58@osu.edu)

**PROFESSIONAL PREPARATION**

University of California, Berkeley	Applied Mathematics and Environmental Economics & Policy	B.A. (2011)
Anderson School of Management, UCLA		Ph.D. (2017)

**APPOINTMENTS**

2017-Present	Assistant Professor, Operations and Business Analytics Fisher College of Business, The Ohio State University
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**PUBLICATIONS**

1. Blanco, C. (2021). Supply chain carbon footprinting and climate change disclosures of global firms. *Production and Operations Management*, 30(9), pp.3143-3160
2. Blanco, C., Caro, F., & Corbett, C. J. (2016). The state of supply chain carbon footprinting: Analysis of CDP disclosures by US firms. *Journal of Cleaner Production*, 135, pp.1189-1197.

**Other Significant Publications**

1. Blanco, C., Caro, F., & Corbett, C. J. (2020). Do carbon abatement opportunities become less profitable over time? A global firm-level perspective using CDP data. *Energy Policy*, 138, 111252.
2. Blanco, C., Caro, F., & Corbett, C. J. (2019). Managing safety-related disruptions: Evidence from the US nuclear power industry. *Risk Analysis*, 39(10), pp. 2197-2213.

**SYNERGISTIC ACTIVITIES**

1. Awarded UCLA Anderson Doctoral Fellowship (2012-2016)
2. Received NETL DoE Research Grant \$125,000 (co-authored grant with Jay Apt 20122014)

**Elliot Bendoly**

Distinguished Professor of Operations and Business Analytics

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E-Mail: [bendoly.2@osu.edu](mailto:bendoly.2@osu.edu)**PROFESSIONAL PREPARATION**

Case Western Reserve University	Materials Engineering	B.S. (1996)
	Economics (Industrial/Developmental)	B.A. (1996)
Kelley School of Business, Indiana University	Operations and Decisions Technologies	M.S. & Ph.D. (2011)

**APPOINTMENTS**

2016-Present	Distinguished Professor, Operations and Business Analytics Fisher College of Business, The Ohio State University
2020-2023	Co-Academic Director, Specialized Master in Business Analytics Fisher College of Business, The Ohio State University
2016-2019	Associate Dean for Undergraduate Programs Fisher College of Business, The Ohio State University
2016	Translational Data Analytics Faculty-in-Residence The Ohio State University
2014-2016	Full Professors, Management Sciences Fisher College of Business, The Ohio State University
2011-2014	Area Coordinator, Information Systems and Operations Management Goizueta School of Business, Emory University
2007-2014	Associate Professor, Information Systems and Operations Management Goizueta School of Business, Emory University
2010	Visiting Researcher IE Business School, Madrid
2001-2007	Assistant Professor, Decision and Information Analysis Goizueta School of Business, Emory University

**PUBLICATIONS**

1. B. Fahimnia, M. Pournader, E. Siemsen, E. Bendoly, Wang, C, 2019. Behavioral operations and supply chain management – a review and literature mapping. *Decision Sciences Journal*, 50(6), pp. 1127-1183.
2. N. Craig, N. DeHoratius, A. Raman, E. Bendoly, 2018. Consistency and recovery in retail supply chains. *Journal of Business Logistics*, 39(1), pp. 26-37.
3. E. Bendoly, 2016. Fit, bias and enacted sensemaking in data visualization: frameworks for continuous development in operations and supply chain management analytics. *Journal of Business Logistics*, 37(1), pp. 6-17.



4. D. Bachrach, E. Bendoly, 2011. Rigor in behavioral experiments: a basic primer for SCM researchers. *Journal of Supply Chain Management*, 47(3), pp. 5-8.
5. R. Narasimhan, A. Nair, D. Griffith, E. Bendoly, J. Arlbjorn, 2009. Lock-in situations in supply chains: A social exchange theoretic study of sourcing arrangements in buyer– supplier relationships. *Journal of Operations Management*, 27(5), pp. 374-389.

### **Other Significant Publications**

1. S. Eckerd, S. DuHadway, L. Kaufmann, C. Carter, E. Bendoly, 2021. On Making Experimental Design Choices: Discussions on the use and challenges of demand effects, incentives, deception, samples, and vignettes. *Journal of Operations Management*, 67(2), pp. 261-275.
2. S. Babbar, X. Koufteros, E. Bendoly, R. Behara, R. Metters, K. Boyer, 2020. Productivity networks and career shifts in the field of Operations Management. *Journal of Operations Management*, 66(3), pp. 349-364.
3. T. Schoenherr, E. Bendoly, D. Bachrach, A. Hood, 2017. Task interdependence impacts on reciprocity in IT implementation teams: Bringing out the worst in us, or driving responsibility? *Production and Operations Management*, 26(4), pp. 667-685.
4. R. Hardcopf, P. Goncalves, K. Linderman, 2017. Short-term bias and strategic misalignment in operational solutions: perceptions, tendencies and traps. *European Journal of Operational Research*, 258(3), pp. 1004-1021.
5. L. Gua, Y. Hu, J. Tobias, E. Bendoly, 2017. Different Departments, Different Drivers: Asymmetry in Antecedents and Outcomes of Voluntary Knowledge Exchange between Sales and Production Functions. *International Journal of Production and Operations Management*, 37(8), pp. 1031-1053.

### **SYNERGISTIC ACTIVITIES**

1. Department Editor for Journal of Operations Management (Technology Management, 2021-Present)
2. Department Editor for Decision Sciences Journal (Empirical Studies in Supply Chain Management, 2020-Present)
3. Associate Editor for Journal of Operations Management (2006), Decision Science (2006-2012)
4. Special Issue Editor for Journal of Operations Management (Behavioral Dynamics in Operations Management, 2006)
5. Special Issue Editor for Decision Science (Behavioral Issues in IS-enabled Operations Decision Making, 2008)

**Erin McKie**

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E-Mail: [mckie.5@osu.edu](mailto:mckie.5@osu.edu)**PROFESSIONAL PREPARATION**

University of South Carolina	Business Administration	B.S. (2009)
University of South Carolina	Production and Operations Management	Ph.D. (2017)

**APPOINTMENTS**

2017-Present	Assistant Professor of Operations and Business Analytics Fisher College of Business, The Ohio State University
2009-2011	Business Process Consultant Colonial Life

**PUBLICATIONS**

1. Shang, G., McKie, E.C., Ferguson, M., and Galbreth, M., 2019. Using Transactions Data to Improve Consumer Returns Forecasting. *Journal of Operations Management*, forthcoming.
2. McKie, E.C., Ferguson, M., Galbreth, M., and Venkataraman, S., 2018. How do Consumers Choose between Multiple Product Generations and Conditions? An Empirical Study of iPad Sales on eBay. *Production and Operations Management*, 27(8), pp. 1574-1594

**SYNERGISTIC ACTIVITIES**

1. Reviewer for European Journal of Operational Research, Journal of Operations Management, Manufacturing & Service Operations Management. (2014-2017)
2. Session Chair for Production and Operations Management Annual Conference (2015-2017)

**James Hill**

Associate Professor of Operations

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(614) 247 8965

E-Mail: [hill.249@osu.edu](mailto:hill.249@osu.edu)**PROFESSIONAL PREPARATION**

University of Dayton	Electrical Engineering	B.S. (1987)
Weatherhead School of Management, Case Western Reserve University	Management	M.B.A. (1991)
The Ohio State University	Operations Management	Ph.D. (1999)

**APPOINTMENTS**

2004-Present	Associate Professor of Operations Fisher College of Business, The Ohio State University
1999-2004	Assistant Professor of Operations Management Vanderbilt University
1990-1994	Supplier Development Manager Pepsi Co.

**PUBLICATIONS**

1. Eckerd, S., Boyer, K., Qi, Y., Eckerd, A., and Hill, J.A., 2016. Supply Chain Psychological Contract Breach: An Experimental Study across National Cultures. *Journal of Supply Chain Management*, 52(3), pp.68-82.
2. Blount, I.Y., and Hill, J.A., 2015. Supplier diversification by executive order: Examining the effect reporting compliance, education and training, outreach, and proximity to leadership have on government procurement behavior with minority business enterprises. *Journal of Purchasing and Supply Management*, 21(4), pp.251-258.
3. Marley, K. A., Ward, P. T., Hill, J. A., 2014. Mitigating Supply Chain Disruptions - A Normal Accident Perspective. *Supply Chain Management*, 19(2), pp.142-152.
4. L. LeBlanc, J. Hill, J. Harder, and G. Greenwell, 2009. Modeling Uncertain Forecast Accuracy in Supply Chains with Postponement. *Journal of Business Logistics*, 30(1), pp.19-31.
5. M.R. Galbreth, J.A. Hill, and S. Handley, 2008. An Investigation of the Value of Crossdocking for Supply Chain Management. *Journal of Business Logistics*, 29(1), pp.225-239.

**Other Significant Publications**

1. K. Hozak and J. Hill, 2010. The Material Handling Trade-Off When Lot Splitting with RFID in a Job Shop. *International Journal of Production Research*, 48(9), pp.2723-2743.
2. K. Hozak and J. Hill, 2009. Issues and Opportunities Regarding Replanning and Rescheduling Frequencies. *International Journal of Production Research* 47(18), pp.4955-4970.

3. J.A. Hill, and M.R. Galbreth, 2008. A Heuristic for Single-Warehouse Multiretailer Supply Chains with All-Unit Transportation Cost Discounts. *European Journal of Operational Research*, 187(2), pp.473-482.
4. P. Wang and J.A. Hill, 2006. Recursive Behavior of Safety Stock Reduction: The Effect of Lead-Time Uncertainty. *Decision Sciences* 37(2), pp.285-290.
5. J.A. Hill, W.L. Berry, and D.A. Schilling, (2003). Revising the Master Production Schedule in Sequence Dependent Processes. *International Journal of Production Research* 41(9), pp.2021-2035.

