

**DEREE COLLEGE SYLLABUS FOR: MG 4579 CAPSTONE PROJECT IN OPERATIONS MANAGEMENT**

**UK LEVEL: 6**  
**UK CREDITS: 15**  
**US CREDITS: 3/0/3**

(Updated Spring2021)

**PREREQUISITES:**

BU 3233 Business Research Methods  
MA 1008 College Algebra  
MA 2021 Applied Statistics  
MG 2003 Management Principles or MG 3034 Managing People and Organizations  
MG 3272 Business Operations  
*Students must have at least 90 earned US credits before taking this course*

**CATALOG DESCRIPTION:**

Qualitative or quantitative research into a topic related to operations management.

**RATIONALE:**

The capstone offers an opportunity to students to apply the knowledge acquired in their undergraduate study to a research topic or a consultancy project in operations management. Students are expected to conduct independent research, which is supervised through seminar-style tutorials. This course is geared toward reinforcing students' academic qualities, such as academic writing, selection and evaluation of sources and correct referencing, and further developing their overall research attitude through recognizing relevant paradigms/theories in operations management and developing a critical and analytical perspective in terms of both theory and practice. Hence, the course prepares the students to enter the workplace where will be faced with a multiplicity of decisions to make, as well to pursue with postgraduate studies.

**LEARNING OUTCOMES:**

On successful completion of this course, students should be able to:

1. Design a research strategy and select appropriate research methods to conduct research in the field of operations management.
2. Assess the validity of theoretical assumptions in the actual practice of operations management and integrate research findings into the broader theoretical debate in a knowledge area.
3. Formulate scenarios and recommend actions to operations management professionals to enhance individual and/or organizational performance.

**METHOD OF TEACHING AND LEARNING:**

In congruence with the learning and teaching strategy of the college, the following tools are used:

- Seminar-style class sessions, which are devoted to supervising student research projects, including discussion of research topics in international business, tutorials on conducting research and feedback on student work.
- Office Hours: Students are encouraged to make full use of the office hours of their instructor in order to consult and discuss issues related to the course's content.
- Use of blackboard platform, where instructors post lecture notes,

	assignments instructions, timely announcements, as well as additional resources.
<b>ASSESSMENT:</b>	<b>Summative:</b>
	Research Project (Individual; 4,500-5,500 words) 100%
	<b>Formative:</b>
	Course work: Interactive group discussions and feedback sessions on work submitted 0%
	<p>The formative coursework aims to prepare students for the major written project.</p> <p>The research project and presentation test Learning Outcomes 1, 2, and 3.</p>
<b>INDICATIVE READING:</b>	<p><b>RECOMMENDED MATERIAL:</b></p> <p>Students are required to delve into the operations management literature. The articles below are indicative of the topics, as well as type of readings that students are expected to discuss in their capstone project.</p> <p><b>ARTICLES</b></p> <p>Barratt, M., Choi, T.Y., and Li, M. (2011). "Qualitative case studies in operations management: Trends, research outcomes, and future research implications". <i>Journal of Operations Management</i>, Vol. 29 No 4, pp. 329-342</p> <p>Binder, M. and Edwards, J. (2010), "Using grounded theory method for theory building in operations management research: A study on inter-firm relationship governance", <i>International Journal of Operations &amp; Production Management</i>, Vol. 30 No. 3, pp. 232-259</p> <p>Boyer, K., and Pagell, m. (2000). "Measurement issues in empirical research: improving measures of operations strategy and advanced manufacturing technology". <i>Journal of Operations Management</i>, Vol. 18 No 3, pp. 361-374</p> <p>Boyer, K., Swink, M., and Rosenzweig, E.D. (2005). "Operations strategy research in the POMS journal". <i>Production and Operations Management</i>, Vol. 14 No 4, pp. 442-449.</p> <p>Calabrese, A., Ghiron, N.L, and Tiburzi, L. (2021) 'Evolutions' and 'revolutions' in manufacturers' implementation of industry 4.0: a literature review, a multiple case study, and a conceptual framework, <i>Production Planning &amp; Control</i>, Vol. 32 No 3, pp. 213-227.</p> <p>Carter, M.W. and Price, C.C., and Rabadi, G. (2018). <i>Operations Research: A Practical Introduction</i>, 2<sup>nd</sup> ed., Chapman and Hall/CRC.</p> <p>Chase, R.B. (1980). "A classification and evaluation of research in operations management". <i>Journal of Operations Management</i>, Vol. 1 No. 2, pp. 9-14.</p> <p>Choi, T.-M., Cheng, T.C.E. and Zhao, X. (2016). "Multi-Methodological Research in Operations Management", <i>Production Operations</i></p>

*Management*, Vol. 25, pp. 379-389.

