UGSM-MONARCH BUSINESS SCHOOL SWITZERLAND

DBA-675 – PRODUCTION MANAGEMENT
COURSE OUTLINE

PROFESSOR: **Dr. Barin N Nag**
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COURSE OBJECTIVES:

This course is designed to demonstrate the methods, models, and techniques of efficient and effective management of all aspects of the production of manufactured and service products consistent with objectives of achieving competitiveness and success. Topics include strategy, product design, quality management and control, inventory management, lean and agile production, supply chain management, forecasting and capacity management, and aggregate planning and resource management. Other topics may be included for currency and relevancy.

TEXTBOOK REQUIREMENT:

MANAGING OPERATIONS IN MANUFACTURING, SERVICES & E-BUSINESS
by Barin N. Nag, 2011, Linus Publications Inc. ISBN: 1-60797-194-1

EVALUATION:

Students will be evaluated based on the quality of their written submissions to the university. Each of the first four papers should be approximately15 pages, not including the title page, abstract and reference page. Each paper should include APA 6 style referencing and include at least 15 scholarly references no older than ten years. The assignment should be double spaced, with proper header and page numbers located on each page. It is expected that each paper reflects the position of the student supported by references. Monarch standard for formatting of term papers should be followed.

The final term paper should be no less than 25 pages and should include a minimum of 30 references. The ultimate goal for this final term paper should be work that is publishable in a journal. Thus it should contain well-written high quality analysis of a substantial body of literature, or contain original ideas supported by the existing literature. Work on the final term paper should begin in week 1 with the selection of a topic by the student in consultation with the instructor.

MARKING SCHEME			
	Mark	Approx. Length	Due Date - Week
Paper 1	15%	15 pages	Week 2
Paper 2	15%	15 pages	Week 4
Paper 3	15%	15 pages	Week 6
Paper 4	15%	15 pages	Week 8
Final Term Paper	40%	25 pages	Week 12
Total	100%		

DROPBOX SUBMISSION:

Please note that all candidates MUST upload all assignments to the DROPBOX account assigned for this course. NO exceptions will be granted. Also, students should not send assignments directly to the professor's email account.

COMMUNICATION:

All communication with the professor MUST be done using the assigned MONARCH EMAIL ADDRESS and NOT PERSONAL EMAIL accounts.

PLAGIARISM:

Plagiarism is a serious academic offence. All submitted work is verified using the state-of-the-art plagiarism software. Any student found plagiarizing will face strict disciplinary action which may include expulsion from the University. All students should make themselves conversant with the Monarch Policy on Plagiarism which may be found on the student portal.

STUDY PLAN:

The duration of the course is 12 WEEKS. By week 11, all candidates should able to merge all the principles taught to prepare and complete the Final Term Paper.

COURSE OVERVIEW - SCHEDULE			
WEEK	CHAPTER	ASSIGNMENT	TOPICS
1	1, 2		1. Introduction and Overview 2. Strategy, Globalization, and Ethics
2	3, 4	Paper #1	3. Quality Management 4. E-Business Operations: Strategies and Technologies
3	8, 9		8. Product Design in Goods and Services 9. Process Design and Capacity Planning
4	10, 11	Paper #2	10. Location Decisions and Analysis 11. Process Layout Design
5	12, 13		12. Inventory Management 13. Aggregate Planning
6	14, 15	Paper #3	14. Resource Planning: MRP, MRP II, and ERP 15. Supply Chain Management
7	16		16. JIT and Lean Operations
8	17	Paper #4	17. Reliability and Maintenance
9	18		18. Time-Oriented Management of Operations
10	19		19. Managing Human Resources, Jobs, Work
11	6 (optional)		20. Forecasting
12	7 (optional)	Final Term Paper	21. Statistical Quality Control

Note: Chapters and reading topics come at the beginning of the week. Assignments are due at the end of the week of listing.

READINGS

1. Hyun-soo Ahn, Mehmet Gümüş and Philip Kaminsky (2007) Pricing and Manufacturing Decisions When Demand Is a Function of Prices in Multiple Periods, Operations Research, 55(6), pp. 1039-1057.

2. J. Antony, M. Kumar and A. Labib (2008) Gearing Six Sigma into UK Manufacturing SMEs: Results from a Pilot Study, The Journal of the Operational Research Society, 59(4), pp. 482-493.

3. Saif Benjaafar, William L. Cooper and Joon-Seok KimSource (2005) On the Benefits of Pooling in Production-Inventory Management Science, 51(4), pp. 548-565.