## **SYNERGISTIC ACTIVITIES**

1. Production and Operations Management Conference, 2014. "Small Suppliers Growing Sales: Does Participation in Business Membership Organizations Help?" by Pan, M., (Presenter and Author), Hill, J., (Author Only), Rungtusanatham, J., (Author Only) and Blount, I. (Author Only)
2. Session Chair for "JIT Production" National Sciences Institute Meeting, Washington D.C. (2003)
3. Session Chair for "Teaching Innovation" National Sciences Institute Meeting, San Francisco (2001)
4. Discussant for "Impact of Marketing and Manufacturing Strategies, Conflicts and Morale on Performance: An Empirical Investigation" in National Sciences Institute Meeting, Orlando (1996)

**John Gray**  
 Professor of Operations  
 Fisher College of Business, The Ohio State University  
 Columbus, Ohio, 43210

(614) 247 8021

E-Mail: [gray.402@osu.edu](mailto:gray.402@osu.edu)

### PROFESSIONAL PREPARATION

Dartmouth College, Hanover	Engineering Sciences	B.A. (1994)
Babcock School of Graduate Management	Operations	M.B.A. (1999)
University of North Carolina	Operations, Technology, and Innovation Management	Ph.D. (2006)

### APPOINTMENTS

2019-Present	Professor (with tenure) Operations and Business Analytics Department Fisher College of Business, The Ohio State University
2013-2019	Associate Professor (with tenure) Fisher College of Business, The Ohio State University
2014-2017	Assistant Professor Fisher College of Business, The Ohio State University
1994-2002	Operations Manager The Procter & Gamble Manufacturing Company

### PUBLICATIONS

1. Esenduran, G., J.V. Gray, B. Tan, 2021. A dynamic analysis of supply chain risk management and extended payment terms. *Production and Operations Management*, conditionally accepted
2. Gray, J.V., S. Helper, B. Osborn, 2020. Value first, cost later: Total Value Contribution as a new approach to sourcing decisions. *Journal of Operations Management*, 66(6), pp.735-750.
3. Gray, J.V., K. Skowronski, G. Esenduran, J. Rungtusanatham, 2013. The Reshoring Phenomenon: What Supply Chain Academics Ought to Know and Should Do. *Journal of Supply Chain Management*, 49(2), pp.27-33.
4. Roth, A.V., M. Pullman, A. Tsay, J.V. Gray, 2008. Unraveling the Food Supply Chain: Strategic Insights from the Pet Food Recalls. *Journal of Supply Chain Management*, 44(1), pp.22-39.
5. Massimino, B., J.V. Gray, 2021. Digital Connectivity and Data Protection in Supply Management. CAPS Research (final acceptance Nov. 2020)

### Other Significant Publications

1. Helper, S., J.V. Gray, M. Hughes, A. Roman, 2021. Editorial: Public Policy and Operations Management. *Journal of Operations Management*, forthcoming.
2. Altamuro, J., J.V. Gray, H. Zhang, 2021. Corporate integrity culture and compliance: A study of the pharmaceutical industry. *Contemporary Accounting Research*, forthcoming.

3. Pagell, M., M. Parkinson, A. Veltri, J.V. Gray, M. Louis, F. Wiengarten, B. Fynes, 2020. The tension between worker safety and organization survival. *Management Science*, 66(10), pp.4863-4878.
4. Tsay, A., J.V. Gray, J. Mahoney, I. Noh, 2018. A review of POM research on outsourcing in supply chains: Implications for the Theory of the Firm. *Production and Operations Management*, 27(7), pp.1177-1220.
5. Anand, G., J.V. Gray, 2017. Strategy and Organization Research in Operations Management. *Journal of Operations Management*, 53-56, pp.1-8.

## **SYNERGISTIC ACTIVITIES**

1. Department Editor for Journal of Operations Management (Public Policy, 2002-Present)
2. Associate Editor for Journal of Operations Management (2012-2016)
3. Committee Member for Chan Hahn Best Paper Award by Academy of Management (2009)
4. Editorial Review Board Member for Journal of Supply Chain Management (Best Reviewer for 2007 and 2012)

**Keely Croxton**

Professor of Logistics

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E-Mail: [croxton.4@osu.edu](mailto:croxton.4@osu.edu)**PROFESSIONAL PREPARATION**

Northwestern University	Industrial Engineering	B.S. (1992)
Massachusetts Institute of Technology	Operations Research	Ph.D. (1999)

**APPOINTMENTS**

2005-Present	Associate Professor Fisher College of Business, The Ohio State University
2018-Present	Co-Coordinator of Full Time MBA Fisher College of Business, The Ohio State University
1999-2005	Assistant Professor The Ohio State University
1996-1997	Graduate Intern Caliber Logistics
1993-1994	Industrial Engineer International Paper.
1990-1992	Co-op Engineer Saturn Corporation

**PUBLICATIONS**

1. Schwieterman, M. A., J. Miller, K. Croxton, A.M. Knemeyer, 2020. A Strong Inference Test of Competing Predictions Regarding Dependence in Supplier Portfolios. *Journal of Business Logistics*, 41(1).
2. Polyviou, M., K. Croxton, A.M. Knemeyer, 2019. Resilience of medium-sized firms to supply chain disruptions: the role of internal social capital. *International Journal of Operations and Production Management*, 40(1), pp.68-91.
3. Pettit, T.J., J. Fiksel, K. Croxton, 2019. The Evolution of Resilience in Supply Chain Management: A Retrospective on Ensuring Supply Chain Resilience. *Journal of Business Logistics*, 40(1), pp.56-65.
4. Smyth, K. B., K. Croxton, R. Franklin, A.M. Knemeyer, 2018. Thirsty in an Ocean of Data? Pitfalls and Practical Strategies when Partnering with Industry on Big Data Supply Chain Research. *Journal of Business Logistics*, 39(3), pp.203-219.
5. Schwieterman, M. A., T.J. Goldsby, K. Croxton, 2018. Customer and Supplier Portfolios: Can Credit Risks Be Managed Through Supply Chain Relationships? *Journal of Business Logistics*, 39(2), pp.123-137.

### **Other Significant Publications**

1. Wang, P., W. Zinn and K. Croxton, 2010. Sizing Inventory with Correlated Lead Time and Demand. *Production and Operations Management Journal*, 19(4), pp.480-484.
2. Eroglu, C., K.Croxton, 2010. Biases in Judgmental Adjustments of Statistical Forecasts: The Role of Individual Differences. *International Journal of Forecasting*, 2(1), pp.116133.
3. Croxton, K.L., B. Gendron and T.L. Magnanti, 2007. Variable Disaggregation in Network Flow Problems with Piecewise Linear Costs. *Operations Research*, 55(1), pp.146-157.
4. Croxton, K.L., B. Gendron and T.L. Magnanti, 2003. A Comparison of Mixed-Integer Programming Models for Non-convex Piecewise Linear Cost Minimization Problems. *Management Science*, 49(9), pp.1268-1273.
5. Croxton, K. and W. Zinn, 2005. Inventory Considerations in Network Design. *Journal of Business Logistics*, 26(1), pp. 149-168.

### **SYNERGISTIC ACTIVITIES**

1. Co-PI on \$55,000 grant from The National Center for the Middle Market to pursue research on supply chain resilience for mid-sized firms, 2012.
2. Co-PI on \$530,000 grant from the Dow Chemical Company to pursue research in supply chain resilience, 2008.
3. Editorial Review Board Member for Journal of Business Logistics, International Journal of Logistics Management and Journal of Supply Chain Management.
4. Track Chair for Council of Supply Chain Management Professionals Educators' Conference (2009)
5. Chair of Logistics Recruiting Committee (2005)



**Kenneth Boyer**

Professor of Operations and Business Analytics

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E-Mail: [boyer.9@osu.edu](mailto:boyer.9@osu.edu)**PROFESSIONAL PREPARATION**

Brown University	Mechanical engineering	B.S. (1989)
The Ohio State University	Business Administration	M.A. (1993)
The Ohio State University	Operations Management	Ph.D. (1994)

**APPOINTMENTS**

2015-Present	Chair, Management Sciences Department Fisher College of Business, The Ohio State University
2013-2015	Faculty Director, Working Professional MBA Program Fisher College of Business, The Ohio State University
2011-2013	Academic Director Fisher College of Business, The Ohio State University
2008-Present	Full Professor (with tenure) The Ohio State University
2008-Present	Dean's Distinguished Professor Fisher College of Business, The Ohio State University
2006-2008	Full Professor (Dept of Marketing and Supply Chain Management) Michigan State University
2000-2006	Associate Professor (Dept of Marketing and Supply Chain Management) Michigan State University
2002-2004	Co-Director (Dept of Marketing and Supply Chain Management) Michigan State University
2005-2006	Director and Founder, Last Mile Supply Chain Center Michigan State University
2009	Visiting Professor Swiss Federal Institute of Technology
2006-2008	Visiting Professor Ecole Polytechnique Federale de Lausanne
2002	Visiting Associate Professor London Business School, Operations management and Technology

1995-2000	Assistant Professor DePaul University, Management Department, Chicago
1994-1995	Visiting Assistant Professor Miami University, Management Department

## PUBLICATIONS

1. Stephanie Eckerd, Kenneth Boyer, Yinan Qi, Adam Eckerd, and James Hill “Supply Chain Psychological Contract Breach: An Experimental Study Across National Cultures”. *Journal of Supply Chain Management*, forthcoming.
2. Dayna Simpson, Jack Meredith, Kenneth Boyer, David Dilts, Lisa Ellram, and Keong Leong, 2015. Professional, Research, and Publishing Trends in Operations and Supply Chain Management. *Journal of Supply Chain Management*, 51(3), pp.87-100.
3. Ann Vereecke, Evelyne Vanpoucke, and Kenneth Boyer, 2014. Triggers and Patterns of Integration Initiatives in Successful Buyer-Supplier Relationships. *Journal of Operations Management*, 32(1-2), pp.15-33.
4. Kenneth Boyer, Joe Roh and Judy Whipple, 2013. The Effect of Single Rater Bias in Multi-Stakeholder Research: A Methodological Evaluation of Buyer-Supplier Relationships. *Production and Operations Management*, 22(3), pp.711-725.
5. Kenneth Boyer, Evelyne Vanpoucke, and Ann Vereecke, 2009. Supply Chain Information Flow Strategies: An Empirical Taxonomy. *International Journal of Operations and Production Management*, 29(12), pp.1213-1241.

