

# 南臺科技大學 106 學年度第 1 學期課程資訊

課程代碼	N0M00801
課程中文名稱	生產與作業管理
課程英文名稱	Production and Operations Management
學分數	3.0
必選修	必修
開課班級	碩商管國際二甲
任課教師	朱大中
上課教室(時間)	週四第 2 節(E0604) 週四第 3 節(E0604) 週四第 4 節(E0604)
課程時數	3
實習時數	0
授課語言 1	英語
授課語言 2	
輔導考照 1	
輔導考照 2	
課程概述	The objective of this course is to introduce students the principles and concepts of operations management. Questions and discussions are welcome in the class.
先修科目或預備能力	
課程學習目標與核心能力之對應	
中文課程大綱	<p>Topics for this course include, but not limited to:</p> <ol style="list-style-type: none"> <li>1. Introduction <ol style="list-style-type: none"> <li>a. Operations management</li> <li>b. Competitiveness, strategy, and productivity</li> </ol> </li> <li>2. Forecasting <ol style="list-style-type: none"> <li>a. Weighted-average forecast</li> <li>b. Exponential smoothing forecast</li> <li>c. Linear trend forecast</li> <li>d. Seasonal relatives</li> <li>e. Control charts to monitor forecast errors</li> </ol> </li> <li>3. Product Design <ol style="list-style-type: none"> <li>a. Quality Function Deployment</li> </ol> </li> <li>4. Capacity planning <ol style="list-style-type: none"> <li>a. Measuring capacity</li> <li>b. Calculating processing requirements</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>c. Cost volume analysis</li> <li>5. Process Selection and Facility Layout <ul style="list-style-type: none"> <li>a. Basic processing layouts</li> <li>b. Line-balancing problems</li> </ul> </li> <li>6. Location Planning <ul style="list-style-type: none"> <li>a. Cost-profit-volume analysis</li> </ul> </li> <li>7. Quality Management <ul style="list-style-type: none"> <li>a. Determinants of quality</li> <li>b. TOM</li> <li>c. Six sigma</li> </ul> </li> <li>8. Quality control <ul style="list-style-type: none"> <li>a. Control charts</li> <li>b. Run tests</li> <li>c. Process capability</li> </ul> </li> <li>9. Master Scheduling &amp; MRP</li> <li>10. Inventory management <ul style="list-style-type: none"> <li>a. EOQ</li> <li>b. EPQ</li> <li>c. Reorder point</li> <li>d. Safety stock</li> <li>e. Fixed-quantity vs. Fixed-interval ordering</li> <li>f. Single-Period Model</li> </ul> </li> <li>11. Scheduling <ul style="list-style-type: none"> <li>a. Hungarian method</li> <li>b. Johnson's rule</li> </ul> </li> </ul>
英/日文課程大綱	<p>Topics for this course include, but not limited to:</p> <ul style="list-style-type: none"> <li>1. Introduction <ul style="list-style-type: none"> <li>a. Operations management</li> <li>b. Competitiveness, strategy, and productivity</li> </ul> </li> <li>2. Forecasting <ul style="list-style-type: none"> <li>a. Weighted-average forecast</li> <li>b. Exponential smoothing forecast</li> <li>c. Linear trend forecast</li> <li>d. Seasonal relatives</li> </ul> </li> <li>e. Control charts to monitor forecast errors</li> <li>3. Product Design <ul style="list-style-type: none"> <li>a. Quality Function Deployment</li> </ul> </li> <li>4. Capacity planning <ul style="list-style-type: none"> <li>a. Measuring capacity</li> <li>b. Calculating processing requirements</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>c. Cost volume analysis</li> <li>5. Process Selection and Facility Layout <ul style="list-style-type: none"> <li>a. Basic processing layouts</li> <li>b. Line-balancing problems</li> </ul> </li> <li>6. Location Planning <ul style="list-style-type: none"> <li>a. Cost-profit-volume analysis</li> </ul> </li> <li>7. Quality Management <ul style="list-style-type: none"> <li>a. Determinants of quality</li> <li>b. TOM</li> <li>c. Six sigma</li> </ul> </li> <li>8. Quality control <ul style="list-style-type: none"> <li>a. Control charts</li> <li>b. Run tests</li> <li>c. Process capability</li> </ul> </li> <li>9. Master Scheduling &amp; MRP</li> <li>10. Inventory management <ul style="list-style-type: none"> <li>a. EOQ</li> <li>b. EPQ</li> <li>c. Reorder point</li> <li>d. Safety stock</li> <li>e. Fixed-quantity vs. Fixed-interval ordering</li> <li>f. Single-Period Model</li> </ul> </li> <li>11. Scheduling <ul style="list-style-type: none"> <li>a. Hungarian method</li> <li>b. Johnson's rule</li> </ul> </li> </ul>
課程進度表	<p>Week 1:Introduction</p> <p>Week 2-4:Forecasting</p> <p>Week 5-6:System Design</p> <p>Week 7-8:Quality Management</p> <p>Week 9: Midterm Exam</p> <p>week 10-11:Quality Control</p> <p>Week 12:Inventory management</p> <p>week 13-15:Inventory Control</p> <p>Week 15:MRP</p> <p>Week 16:JIT and Lean production</p> <p>Week 17:Scheduling &amp; Supply chain management</p> <p>Week 18:Final Exam</p>
教學方式與評量方法	

指定用書	書名：Operations Management 作者：William J. Stevenson 書局：McGraw-Hill 年份：2014 ISBN：9789863411482 版本：12
參考書籍	Operations Management, 10th Edition, by Chase, Jacobs and Aquilano, McGraw Hill 2.
教學軟體	
課程規範	