4. Brian S. Butler and Peter H. GraySource (2006) Reliability, Mindfulness, and Information Systems, MIS Quarterly, 30(2), pp. 211-224.

5. Enrico Cagno, Franco Caron and Mauro Mancini (2007) A Multi-Dimensional Analysis of Major Risks in Complex Projects, Risk Management, 9(1), pp. 1-18.

6. Zhi-Long Chen and George L. Vairaktarakis (2005) Integrated Scheduling of Production and Distribution Operations, Management Science, 51(4), pp. 614-628.

7. Adrian S. Choo, Kevin W. Linderman and Roger G. Schroeder (2007) Method and Psychological Effects on Learning Behaviors and Knowledge Creation in Quality Improvement Projects, Management Science, 53(3), pp. 437-450.

8. Ton de Kok, Fred Janssen, Jan van Doremalen, Erik van Wachem, Mathieu Clerkx and Winfried Peeters (2005) Philips Electronics Synchronizes Its Supply Chain to End the Bullwhip Effect, Interfaces, 35(1), pp. 37-48.

9. Thomas W. Ferratt, Sanjay Ahire and Prabuddha De (2006) Achieving Success in Large Projects: Implications from a Study of ERP Implementations, Interfaces, 36(5), pp. 458-469.

10. Stephen C. Graves and Sean P. Willems (2005) Optimizing the Supply Chain Configuration for New Products, Management Science, 51(8), pp. 1165-1180.

11. Stephen C. Graves and Brian T. Tomlin (2003) Process Flexibility in Supply Chains Management Science, 49(7), pp. 907-919.

12. J. Gregory (2007) Target Setting, Lean Systems and Viable Systems: A Systems Perspective on Control andPerformance Measurement, The Journal of the Operational Research Society, 58(11), pp. 1503-1517.

13. John Hauser, Gerard J. Tellis and Abbie Griffin (2006) Research on Innovation: A Review and Agenda for "Marketing Science", Marketing Science, 25(6), pp. 687-717.

14. M. Eric Johnson (2006) Supply Chain Management: Technology, Globalization, and Policy at a Crossroads, Interfaces, 36(3), pp. 191-193.

15. Suleyman Karabuk and S. David Wu (2003) Coordinating Strategic Capacity Planning in the Semiconductor Industry, Operations Research, 51(6), pp. 839-849.

16. Burak Kazaz, Maqbool Dada and Herbert Moskowitz (2005) Global Production Planning under Exchange-Rate Uncertainty, Management Science, 51(7), pp. 1101-1119.

17. Dong-Gil Ko, Laurie J. Kirsch and William R. King (2005) Antecedents of Knowledge Transfer from Consultants to Clients in Enterprise System Implementations, MIS Quarterly, 29(1), pp. 59-85.

18. Ławrynowicz (2008) Integration of Production Planning and Scheduling Using an Expert System and a Genetic Algorithm, The Journal of the Operational Research Society, 59(4), pp. 455-463.

19. Jeffrey K. Liker and James M. Morgan (2006) The Toyota Way in Services: The Case of Lean Product Development, Academy of Management Perspectives, 20(2), pp. 5-20.

20. Barin Nag, Chaodong Han, and Dong-qing Yao (2013) Mapping Supply Chain Strategy: An Industry Analysis, Journal of Manufacturing Technology Management.

21. Eitan Naveh and Miriam Erez (2004) Innovation and Attention to Detail in the Quality Improvement Paradigm, Management Science, 50(11), pp. 1576-1586.

22. B. Ritchie and C. Brindley (2007) An Emergent Framework for Supply Chain Risk Management and Performance Measurement, The Journal of the Operational Research Society, 58(11), pp. 1398-1411.

23. Jayashankar M. Swaminathan and Sridhar R. Tayur (2003) Models for Supply Chains in E-Business, Management Science, 49(10), pp. 1387-1406.

24. Marshall Van Alstyne and Erik Brynjolfsson (2005) Global Village or Cyber-Balkans? Modeling and Measuring the Integration of Electronic Communities, Management Science, 51(6), pp. 851-868.

25. Ann Vereecke, Roland Van Dierdonck and Arnoud De Meyer (2006) A Typology of Plants in Global Manufacturing Networks, Management Science, 52(11), pp. 1737-1750.

26. S. Wang and B. R. Sarker (2004) A Single-Stage Supply Chain System Controlled by Kanban under Just-in-Time Philosophy, The Journal of the Operational Research Society, 55(5), pp. 485-494.

27. Kaijie Zhu, Rachel Q. Zhang and Fugee Tsung (2007) Pushing Quality Improvement along Supply Chains, Management Science, 53(3), pp. 421-436.