## Other Significant Publications

1. Luv Sharma, Aravind Chandresakaran, and Kenneth Boyer, 2016. The Impact of Health Information Technology Bundles on Performance: An Econometric Study. *Journal of Operations Management*, 41, pp.25-41.
2. John Gardner, Kenneth Boyer, and John V. Gray, 2015. Operational and Strategic Information Processing: Complementing Healthcare IT Infrastructure. *Journal of Operations Management*, 33-34(1), pp.123-139.
3. Johnny Rungtusanatham, J.W. Miller, and Kenneth Boyer, 2014. Theorizing, Testing, and Concluding for Mediation in SCM Research. *Journal of Operations Management*, 32(3), pp.99-113.

## SYNERGISTIC ACTIVITIES

1. Director and Founder, Last Mile Supply Chain Center, self-funding center for research supported by member companies, including FedEx, Albertsons, Grocery Gateway, Kelloggs, FreshDirect, NetGrocer, Newgistics, Office Depot and Descartes. \$70,000 in funding generated. (Jun 2005-Dec 2006)
2. “ITR: Internet Disintermediation of Food Delivery – Spanning the Last Mile”, co-funded by Information Technology Research small grants and Decision, Risk and Management Sciences Programs – National Science Foundation, August 1, 2002 – July 31, 2005, with G. Tomas Hult and Mark Frohlich, for \$249,999
3. Co-Editor in Chief for Journal of Operations Management (2006-Present)
4. Department Editor for Production and Operations Management Journal (Operations Strategy and Flexibility, 2003-2006)

**Michael Knemeyer**  
Professor of Logistics

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### PROFESSIONAL PREPARATION

John Carroll University	Bachelor of Science in Business Administration, Logistics	B.S.B.A. (1991)
University of Maryland Smith School of Business	Logistics	Ph.D. (2000)

### APPOINTMENTS

2015-Present	Professor Fisher College of Business, The Ohio State University
2010-2015	Associate professor Fisher College of Business, The Ohio State University
2003-2010	Assistant Professor Fisher College of Business, The Ohio State University
2002-2003	Assistant professor John Carroll university
2001-2002	Assistant professor University of North Florida
1999-2001	Assistant Professor University of West Virginia
1996-1999	Graduate Assistant University of Maryland
1992-1996	Analyst CSX Intermodal
1991-1992	Account Representative Anixter Brothers

### PUBLICATIONS

1. Brockhaus, S., S.E. Fawcett, W. Kersten, and A.M. Knemeyer, 2016. A Framework for Benchmarking Product Sustainability Efforts: Using Systems Dynamics to Achieve Supply Chain Alignment, *Benchmarking: An International Journal*, 23(1), pp.127-164.
2. Fawcett, S.E., S. Brockhaus, A.M. Knemeyer, and A. Fawcett. Sustainability as Strategy: Caught in the Luxury Trap. *Supply Chain Management Review*, 19(6), pp.16-25.
3. Grimm, C., A.M. Knemeyer, M. Polyviou and X. Ren, 2015. Supply Chain Management Research in Management Journals: A Review of Recent Literature (2004-2013). *International Journal of Physical Distribution & Logistics Management*, 45(5), pp.404-458.

4. Knemeyer, A.M. and S.E. Fawcett, 2015. Supply Chain Design and Integration: Why Complex Collaborative Systems are Easy to Talk About But Hard To Do, *Journal of Business Logistics*, 36(3), pp.301-302.
5. Saldanha, J.P., J.E. Mello, A.M. Knemeyer and V. Vijayaraghavan, (2015). "Coping Strategies for Overcoming Constrained Supply Chain Technology: An Exploratory Study," *Transportation Journal*, 54(3), pp.368-404.

### **Other Significant Publications**

1. Wallenburg, C.M., D.L. Cahill, A.M. Knemeyer and T.J. Goldsby, 2011. Commitment and Trust as Drivers of Loyalty in Logistics Outsourcing Relationships: Cultural Differences Between the United States and Germany. *Journal of Business Logistics*, 32(1), pp.83-98.
2. Cahill, D. T.J. Goldsby, A.M. Knemeyer and C.M. Wallenburg, 2010. Customer Loyalty in Logistics Outsourcing Relationships: An Examination of Moderating Effects of Conflict Frequency. *Journal of Business Logistics*, 31(2), pp.253-277.
3. Eroglu, C. and A.M. Knemeyer, 2010. Exploring the Potential Effects of Forecaster Motivational Orientation and Gender on Judgmental Adjustments of Statistical Forecasts, *Journal of Business Logistics*, 31(1), pp.179-195.
4. Rabinovich, E., A.M. Knemeyer and C.M. Mayer, 2007. Why Do Internet Commerce Firms Incorporate Logistics Service Providers in Their Distribution Channels? The Role of Transaction Costs and Network Strength. *Journal of Operations Management*, 25, pp.661-681.
5. Knemeyer, A.M. and P.R. Murphy, 2001. Just Do It: Educators' Views on Logistics Internships. *Defense Transportation Journal*, 57(6), pp.6-10.

### **SYNERGISTIC ACTIVITIES**

1. Received a 2012 NCMM (National Center for the Middle Market) Research Grant, which is intended to support research focused on the middle market
2. Received the 2006 ISM Senior Research Fellowship, which is intended to support emerging scholars
3. Associate Editor for *Journal of Business Logistics* (2016-Present)
4. Editorial Review Board Member for *Journal of Business Logistics*, *Journal of Supply Chain Management*, *International Journal of Logistics Management* and *Journal of Purchasing and Supply Management*.

**Nathan Craig**

Assistant Professor of Management Science

Fisher College of Business, The Ohio State University

Columbus, Ohio, 43210

(614) 292 5316

E-Mail: [craig.186@osu.edu](mailto:craig.186@osu.edu)**PROFESSIONAL PREPARATION**

The Ohio State University	Integrated System Engineering	B.S. (2007)
The Ohio State University	Operations Research	M.S. (2008)
Harvard Business School	Technology and Operations Management	D.B.A. (2014)

**APPOINTMENTS**

2014-Present	Assistant Professor of Management Sciences Fisher College of Business, The Ohio State University
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**PUBLICATIONS**

1. Bendoly, Elliot, Nathan Craig, and Nicole DeHoratius, 2017. Consistency and Recovery in Retail Supply Chains. *Journal of Business Logistics*, forthcoming.
2. Craig, Nathan, Nicole DeHoratius, and Ananth Raman, 2016. The Impact of Supplier Inventory Service Level on Retailer Demand. *Manufacturing & Service Operations Management*, 18(4), pp.461-474.

**Other Significant Publications**

1. Craig, Nathan, Nicole DeHoratius, and Ananth Raman, 2017. Ralph Gomory Best ISA Paper Award (2016). *Manufacturing & Service Operations Management*, 19(3), pp.337.
2. Craig, Nathan and Ananth Raman, 2016. Improving Store Liquidation. *Manufacturing & Service Operations Management*, 18(1), pp.89-103.
3. Craig, Nathan, Nicole DeHoratius, Yan Jiang, and Diego Klabjan 2015. Execution Quality: An Analysis of Fulfillment Errors in a Retail Distribution Center. *Journal of Operations Management*, 38, pp.25-40.

**SYNERGISTIC ACTIVITIES**

1. Reviewer for European Journal of Operational Research, Journal of Operations Management, Manufacturing & Service Operations Management. (2010-2017)
2. Session Chair for Production and Operations Management Annual Conference (20152017)

**Xiang (Sean) Wan**

Associate Professor of Marketing and Logistics

Fisher College of Business, The Ohio State University  
Columbus, Ohio, 43210

Telephone: (614) 247 8003

E-Mail: [wan.207@osu.edu](mailto:wan.207@osu.edu)**PROFESSIONAL PREPARATION**

Nanchang University, Information Engineering School	Computer Science	B.S. (2001)
Xi'an Jiaotong University, School of Economics and Finance	Economics	M.S. (2005)
University of Maryland, R.H. Smith School of Business	Supply Chain Management	Ph.D. (2011)

**APPOINTMENTS**

2018-Present	Associate Professor (with Tenure), Department of Marketing and Logistics, Fisher College of Business, The Ohio State University
2014-2018	Assistant Professor, Department of Marketing and Logistics, Fisher College of Business, The Ohio State University
2012-2014	Assistant Professor, Department of Marketing and Supply Chain Management, Haslam College of Business, University of Tennessee
2011-2012	Assistant Professor, Department of Management, College of Business Administration, Marquette University
2006-2011	Instructor and Research Assistant, Department of Logistics, Business and Public Policy, Smith School of Business, University of Maryland
2009-2011	Product Variety and Demand Planning Consultant Pepsi Co.
2001-2002	Manufacturing Manager Letop International Limited

**PUBLICATIONS**

1. Xiang Wan, Xiaowen Huang, and Yan Dong, 2016. The Moderating Role of Product Categories in the relationship between Online Fulfillment, Procurement, and Consumer Repurchase Intention: A Hierarchical Analysis. *Journal of Supply Chain Management*, 52(4), pp.63-76.
2. Yan Dong, Kefeng Xu, Yi Xu, and Xiang Wan, 2016. Quality Management in MultiLevel Supply Chains with Outsourced Manufacturing. *Production and Operations Management*, 25(2), pp.290-305.