Choudhury, T.T., Paul, S.K., Rahman, H.F., Jia, Z. and Shukla, N. (2020) A systematic literature review on the service supply chain: research agenda and future research directions, *Production Planning & Control*, Vol. 31 No 16, pp. 1363-1384.

Coughlan, P. and Coughlan, D. (2002), "Action research for operations management", *International Journal of Operations & Production Management*, Vol. 22 No. 2, pp. 220-240.

DeHoratius, N. and Rabinovich, E. (2011). "Field research in operations and supply chain management", *Journal of Operations Management*, Vol. 29 No 5, pp. 371-375

Egbunike, O., Purvis, L., and Naim, M.N. (2019). "A systematic review of research into the management of manufacturing capabilities". *Production Planning & Control*, Vol. 29 No. 16, pp. 1349-1366

Fatorachian, H. and Kazemi, H. (2021) Impact of Industry 4.0 on supply chain performance, *Production Planning & Control*, Vol. 32 No 1, pp. 63-81.

Ferreira, L.M.F.R. and Candido, C.J.F. (2021), "Factors influencing firm propensity for ISO 9001 withdrawal: Evidence on decertification tendency and antecedents", *International Journal of Production Economics*, Vol. 233. DOI: 10.1016/j.ijpe.2020.108024.

Flynn, B., Schroeder, R., and Sakakibara, S. (1994). "A framework for quality management research and an associated measurement instrument". *Journal of Operations Management*, Vol. 11 No 4, pp. 339-367

Forza, C. (2002), "Survey research in operations management: a process-based perspective", *International Journal of Operations & Production Management*, Vol. 22 No. 2, pp. 152-194.

Golicic, S.L., Lenk, M.M. and Hazen, B.T. (2020), "A global meaning of supply chain social sustainability", *Production Planning & Control*, Vol. 31 No 11-12, pp. 988-1004.

Gupta, S., Verma, R. and Victorino, L. (2006). "Empirical Research Published in *Production and Operations Management* (1992–2005): Trends and Future Research Directions". *Production and Operations Management*, Vol. 15, pp. 432-448.

Hair, J.F., Page, M., and Brunsveld, N. (2019). *Essentials of Business Research Methods*, 4<sup>th</sup> ed., Routledge.

Ketokivi, M., and Choi, T. (2014). "Renaissance of Case Research as a Scientific Method". *Journal of Operations Management*, Vol 32 No. 5, pp. 232–240

Kumar, S., Mookerjee, V. and Shubham, A. (2018). "Research in Operations Management and Information Systems Interface". *Production*