### **Other Significant Publications**

1. Xiang Wan. What Happened to Inventory and Cost after a Vertical Integration? A Longitudinal Analysis Considering Demand Uncertainty. *International Journal of Production Research*, forthcoming.
2. Xiang Wan, Martin Dresner, Philip Evers, 2018. How Do Delivery Variety Decisions Contribute to Sales? *Decision Sciences*, 49(6), pp.1024-1060.

### **SYNERGISTIC ACTIVITIES**

1. Associate Editor for Journal of Operations Management and Journal of Business Logistics (2019-Present)
2. Track Chair of Council of Supply Chain Management Professionals Academic Research Symposium (2019)
3. Faculty Advisor of The Logistics Association at the Fisher College of Business, The Ohio State University (2016-Present)

**Steve DeNunzio**

Senior Lecturer of Marketing and Logistics

Fisher College of Business, The Ohio State University

Columbus, Ohio, 43210

Telephone: (614) 769 3155

E-Mail: [denunzio.4@osu.edu](mailto:denunzio.4@osu.edu)**PROFESSIONAL PREPARATION**

Purdue University	American History	B.A. (1989)
Carl H. Lindner School of Business, University of Cincinnati	Finance and Information Systems	MBA (1992)

**APPOINTMENTS**

2015-Present	Senior Lecturer, Department of Marketing and logistics Fisher College of Business, The Ohio State University
2015-2020	Director, Master of Business Logistics and Management Programs Fisher College of Business, The Ohio State University
2012-2015	Adjunct Professor/Lecturer, Department of Marketing and Logistics Fisher College of Business, The Ohio State University
2014-2015	Technical Program Manager Lululemon Athletica
2011-2014	Senior Project Manager Bob Evans Farms
2005-2011	Technical Project Manager DSW
2001-2005	Senior Programmer/Analyst DSW
1997-2001	Senior Consultant Information Technology Placement Corp.

**PUBLICATIONS**

1. DeNunzio, Steve, 2020. The Physical Internet: A Shared Logistics Model. *Supply Chain Management Review*, March/April 2020, pp.33-34.
2. Terry L. Esper, Vincent E. Castillo, Kate Ren, Annibal Sodero, Xiang Wan, Keely L. Croxton, A. Michael Knemeyer, Steven DeNunzio, Walter Zinn, Thomas J. Goldsby, 2021. Everything Old is New Again: The Age of Consumer-Centric Supply Chain Management. *Journal of Business Logistics*, Vol. 41(4), pp.286-293.

**SYNERGISTIC ACTIVITIES**



1. Co-Founder of Ohio Supply Chain Academic Network (2019-Present)
2. Executive Vice President of Association for Supply Chain Management, Columbus Chapter (2019-Present)
3. Advisory Board Member for Logistics Engineering Technology Program, Columbus State Community College (2017-Present)

**Telesilla Kotsi**

Assistant Professor of Operations and Business Analytics

Fisher College of Business, The Ohio State University Columbus, Ohio, 43210 E-Mail: [kotsi.1@osu.edu](mailto:kotsi.1@osu.edu)**PROFESSIONAL PREPARATION**

Aristotle University of Thessaloniki	Diploma in Engineering	D.M.E. (2010)
School of Mathematics, University of Edinburgh	Operations Research with Computational Optimization	M.Sc. (2012)
Kelley School of Business, Indiana University	Operation Management	MBA (2016)
Kelley School of Business, Indiana University	Operations Management and Decision Sciences (double major)	Ph.D. (2020)

**APPOINTMENTS**

2020-Present	Assistant Professor of Operations and Business Analytics Fisher College of Business, The Ohio State University
2013-2014	Research Associate INSEAD Humanitarian Research Group (France)
2012	Analyst Orange Labs (France Telecom) Research and Development

**PUBLICATIONS**

1. Kotsi, T., Van Wassenhove, L.N., Hensen, M., 2014. Medicine Donations: Matching Demand with Supply in Broken Supply Chains. *INSEAD Working Paper No.*

*2014/19/TOM/INSEAD Social Innovation Centre.*

**SYNERGISTIC ACTIVITIES**

1. Reviewer for Production and Operations Management Journal.
2. Ad-hoc Reviewer for Journal of Operations Management, Journal of Humanitarian Logistics and Supply Chain Management.
3. Session Chair, “Matching Supply with Demand in Nonprofit Operations”, INFORMS Annual Meeting, Phoenix, AZ, U.S.A., 2018.

**Terry Esper**

Associate Professor of Logistics

Fisher College of Business, The Ohio State University

Columbus, Ohio, 43210

Telephone: (614) 292 2610

E-Mail: [esper.9@osu.edu](mailto:esper.9@osu.edu)**PROFESSIONAL PREPARATION**

Philander Smith College	Mathematics	B.S. (1996)
Sam M. Walton College of Business	Transportation and Logistics Management	MBA (1998)
Sam M. Walton College of Business	Business Administration	Ph.D. (2003)

**APPOINTMENTS**

2017-Present	Assistant Professor of Logistics Fisher College of Business, The Ohio State University
2016-Present	Adjunct Professor of Supply Chain Management University of Iowa CIMBA Italy MBA Program
2013-2017	Oren Harris Endowed Chair / Associate Professor of SCM Executive Director, Supply Chain Management Research Center University of Arkansas Sam M. Walton College of Business
2010-2016	Adjunct Professor of SCM University of San Francisco Graduate School of Management
2009-2012	Assistant Professor of Logistics University of Tennessee Haslam College of Business
1998-2000	Senior Traffic Administrator Hallmark Cards Inc.
1995-1996	Research and Intermodal Planning Assistant Arkansas Highway and Transportation Department

**PUBLICATIONS**

1. Stank, Ted, Terry L. Esper, Thomas Goldsby, Walter Zinn and Chad Autry, 2019. Toward a Digitally-Dominant Paradigm for 21st Century Supply Chain Scholarship. *International Journal of Physical Distribution and Logistics Management*, forthcoming.
2. Peinkofer, Simone and Terry L. Esper, 2018. Assessing the Impact of Drop-Shipping Fulfillment Operations on the Upstream Supply Chain. *International Journal of Production Research*, pp.1-24.
3. Ta, Ha, Terry L. Esper, and Sebastian Garcia-Dastugue, 2018. The Effect of Trustworthiness Velocity on Continuity in Supply Chain Relationships. *Journal of Supply Chain Management*, 54(4), pp.42-61.
4. Esper, Terry L. and Simone Peinkofer, 2017. Consumer-Based Supply Chain Management Performance: A Structured Literature Review and Call for Research.

*Transportation Journal*, 56(4), pp.395-428.

5. Thornton, LaDonna, Terry L. Esper and Chad Autry, 2016. Leader or Lobbyist: Exploring Politics in Supply Chain Management. *Journal of Supply Chain Management*, 52(4), pp.42-62.

### **Other Significant Publications**

1. Peinkofer, Simone, Terry L. Esper, Ronn Smith and Brent Williams, 2015. Assessing the Impact of Price Promotions on Consumer Response to Online Stockouts. *Journal of Business Logistics*, 36(3), pp.260-272.
2. Murfield, Monique, Terry L. Esper, Wendy Tate, and Kenneth Petersen, 2016. Supplier Role Conflict: An Investigation of its Relationship Implications and Impact on Supplier Accommodation. *Journal of Business Logistics*, 37(2), pp.168-184.
3. Ta, Ha, Terry L. Esper and Adriana Rossiter Hofer, 2018. Designing Crowdsourced Delivery Systems: The Effect of Driver Disclosure and Ethnic Similarity. *Journal of Operations Management*, 30(1), pp.19-33.
4. Bradley, Randy V., Terry L. Esper, Bogdan Bichescu, Joonwhan In, and Terry Byrd, 2018. The Joint Use of RFID and EDI: Implication for Hospital Performance. *Production and Operations Management Journal*, 27(11), pp.2071-2090.
5. Mello, John, Theodore P. Stank, and Terry L. Esper, 2008. A Model of Logistics Outsourcing Strategy. *Transportation Journal*, 47(4), pp.5-25.

### **SYNERGISTIC ACTIVITIES**

1. Recipient of Scholarly Research Grant Program (2005), College of Business Administration, University of Tennessee, for research associated with Supply Chain Collaboration.
2. Co-Chair, Logistics Doctoral Symposium, Knoxville, TN (2012)
3. Co-Chair (with Funda Sahin), Current Research and Theoretical Developments Track at the 2005 Supply Chain Educators' Conference of the Annual CSCMP Meeting.
4. Reviewer for *Journal of Operations Management*, *Decision Sciences Journal*, *International Journal of Logistics Management*.

**Vince Castillo**

Assistant Professor of Marketing and Logistics

Fisher College of Business, The Ohio State University Columbus, Ohio, 43210 E-Mail:

[castillo.230@osu.edu](mailto:castillo.230@osu.edu)**PROFESSIONAL PREPARATION**

University of Tennessee	Supply Chain Management and Strategy	Ph.D. (2018)
University of San Diego	Supply Chain Management and Finance	MBA (2014)
Colorado School of Mines	Civil Engineering	B.S. (2006)

**APPOINTMENTS**

2018-Present	Assistant Professor of logistics Fisher College of Business, The Ohio State University
2018-Present	Faculty Fellow, Initiative for Food and Agricultural Transformation (InFACT) Discovery Theme, The Ohio State University
2019-Present	Affiliated Faculty, Sustainability Institute The Ohio State University
2006-2015	Captain (Infantry) California Army National Guard and US Army
2010-2011	Production Supervisor Silgan Containers
2007-2008	Civil Design Engineer Mollenhauer Group

**PUBLICATIONS**

1. Castillo, Vincent E.; Mollenkopf, Diane A.; Bell, John E.; Bozdogan, Hamparsum, 2018. Supply Chain Integrity: A Key to Sustainable Supply Chain Management. *Journal of Business Logistics*.

**Other Significant Publications**

1. Castillo, Vincent E.; Bell, John E.; Rose, William J.; Rodrigues, Alexandre M., 2017. Crowdsourcing Last Mile Delivery: Strategic Implications and Future Research. *Journal of Business Logistics*. Finalist, 2019 Bernard J. LaLonde Best Paper Award.

**SYNERGISTIC ACTIVITIES**

1. Principal Investigator. "An Inquiry into Supply Chain Strategy Implications of the

Sharing Economy for Last Mile Logistics” (\$8,000). University of Tennessee Global Supply Chain Institute, Knoxville, TN. April 2017.

2. Co-Investigator with Bell, John E. and Mollenkopf, Diane A. “Transparency and Sustainable Supply Chain Management in Department of Defense Procurement” (\$30,000). United States Air Force Institute of Technology, Dayton, OH, 2016.
3. Logistics Undergraduate Committee Member, The Ohio State University (2019-Present) 4. Ad-hoc Reviewer for Journal of Business Logistics, Decision Sciences Journal, International Journal of Physical Distribution and Logistics Management.

**Walter Zinn**

Professor of Marketing and Logistics

Fisher College of Business, The Ohio State University  
Columbus, Ohio, 43210

Telephone: (614) 292 0797

E-Mail: [zinn.13@osu.edu](mailto:zinn.13@osu.edu)**PROFESSIONAL PREPARATION**

Fundacao Getulio Vargas		B.B.A (1975)
Michigan State University	Logistics	M.B.A. (1979)
Michigan State University	Logistics	Ph.D. (1985)

**APPOINTMENTS**

2005-Present	Professor of Logistics, Department of Marketing and Logistics Fisher College of Business, The Ohio State University
2016-2019	Associate Dean for Graduate Students and Programs Fisher College of Business, The Ohio State University
2010-2016	Chairperson, Department of Marketing and Logistics Fisher College of Business, The Ohio State University
2004-2016	Program Director, Master in Business Logistics Engineering Fisher College of Business, The Ohio State University
1999-2005	Associate Professor of Logistics, Department of Marketing and Logistics, Fisher College of Business, The Ohio State University
1992-1999	Associate Professor of Marketing and Logistics, Department of Marketing, University of Miami
1985-1991	Assistant Professor of Marketing and Logistics, Department of Marketing, University of Miami.

**PUBLICATIONS**

1. Stank, T., Esper, T. L., Goldsby, T. J., Zinn, W., Autry, C., 2019. Toward a Digitally Dominant Paradigm for 21st Century Supply Chain Scholarship. *International Journal of Physical Distribution & Logistics Management*, 49(10), pp.956-971.
2. Esper, T. L., Castillo, V. E., Ren, X. K., Sodero, A. C., Wan, X., Croxton, K. L., Knemeyer, A. Michael, DeNunzio, S. R., Zinn, W., Goldsby, T. J., 2020. Everything Old is New Again: The Age of Consumer-Centric Supply Chain Management, *Journal of Business Logistics*, 41(4), pp.286-293.
3. Esper, T. L., Goldsby, T. J., Zinn, W., 2020. A Challenge in our Time: Issues of Race in Supply Chain Management, *Journal of Business Logistics*, 41(2), pp.178-181.
4. Zinn, W., Goldsby, T. J., 2020. Global Supply Chains: Globalization Research in a Changing World, *Journal of Business Logistics*, 41(1), pp.1-3.

### **Other Significant Publications**

1. Charnes, John M., Howard Marmorstein and Walter Zinn, 1995. Safety Stock Determination With Serially Correlated Demand In a Periodic-Review Inventory System. *Journal of the Operational Research Society*, 46, pp. 1006-1013. Translated to Portuguese and reprinted in *Gestao & Producao*, 4(2), pp.140-149.
2. Lassar, Walfried and Walter Zinn, 1995. Informal Channel Relationships in Logistics. *Journal of Business Logistics*, 16(1), 1995, pp.81-106.
3. Dominguez, Luis V. and Walter Zinn, 1994. International Supplier Characteristics Associated With Successful Long-Term Buyer/Seller Relationships. *Journal of Business Logistics*, 15(2), pp.63-88.
4. Marmorstein, Howard and Walter Zinn, 1993. A Conditional Effect of Autocorrelated Demand on Safety Stock Determination, *European Journal of Operational Research*, 68(1), pp.139-142.

### **SYNERGISTIC ACTIVITIES**

1. Co-Editor in Chief for Journal of Business Logistics (2016-2020)
2. Systems Section Editor for Journal of Business Logistics (1996-2000)
3. Special Section Editor, Journal of Business Logistics (2000)



## Appendix 3 – Course Description of the classes taught in the MSCM Program (Parentheses indicate New or Existing Course)

**Course Title:** Introduction to Supply Chain (NEW)

**Credits:** 3

**Course Description:** This course will provide an overview of the key components of managing and operating a supply chain, including the strategic role of supply chain management in determining both the firm's financial performance and the customer experience.

**Course Title:** Contemporary Supply Chain Issues (NEW)

**Credits:** 1.5

**Course Description:** This course will provide an examination of emerging challenges and opportunities in today's dynamic business environment. Topics such as blockchain, greater emphasis on triple bottom line, network layouts following the Covid pandemic and digitization will be discussed and assessed. This course will be agile to examine emerging topics within the past two to three years and will build off engaged faculty research.

**Course Title:** Operations Management (Modification of MBA 6230)

**Credits:** 3

**Course Description:** Focuses on how the operations function contributes to ensuring effective and efficient flow of materials and information within and outside the organization.

**Course Title:** Strategic Global Sourcing (BUSOBA 7233)

**Credits:** 3

**Course Description:** Focuses on major decisions related to global sourcing, starting with ownership (make-buy) and location (offshore-onshore). Among other topics, students explore fundamental trade-offs in sourcing organization, such as centralizing or decentralizing.

**Course Title:** Logistics Management (Modification of BUSML 7380)

**Credits:** 3

**Course Description:** Develop an understanding of key drivers of logistics performance and their inter-relationships with strategy and other functional areas. Focus on developing analytic, problem-solving, and cost trade-off management skills.

**Course Title:** Supply Chain Analytics (Modification of BUSML 7382) **Credits:** 3

**Course Description:** Will equip student with the tools and skills necessary to recognize, analyze and solve significant problems in the operation of a supply chain through the application of techniques using spreadsheet analysis, data visualization, optimization and simulation. Application areas will include demand forecasting, inventory control, and network design.

**Course Title:** Supply Chain Sustainability & Resilience **Credits:** 1.5  
(Modification of BUSML 4385 and BUSOBA 7253)

**Course Description:** Focuses on understanding how to measure and impact the long-term sustainability of a company's supply chain operations; learn practices for reducing carbon footprints, adopting eco-efficient principles, and creating a more resilient supply chain, while meeting financial goals. Highlights factors that promote these efforts, such as environmental laws and product returns.

**Course Title:** Supply Chain Technology (Modification of BUSML 7386) **Credits:** 1.5

**Course Description:** Focus on the operational use and appropriate contextual use of supply chain software technologies such as manufacturing planning systems, transportation management systems, warehouse management systems, inventory management and network design.

**Course Title:** Consumer-Centric Supply Chain Management (NEW) **Credits:** 3

**Course Description:** Focuses on how the supply chain delivers on the promises made by the marketing function and the role it plays in defining the end-consumer's experience. Explores omni-channel and last-mile delivery, consumer-expectations, how consumer insights affect decision-making throughout the supply chain.

**Course Title:** Capstone Project (NEW) **Credits:** 3

**Course Description:** Students will work on a real-life business problem, either with their current employer or with a company assigned to them. These projects will be student-led but faculty-guided and will give students an opportunity to provide a valuable contribution to their organization while practicing the application of the concepts and learnings they have obtained during the program.

**Course Title:** Kickoff Experience (NEW) **Credits:** 1

**Course Description:** This 2-day on-campus experience will include a mini-course (8 instructional hours) on Finance and Accounting, and two company visits (8 instructional hours) to include facility tours and executive presentations. Students will be assigned a five-page paper. Students will be asked to reflect on one of the tours/visits they experienced and to note key supply chain challenges faced by the presenting company. Students will be asked to provide a strategy for addressing the identified challenges. Following the session students will also be given an assessment exam on the topics covered regarding Finance and Accounting.

**Course Title:** Mid-program Experience (NEW)

**Credits:** 1

**Course Description:** This 2-day on-campus experience will include a mini-course (8 instructional hours) on Relationship Management and Negotiations, and two company visits (8 instructional hours) to include facility tours and executive presentations. Students will be assigned a five page paper. Students will be asked to reflect on one of the tours/visits they experienced and to note key supply chain challenges faced by the presenting company. Students will be asked to provide a strategy for addressing the identified challenges. Following the session students will also be assigned a short paper reflecting on lessons in relationship management and Negotiations.

**Course Title:** Final Experience (NEW)

**Credits:** 1

**Course Description:** This 3-day on-campus experience will include a mini-course (8 instructional hours) on Leadership, two company visits (8 instructional hours) to include facility tours and executive presentations, and final presentations of the graduating class's capstone projects. Students will be assigned a five page paper. Students will be asked to reflect on one of the tours/visits they experienced and to note key supply chain challenges faced by the presenting company. Students will be asked to provide a strategy for addressing the identified challenges. Following the session students will also be assigned a short paper reflecting on lessons in Leadership.