	<p>and <i>Operations Management</i>, Vol. 27 No. 11, pp. 1893-1905.</p> <p>Maccarthy, B. L., Lewis, M, Voss, C. and Narasimhan, R (2013), "The Same Old Methodologies? Perspectives on OM Research in the Post-Lean Age". <i>International Journal of Operations and Production Management</i>, Vol. 33 No. 7, pp. 934–956.</p> <p>McCutcheon, D.M. and Meredith, J.R. (1993). "Conducting case study research in operations management". <i>Journal of Operations Management</i>, Vol. 11 No. 3, pp. 239-256.</p> <p>Moshtari, M., Altay, N., Heikkilä, J. and Goncalves, P. (2021), "Procurement in Humanitarian Organizations: Body of Knowledge and Practitioner's Challenges", <i>International Journal of Production Economics</i>, Vol. 233:108017. DOI: 10.1016/j.ijpe.2020.108017.</p> <p>Rungtusanatham, M.J., Choi, T.Y., Hollingworth, D.G., Wu, Z., and Forza, C. (2003). "Survey research in operations management: historical analyses". <i>Journal of Operations Management</i>, Vol. 21 No 4, pp. 475-488</p> <p>Seifert, D., Seifert, R.W., and Protopappa-Sieke, M. (2013). " A review of trade credit literature: Opportunities for research in operations". <i>European Journal of Operational Research</i>, Vol. 231 No 2, pp. 245-256</p> <p>Singhala, V., Flynnb, B.B., Ward, P.T, Rothd, A.V., and Vishal Gaur, V. (2008). "Response and comments: Editorial: Empirical elephants—Why multiple methods are essential to quality research in operations and supply chain management". <i>Journal of Operations Management</i>, Vol. 26 No. 3, pp. 337–348</p> <p>Soltani, E., K. Ahmed, P., Ying Liao, Y. and U. Anosike, P. (2014). "Qualitative middle-range research in operations management: The need for theory-driven empirical inquiry", <i>International Journal of Operations &amp; Production Management</i>, Vol. 34 No. 8, pp. 1003-1027.</p> <p>Sousa, R., and Voss, C.A. (2008). "Contingency research in operations management practices". <i>Journal of Operations Management</i>, Vo. 26 No 6, pp. 697-713</p> <p>Sterman, J., Oliva, R., Linderman, K.W., and Bendoly, E. (2015). "System Dynamics Perspectives and Modeling Opportunities for Research in Operations Management", <i>Journal of Operations Management</i>, Vol. 39-40 No. 1, pp. 1-5</p> <p>Stuart, I., McCutcheon, D., Handfield, R., McLachlin, R. and Samson, D. (2002). "Effective case research in operations management: a process perspective". <i>Journal of Operations Management</i>, Vol. 20 No 5, pp. 419-433.</p> <p>Will M., Bertrand, J. and Fransoo, J. (2002), "Operations management research methodologies using quantitative modeling", <i>International Journal of Operations &amp; Production Management</i>, Vol. 22 No. 2, pp. 241-264.</p>
<p><b>INDICATIVE MATERIAL:</b> (E.g. audiovisual, digital</p>	<p><b>REQUIRED MATERIAL: N/A</b></p>

<i>material, etc.)</i>	<b>RECOMMENDED MATERIAL: N/A</b>
<b>COMMUNICATION REQUIREMENTS:</b>	Use of appropriate academic conventions as applicable in oral and written communications.
<b>SOFTWARE REQUIREMENTS:</b>	MS Office
<b>WWW RESOURCES:</b>	<p>Students are expected to use the internet at their own discretion to select information on the module. Useful sources include:</p> <p> <a href="http://www.napm.org">www.napm.org</a>  <a href="http://www.itsa.org">www.itsa.org</a>  <a href="http://www.clml.org">www.clml.org</a>  <a href="http://www.logisticsworld.com">www.logisticsworld.com</a>  <a href="http://www.logistics-management.gr">www.logistics-management.gr</a>  <a href="http://www.logisticsonline.com">www.logisticsonline.com</a>  <a href="http://www.ReutersBusinessInsight.com/login.asp">www.ReutersBusinessInsight.com/login.asp</a>  <a href="http://www.Capterra.com">www.Capterra.com</a>  <a href="http://www.kmtbrrr.com/index.php?option=com_content&amp;task=view&amp;...">www.kmtbrrr.com/index.php?option=com_content&amp;task=view&amp;...</a>  <a href="http://www.spitrans.com/services/logistics-management.asp">www.spitrans.com/services/logistics-management.asp</a>  <a href="http://www.leanrapid.com/supplychain/logistics_management.asp">www.leanrapid.com/supplychain/logistics_management.asp</a>  <a href="http://www.jobisjob.com/logistics+management+specialist/jobs">www.jobisjob.com/logistics+management+specialist/jobs</a>  <a href="http://www.lmslogistics.com/awards.asp">www.lmslogistics.com/awards.asp</a>  <a href="http://www.securitypackaging.com/reverse-logistics-management.php">www.securitypackaging.com/reverse-logistics-management.php</a>  <a href="http://www.getlogisticsmanagementjobs.com">www.getlogisticsmanagementjobs.com</a> </p>
<b>INDICATIVE CONTENT:</b>	<ol style="list-style-type: none"> <li>1. Research topics in the field of operations management</li> <li>2. Developing a research proposal</li> <li>3. Conducting literature review - writing theory</li> <li>4. Developing a conceptual research model</li> <li>5. Qualitative and quantitative research and design of field research</li> <li>6. Design of interviews/questionnaires for field research</li> <li>7. Interviewing skills and techniques</li> <li>8. Analysing collected data</li> <li>9. Reporting research findings</li> </ol>