## Appendix 4 – Fiscal Impact Statement

### Budget for New Graduate Degree Programs

	Year 1	Year 2	Year 3	Year 4
<b>Projected Enrollment</b>	25	30	30	30
Head-count full time				
Head-count part time				
Full Time Equivalent (FTE) enrollment				
<b>Projected Program Income</b>				
Tuition (paid by student or sponsor)	433,500	520,200	520,200	520,200
Externally funded stipends, as applicable	0	0	0	0
Expected state subsidy	0	284,577	284,577	284,577
Other income (if applicable, describe in narrative section below)	374,822	316,604	316,604	316,604
<b>TOTAL PROJECTED PROGRAM INCOME:</b>	808,322	1,121,382	1,121,382	1,121,382
<b>Program Expenses</b>				
New Personnel				
<ul style="list-style-type: none"> <li>• Faculty (e.g. tenure-track, clinical, professional) <ul style="list-style-type: none"> <li>Full _____</li> <li>Part Time _____</li> </ul> </li> <li>• Non-instruction (indicate role(s) in narrative section below) <ul style="list-style-type: none"> <li>Full _____</li> <li>Part time _____</li> </ul> </li> </ul>	259,633	259,633	259,633	259,633

New facilities/building/space renovation (if applicable, describe in narrative section below)				
Tuition Scholarship Support (if applicable, describe in narrative section below)				
Stipend Support (if applicable, describe in narrative section below)				
Additional library resources (if applicable, describe in narrative section below)				
Additional technology or equipment needs (if applicable, describe in narrative section below)				
Other expenses (e.g., Waived Tuition and Fees, travel, office supplies, accreditation costs) (if applicable, describe in narrative section below)	385,500	385,500	385,500	385,500
<b>TOTAL PROJECTED EXPENSE:</b>	645,133	645,133	645,133	645,133
<b>NET</b>	163,189	476,248	476,248	476,248

**Budget Narrative:**

**For the Budget template provided above please see the following assumptions:**

- Program enrollment is expected to be 25 in year one and increase to steady state of 30
- Tuition Income is calculated based on the resident total which includes instructional fee, general fee and distance education fee.
- State subsidy is based on a \$314 per credit hour rate with no expected increase over time.
- Other income is the net of differential fees, support unit tax, ODEE tax, and estimated non-resident surcharge.
- Personnel includes existing personnel for faculty instructional costs and a program director
- Other expenses include the following: In person experience costs for the students (Blackwell space rental, food costs, guest speakers), various support office costs (career services, Graduate Programs Office, administrative support, IT support, etc.) it is based on an internal FCOB calculation as to how much each of these services cost per FCOB program, and marketing costs for the program.

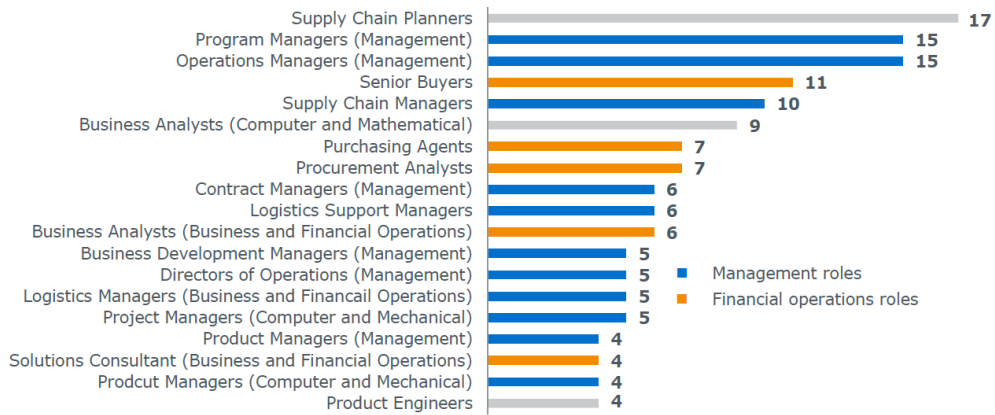
## Appendix 5- Market Analyses and Need Survey

A recent analysis conducted by EAB shows that there were about 372 jobs in Ohio posted for Masters professionals in the areas of supply chain and operations in the time period between September 2018 and August 2019. These jobs continue to grow in recent year due to supply chain disruptions.

### Frequently Posted Titles for Master's-Level Supply Chain Management Professionals

Local Data, September 2018-August 2019<sup>5</sup>

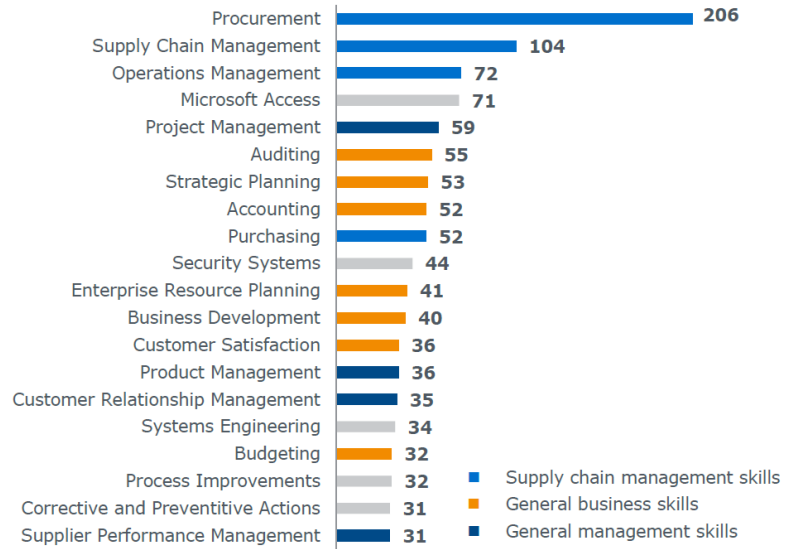
n= 372 unique job postings



**In-Demand Skills for Master’s-Level Supply Chain Management Professionals**

*Local Data, September 2018-August 2019<sup>8</sup>*

n= 372 unique job postings



We have included a report prepared by the EAB included in this proposal that contains more details on these trends and needs survey.

## Appendix 6 - College Executive Committee Meeting Minutes

### College Executive Committee Meeting Minutes (August 2021)

#### **MS Supply Chain**

Faculty from the two departments (*Operations and Business Analytics* and *Marketing & Logistics*) discussed the design and development of a new online Masters program in Supply Chain Management. This is a collaborative effort between the *Operations & Business Analytics* and *Marketing & Logistics* departments. The program will include experiences for students, electives from the online WPMBA curriculum and offer fast-track and two-year options. It is expected to capitalize upon the college's ability to personalize curricula in an online delivery format.

Research into the efficacy of the program included utilizing the services of an external consulting firm to gather information on comparable programs and review of the cost analysis by the fiscal office. The program proposal earned unanimous approval in the two departments and was reviewed by the specialized masters committee. The proposal will now be evaluated at the University level.

The college expressed thanks to those who worked with the MBLE program as lessons learned from that program provided a foundation for this new one. Unfortunately, this program is not open to international students per university restrictions on this type of program but, historically, international students at any rate prefer in-person instruction.



## Appendix 7 – Curricular Content and Course Plan for MSCM Program

### Advising Sheet for MSSC:

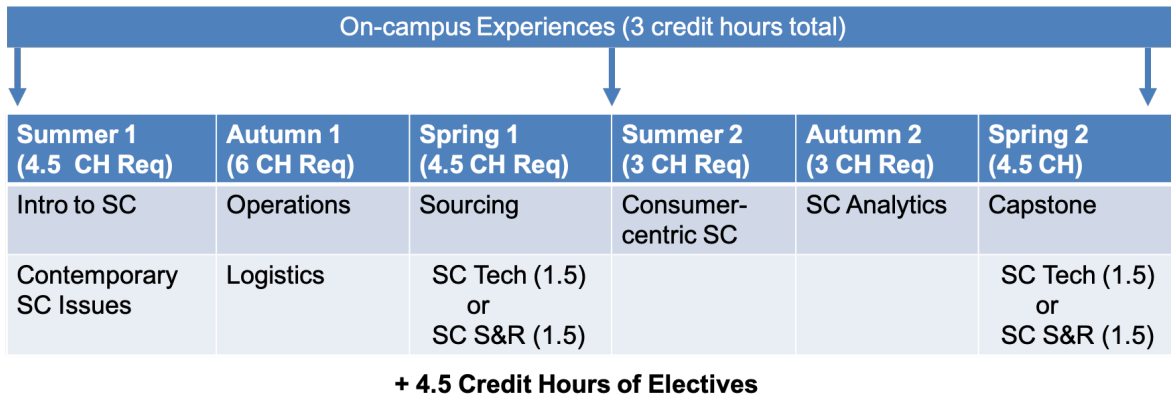
<b>Required Coursework</b>		
<b>Course</b>	<b>Credits</b>	<b>Grade</b>
Introduction to Supply Chain	3.0	
Contemporary Supply Chain Issues	1.5	
Operations Management	3.0	
Logistics Management	3.0	
Sourcing	3.0	
Supply Chain Analytics	3.0	
Supply Chain Sustainability and Resilience	1.5	
Supply Chain Technology	1.5	
Consumer-Centric Supply Chain Management	3.0	
Capstone Project	3.0	
Kickoff On-campus Experience	1.0	
Mid-program On-campus Experience	1.0	
Final On-campus Experience	1.0	
	28.5	

<b>Elective Coursework</b>		
<b>Course*</b>	<b>Credits</b>	<b>Grade</b>

	4.5	

\*MSSC students may choose electives from: (1) a list of options that are updated each year and (2) coursework that is taught outside the Fisher College but approved by program leadership.

## 2-year Course Plan



**Notes:**

- All courses are offered once per year, except the Capstone which would need to be offered in both spring and summer.
- Need to offer the mid and final campus experiences twice per year.

# 15-Month Course Plan

On-campus Experiences (3 credit hours total)			
Summer 1 (4.5 CH Req)	Autumn 1 (9 CH Req)	Spring 1 (6 CH Req)	Summer 2 (6 CH Req)
Intro to SC	Operations	Sourcing	Consumer-centric SC
Contemporary SC Issues	Logistics	SC Technology	Capstone
	SC Analytics	SC Sustainability & Resilience	

**+ 4.5 Credit Hours of Electives**

# Memorandum of Understanding

Distance Education

## Between

The Fisher College of Business

## And

Office of Distance Education and eLearning  
The Ohio State University

## Purpose

This Memorandum of Understanding (MOU) is entered into by and between the Office of Distance Education and eLearning, Distance Education and the above College/Department to facilitate the launch of the online program outlined below.

Program name: Online Masters in Supply Chain Management (Online SCM)

**Program level:** Graduate

**Approval process:** New Online Masters Degree

Has this program been approved in the past?      Yes      **No**

If Yes, please explain:



Will the new approval replace or operate in conjunction with the existing approval?

Yes            **No**

Will this program have a different fee structure from what would normally be assessed similar students at the university?

Yes            **No**

If Yes, please explain:

**Total credit hours for program:** 33 credits

**Total number of courses for program:** The Core consist of 25.5 credit hours that comes from 10 courses. The other 4.5 credit hours comes from elective courses, most of which will be from the Online WPMBA program. There will be 3 1-credit on campus experience opportunities at the beginning, middle and end of the program

**Percentage of courses offered online:** 100% (The 3 1-credit hour on campus experience opportunities will also be available virtually for the students who are unable to make it to campus)

Onsite Activities:

- Optional. There will be three on-campus experiences that will be 1-credit each named as program kickoff, mid-program and final experience. The program kick-off consist of mini-course of finance and accounting, introduction to capstone and some speaker series. The mid-program event consist of a mini-course in relationship management and negotiation and capstone discussion. The Final experience will consist of a mini-course in leadership, capstone presentation and graduation. While all of these are onsite activities, students will be given the option to participate virtually.

**Anticipated semester of first cohort:** Summer 2023.

**Anticipated date to begin recruiting and enrolling:** Fall 2022

**Total number of anticipated students, semesterly over the first five years:**



	Summer	Autumn	Spring	Total
Year 1 AY23-24	25	25	25	25
Year 2 AY24-25	25	25	25	25
Year 3 AY25-26	25	25	25	25
Year 4 AY26-27	30	30	30	30
Year 5 AY27-28	30	30	30	30

## College/Department Contacts

**College/Department:** Fisher College of Business

**Faculty/Program Director** (*responsible for instructor and course coordination*):

**TBD**

**Primary Contact:**

Associate Dean for Graduate Programs and Executive Education (Aravind Chandrasekaran)

**College Fiscal Officer:** Gretchen Gombos

**Program Marketing Contact:** Graduate Programs Office (Paul North)



**Contact for State Authorization compliance:** Associate Dean for Graduate Programs and Executive Education (Aravind Chandrasekaran)

**Additional college/contacts:** Executive Director of Graduate Programs (Paul North)

## Term of MOU

This MOU will begin effective 16 August 2021 and will be discussed and reaffirmed every three years at the start of the next fiscal year on July 1, however continual dialogue will ensue to ensure the involved parties are evaluating the partnership. This MOU does not automatically renew. At the end of this term 30 June 2025 a new MOU will be created. Should the online program end at any time, the DE budget model will remain in effect for three years from the end point of the online program in order for the budget model to self-adjust and close, given that the budget model operates on a one-year lag, two-year average from the start of the online program.

## Distance Education Responsibilities:

**The Office of Distance Education and eLearning (ODEE) entering into this agreement will partner with Colleges to:**

### Secure Approval

1. Consult and recommend options as state authorization related considerations arise
  - a. Consult and support college understanding of rules and regulations
  - b. Engage in prioritization strategy to support the unit's goals
  - c. Communicate the program's authorization status to the college

### Program Administration

1. Consult and recommend best practices for course approval, student labeling, and budget forecasting.

### Participate in Compliance Activities



1. Actively monitor regulations and participate in regional and national state authorization networks to provide recommended best practices to seek and maintain required authorizations.

## Partner to Build Online Courses Based on Best Practice

1. ODEE will collaborate with the college at least one semester prior to each course's first offering term on the curricular and technical solutions for online course design based on best practice by providing expertise on the following:
  - a. Elements of course format, rigor, and integrity that affect delivery mode, based on university policies (tracking attendance with at least one student activity each week, credit hour equivalency), federal policies, and accreditation standards
  - b. Best practices for promoting and maintaining the academic integrity of the courses, including assignment design and technical solutions
  - c. Course templates that provide students with consistent, clear navigation and online course expectations based on best practices
  - d. Formats and platforms for course activities and materials that are supported by university technical requirements and optimal for distance delivery
  - e. Evidence-based recommendations about teaching strategies in online courses
  - f. Technical and instructional mechanisms that facilitate the program's assessment of student learning across courses
2. Provide instructional design consultation and production support for each course, including an initial semester-long (14-week) offering of support, tailored to the instructor's needs and any program requirements. ODEE will plan for staffing availability based on the course design schedule (see Appendix A: Course Design Schedule). This schedule will be confirmed with the Faculty/Program Director each semester and support for instructors/courses added to the schedule after confirmation is received, or for instructor changes, will be provided as ODEE's staffing allows.
3. Collaborate with the college to provide support for course revision with current instructors every three years following the initial instructional design support term.
4. Share expertise on accessibility best practices expected for courses of all modalities at Ohio State and provide referrals to local Accessibility Coordinator.
5. Provide professional learning opportunities for faculty/instructors/students through ODEE and in ongoing partnership with other campus units; promote these opportunities directly with program instructors.





6. Provide additional consultation to instructors associated with the program (as indicated in the attached course design schedule or updated by a program Faculty/Program Director or other contact), including:
  - a. Opportunities for consultation from the instructional design team before, during, or after the first term when a course is taught following ODEE course design support
  - b. Consultation and pathways for professional learning for additional instructors who begin teaching a course before the scheduled three-year revision support

## Conduct Marketing to Drive Applications to the Online Program

1. Distance Education marketing is the unit responsible for promoting the Ohio State Online sub-brand and its programs. A Distance Education marketing representative will work with leaders from each program, internal stakeholders and external agencies to design an annual, individualized marketing plan best suited to drive perspective students to a program.

Distance Education marketing services include:

- a. A presence on [online.osu.edu](http://online.osu.edu) that includes web development and copywriting (all programs)
  - b. Inclusion in digital and non-digital brand marketing campaigns (all programs)
  - c. Program-specific marketing
    - i. Tactics that may be employed include digital advertising, traditional advertising, written and visual storytelling, student journey mapping, and landing page development, among other strategies. (See Appendix C: Scope of Work).
    - ii. Market research insights can be provided to inform program demand, identify competitors, determine alumni outcomes and more.
2. Partner with programs, where applicable, to submit data to the *U.S. News and World Report* for Best Online Programs Rankings Survey

*Note: Marketing will only be conducted in states/countries in which the program has been authorized*

## Provide Student Support to Online Learners



1. Actively engage in discussions with stakeholders across campus to promote the support of distance education students and research national trends in distance education student support

## College/Department Responsibilities:

College/Department entering into this agreement will partner with ODEE to:

1. Engage with the Distance Education Marketing Team to conduct market research to understand program viability and inform program development.

## Secure Approval

1. Secure approval from the following, where applicable:
  - a. Department
  - b. College
  - c. Graduate School
  - d. Council on Academic Affairs (CAA)
  - e. University Senate
  - f. Board of Trustees
  - g. Department of Higher Education
  - h. Accreditation Provider
2. Contact the university budget office and request a distance-education-specific fee table. Differential fees must be approved by the Board of Trustees, if applicable.
3. Contact Student Financial Aid and Office of Student Academic Success to determine initial enrollment term
4. Meet the program standards set forth by your accrediting body (if applicable) for alternative delivery modes

## Program Administration

1. Submit applicable courses for online delivery and any course revisions to [curriculum.osu.edu](http://curriculum.osu.edu) (after CAA approval of program)



2. Label students in the Student Information System with the Distance Education subplan (ONL)
  - a. Please note that the Distance Education Budget Model only applies to students labeled with the ONL subplan
3. Collaborate with Admissions to create an application
4. Develop and maintain a website or webpage for the program that links to the application
5. Incur additional costs not covered by the Distance Education Budget Model, if applicable, associated with distance education programming (e.g. staff or funding to provide consistent support and services to students, faculty, and staff associated with online programs as provided to those for on-ground programs)
6. Collaborate with the Distance Education marketing team
  - a. Work in tandem with Distance Education marketing to design annual marketing plan
  - b. Partner with Distance Education marketing to financially support agreed-upon marketing tactics as outlined in the marketing plan. To maximize the program's potential, each college must invest in its own marketing. The college must allocate the appropriate resources in order to reach each program's enrollment goals. (See College Marketing Responsibilities, attached)
  - c. Regularly share application and enrollment numbers to inform marketing strategy (in the absence of a centralized customer relationship management (CRM) system)
7. Identify a Faculty/Program Director or designee to meet with ODEE on a semester basis to confirm course design schedule, faculty/instructor participation, share information such as strategies and future plans, updates and feedback regarding the program and ODEE support.

## Participate in Compliance Activities

1. Collaborate with ODEE on state authorizations and state professional licensing board approvals for programs in a licensed field
  - a. Identify a state authorizations liaison to serve as the connection to the state authorization team
  - b. Upon request, provide program, instructor and faculty information to the state authorization team



- c. Provide required professional licensing board disclosures in writing to potential and enrolled students
  - d. Communicate to prospective students regarding their eligibility to enroll in the program and seek federal financial aid based on the program's authorization status
  - e. Notify ODEE of states/countries from which you would like to enroll students during initial State Authorization consultation and if changes arise
  - f. Post a link to the Ohio State Online disclosures webpage ([go.osu.edu/disclosures](https://go.osu.edu/disclosures)) on the program webpage maintained by the college
  - g. Notify the state authorization team and the appropriate state authorization liaison regarding any changes in trigger activities outside Ohio, such as:
    - i. Establishing a physical location for students to receive synchronous or asynchronous instruction
    - ii. Establishing an administrative office or providing office space for staff
    - iii. Conducting on-ground supervised field experiences such as clinicals, practicums, student teaching or internships
    - iv. Placing more than 10 students simultaneously at a single placement site (e.g., a hospital)
    - v. Requiring students to meet in person for instructional purposes more than twice per semester
    - vi. Carrying out field study or research at a field station
  - h. Faculty/Program Director and instructors are recommended to participate in ODEE distance education training
    - i. "State Authorization 101" BuckeyeLearn course
2. Complete Appendix B of this document to add clarity to desired program state authorization direction

## Partner to Build Online Courses Based on Best Practice

1. College will collaborate with ODEE on curricular and technical solutions to design online courses based on best practice, at least one semester prior to first offering term. ODEE will provide expertise as outlined in the "Partner to Build Online Courses Based on Best Practice" section of the Distance Education Responsibilities.



2. Provide administrative support to facilitate ODEE instructional design scheduling for each course in the program, based on the course design schedule below. To allow for adequate support staffing from ODEE, communicate changes to that schedule at least one semester before the ODEE support would begin for each course. Schedule changes or new instructors made after that window will receive ODEE support as staffing allows.
3. Collaborate with ODEE to coordinate support for the revision of courses every three years after the initial ODEE course design support term.
4. Encourage faculty/instructors to participate in professional learning opportunities, including those offered through ODEE as well as other university partners, such as the Michael V. Drake Institute for Teaching and Learning.
5. Provide updates to ODEE about course instructor changes that necessitate additional consultation support from ODEE (e.g., a new instructor beginning to teach an existing course before its three-year revision support).
6. Complete the Course Design Schedule to add clarity to desired program course design direction

## Conduct Marketing to Drive Applications to the Online Program

1. **Designate a Dedicated Marketing Liaison**– Designate a marketing professional in the college to support the program marketing strategy. The marketer will serve as the college’s liaison to the Distance Education marketing team and will work with the faculty/program director and other college marketing and communications professionals to conduct marketing activities as noted in the program’s annual marketing plan.
2. **Establish Marketing Budget** – Work with the Distance Education marketing team to establish an appropriate marketing budget to meet the program’s enrollment goals.
3. **Create a Strong Web Presence** – An optimized web presence is the most critical asset for marketing the online program. Stakeholders in the college must have access to the content management system (CMS) to make necessary changes and enhancements to the program’s web page(s) on the college or department’s website.
4. **Participate in Promotional Activities** – Build awareness of your online program to increase brand recognition and convert prospective students into applicants. Activities for which the college must participate in include but are not limited to:
  - a. Recruitment activities to nurture leads
  - b. Content marketing (storytelling, social media, gated content, info sessions)



- c. Email marketing (list acquisition, awareness generation through newsletters, etc.)
  - d. Partnering with ODEE, where applicable, to submit data to the *U.S. News and World Report* for Best Online Programs Rankings Survey
5. Complete Appendix A of this document to add clarity to desired program marketing direction

## Provide Student Support to Online Learners

1. Collaborate with relevant student support services (Disability Services, Writing Center, Libraries, Military and Veterans Services, etc.) to ensure resources available across campus are made know to learners and that student needs are met.
2. Ensure compliance with applicable university policy expected for courses of all modalities at Ohio State, including provisions of the [Digital Accessibility Policy](#) to include obtaining approved [Accommodation-Based Exceptions](#), when needed. College/Department will be responsible for the costs associated with these accommodations as well as accommodations for utilized tools outside of the Ohio State supported toolset.
3. Identify student technology support for tools only used by your program or those outside of the supported university toolset (Toolset Services: [teaching.resources.osu.edu/toolsets](https://teaching.resources.osu.edu/toolsets)).

## Major Deliverables

High level deliverables that will be provided by ODEE:

- ODEE will design courses in partnership with faculty/instructors at least one if not two semesters prior to first offering term
- ODEE will conduct all state authorization and licensing board research prior to the program application for admission opening
- ODEE will create an annual marketing plan specific to the program.

## Pricing and Billing

ODEE distance education services are funded through the Distance Education Budget Model that was created by the University Senate Fiscal subcommittee to incentivize colleges to develop online programs. Beyond the ODEE services listed in this MOU, the Budget Model also supports the learning technology toolset at Ohio State such as Canvas, Zoom, Proctorio, and ExamSoft, open courses, and the ability to provide program data. The ODEE Steering



Committee; Student-Athlete Advisory Committee; Council on Distance Education Libraries, and Information Technology; Council on Academic Affairs; and Council on Enrollment and Student Progress provide governance to ODEE work and services. Please review and complete all appendices and attachments. A completed Budget Worksheet is required when submitting an MOU.

*Signatories begin on page 16*



## APPENDICES

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# Appendix A: Marketing and Communications

Distance Education marketing is the unit responsible for promoting the Ohio State Online sub-brand and its programs, but it is crucial for each college to participate in marketing activities to reach your target audiences, be competitive in the marketplace, and increase enrollments year over year.

The below are highly recommended activities for your program's success.

For this program, does your college plan to do any of the following?

	Yes/No
Leverage market research to inform program design?	Yes
Consider and partner with <a href="#">Ohio State's Corporate Engagement Office</a> to identify corporate partnership opportunities? (Note: ODEE can provide an introduction) (e.g. <a href="#">Third-Party Contract Courses</a> )	Yes
Conduct paid advertising specific to this online program?	Yes
Leverage a customer relationship management (CRM) system to track and nurture prospective Ohio State Online students?	Yes
Engage in virtual programming for perspective students?	Yes





## Appendix B: State Authorization

	Yes/No
Does this program potentially lead to a professional license or certification?	No
Will this program be marketed as leading to a professional license or certification?	No
Is professional licensure or certification a prerequisite for enrollment in the program?	No

For this program, does your college plan to do any of the following outside of Ohio:

	Yes/No
Enroll students located outside Ohio?	Yes
Establish a physical location for students to receive synchronous or asynchronous instruction?	No
Establish an administrative office or provide office space outside of Ohio for staff?	No
Conduct on-ground supervised field experiences such as clinicals, practicums, student teaching or internships?	No
Place more than 10 students simultaneously at a single placement site (e.g., a hospital)?	No
Require students to meet in person for instructional purposes more than twice per semester?	No
Carry out field study or research at a field station?	No



# Appendix C: Attachments

Completed Attachment: [Course Design Schedule](#)

Reference Attachment: [Distance Education Marketing – Scope of Work](#)

Reference Attachment: [Effective Practices for Online Teaching](#)

Reference Attachment: [Partnership and Roles](#)



# Signatories

By signing this MOU, all groups agree to be active partners and to abide by this agreement:

DocuSigned by:  
*Aravind Chandrasekaran*  
1E3EFCEB6266447...

08/16/2021  
Date \_\_\_\_\_

Program Director

DocuSigned by:  
*James Alton Hill*  
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DocuSigned by:  
*Joseph Goodman*  
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08/17/2021 08/17/2021  
Date \_\_\_\_\_

Department Chair

DocuSigned by:  
*Gretchen L Gombos*  
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08/18/2021  
Date \_\_\_\_\_

College Fiscal Officer

DocuSigned by:  
*Anil K Mahija*  
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08/18/2021  
Date \_\_\_\_\_

Dean

DocuSigned by:  
*Liam M. Lagchende*  
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08/19/2021  
Date \_\_\_\_\_

Ohio State Chief Information Officer



**Certificate Of Completion**

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Certificate Pages: 3	Initials: 0
AutoNav: Enabled	Envelope Originator:
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Time Zone: (UTC-05:00) Eastern Time (US & Canada)	1050 Carmack Rd
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	bane.17@osu.edu
	IP Address: 23.28.164.151

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**Signer Events**

Aravind Chandrasekaran  
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 The Ohio State University  
 Security Level: Email, Account Authentication (None)

**Signature**

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Signer Events	Signature	Timestamp
<p>Anil K Makhija makhija.1@osu.edu Dean The Ohio State University Security Level: Email, Account Authentication (None)</p>	<p>DocuSigned by: <i>Anil K Makhija</i> CA97CC0F05934CB...</p> <p>Signature Adoption: Pre-selected Style Using IP Address: 164.107.69.8</p>	<p>Sent: 8/18/2021 4:15:06 PM Viewed: 8/18/2021 4:27:24 PM Signed: 8/18/2021 4:27:40 PM</p>

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<p>Diane Dagefoerde dagefoerde.2@osu.edu Interim VP and CIO Ohio State University Security Level: Email, Account Authentication (None)</p>	<p>DocuSigned by: <i>Diane M. Dagefoerde</i> 69D2267C238849D...</p> <p>Signature Adoption: Uploaded Signature Image Using IP Address: 128.146.237.20</p>	<p>Sent: 8/18/2021 4:27:42 PM Viewed: 8/19/2021 10:41:38 AM Signed: 8/19/2021 10:42:50 AM</p>
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<p>Tracey Renee Richardson richardson.408@osu.edu Senior Director, Service Management The Ohio State University Security Level: Email, Account Authentication (None)</p>	<p><b>COPIED</b></p>	<p>Sent: 8/19/2021 10:42:52 AM</p>
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<p>Kristina Elaine Davis davis.1724@osu.edu Interim Director of Finance The Ohio State University Security Level: Email, Account Authentication (None)</p>	<p><b>COPIED</b></p>	<p>Sent: 8/19/2021 10:42:52 AM</p>
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<p>Lisa N Delaney delaney.177@osu.edu The Ohio State University Security Level: Email, Account Authentication (None)</p> <p><b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign</p>	COPIED	<p>Sent: 8/19/2021 10:42:56 AM Viewed: 8/19/2021 12:54:59 PM</p>

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