# **University of North Texas**

College of Business Administration

# OPSM 3830: Fall 2019 OPERATIONS MANAGEMENT

Section 002: BLB 070, 6:30 PM-9:20 PM; Tu

**INSTRUCTOR**: Divesh Ojha

Office: BLB 385 C

Telephone number: (940) 565-2862 E-mail: **Use CANVAS e-mail only** 

**OFFICE HOURS**: 11:00 AM – 12:00 PM on Wed in BLB 385C

**TEXTS:** Operations Management, 13<sup>th</sup> edition, William J. Stevenson, McGraw-Hill Irwin

#### **COURSE DESCRIPTION:**

- This course examines the role of an operating system in a firm and then it examines those activities that create the goods and services that an organization supplies to its customers.
- All firms have some type of operating system. The capability of a firm to provide value to its customers is determined by its operating system.
- ➤ This course examines the principle functions of management plan, lead, organize and control in terms of operations management.

#### STUDENT LEARNING OBJECTIVES:

The major objective of OPSM 3830 is to ensure that students understand that all businesses are performed through a set of processes, which consist of flows, buffers and activities. Also, students should understand how these processes are influenced by 8 types of decisions made by managers. These are: capacity, facilities, technology, vertical integration, workforce, quality, production planning/materials control and organization structure decisions.

Upon completion of the course, you will be able to:

- 1. Explain the role of operations management in the firm.
- 2. Explain the need for operations to coordinate with other functions.
- 3. State and explain in your own words the importance of bottlenecks, sequence dependence and variance on operations.
- 4. Use operations management tools to analyze bottlenecks, variance and sequence dependence.
- 5. State and explain in your own words basic principles of manufacturing strategy, facility design and layout, and production planning and control.
- 6. State the importance of quality management and use the basic quality tools.
- 7. Differentiate service operations from goods producing operations.
- 8. Use the concepts of operations management to understand unstructured problems and produce feasible solutions using OM tools.

#### Grading Criteria:

3	
Exam 1	20%
Final Exam	20%
Quizzes	15%
Class Attendance and Participation	10%
Case Discussion	15%
GMETRIX	5%
Excel certification	5%
Research Participation	10%

Final grades: A = 90-100%; B = 80-89%; C = 70-79%; D = 60-69%; F = less than 60%.

**Exams:** There will be 2 in-class exams, a midterm and a final, both with problems, multiple choices, true and false and maybe some discussion questions. The primary focus of an exam will be on the material covered since the last exam. However, there can be questions that are based on material covered before the first exam. The exams are closed book but a formula sheet, if required, will be handed out with the exam. Exams will be taken on the assigned date unless there is some unavoidable emergency. It is the student's responsibility to let the instructor know of the emergency ahead of exam and set a new exam date (if you need to reschedule you need to provide documentation of your emergency).

### Final Exam:

The final exam is mandatory for all students in this course. Failure to take the final will result in an automatic F for the course regardless of any other grades.

The exams are closed book but a formula sheet, if required, will be handed out with the exam. I do not handover graded exams to students. If a student wants to go over her/his exam he has to meet me during my office hours or setup an appointment with me.

Quizzes: Three quizzes will have to be taken online at times specified by the instructor.

<u>Case discussion</u>: These discussions will be based on the cases relating to operations management. These discussions will occur though the <u>online discussion board</u>. On the day of the online discussion we will not have on campus class as the online discussion replaces the on campus class.

#### CASES FOR ONLINE DISCUSSION

Discussion number	Topic	Case title	Text Book Page
			number
Online Discussion 1	Competitiveness,	AN AMERICAN	67
	Strategy and	TRAGEDY: HOW	
	Productivity	A GOOD	
		COMPANY DIED	
Online Discussion 2	Management of	TIP TOP	412
	Quality	MARKETS	
Online Discussion 3	Inventory	Bruegger's Bagel	604
	Management	Bakery	
Online Discussion 4	Supply chain	MasterTag	687
	management		
Online Discussion 5	MRP & ERP	Stickley Furniture	546
Online Discussion 6	JIT and Lean	LEVEL	641
	Operations	<b>OPERATIONS</b>	

# **Late Work:**

Work must be turned in on time. *Late work will not be accepted*. Due dates are provided on page 9 for your reference.

# **Class attendance and participation:**

Achievement in the class is highly correlated with regular class attendance and participation. Regular, timely attendance is expected of all students, and will be rewarded as a substantial portion of the total grades is the class participation and attendance. Participation is important to the classroom learning experience. Careful preparation by reading the requisite chapters will be expected of all students. Brief question and answer periods will be utilized to review material, and students will be asked to summarize, critique, and/or provide examples of concepts in the assigned readings.

In most classes, there will be one or more exercises to practice what is taught in the class. Everyone who turns in his/her exercises will get 100 points for his/her participation in that class. At the end of the semester, the total scores of exercises will be averaged towards in-class participation credits. Moreover, in-class participation in discussions will also be used towards *Class Attendance and Participation* grades.

If I am late for class, wait 15 minutes. After that, you may assume class is canceled and the scheduled material will be included in the next meeting.

# **MS-EXCEL CERTIFICATION:**

#### What is this Excel Certification?

Due to feedback from industry, Dean Wiley has set a requirement for every student who is graduating out of our college to be certified in Microsoft Excel. To best accomplish this task, every long semester since Fall 2017, the service classes for the college have required the Excel Certification, equaling 10% of the students' grade. These classes are: LSCM 3960, OPSM 3830, DSCI 3870, and ECON 4140.

# **How is the Excel Certification Broken Up?**

The Excel Certification is broken up into 2 parts: (1) Training and (2) Certification. Each is worth 5% of the student's grade.

(1) Training: Training for the Excel Certification is tracked through GMetrix. After the first week of class, students will receive a code to log into GMetrix, where they will have access to the training modules for the Excel Certification.

GMetrix training is made up of 8 modules: Core Skill Review 1-3, Practice Exams 1-3, and Project Reviews 1-2. Each module has a Training Mode (untimed) and a Testing Mode (50 minute limit). Students must pass each module in **TESTING MODE with a 70% or better f**or it to be counted toward their grade.

The training is broken up into 3 sections. The students will be required to complete the Core Skill Review modules by <u>Deadline 1</u> in order to receive credit for them. Then they will be required to complete the Practice Exams by <u>Deadline 2</u>. And the last section will be the Project Reviews, to be completed by <u>Deadline 3</u>. (The students may complete these modules before the deadline if they so wish, but only those completed by the deadline should count toward their grade.) Specific deadlines are listed on pages 5 and 6. These modules will account for 5% of their grade.

If a student completes a portion of the required modules, they are graded accordingly (for example, if a student completes 5 of the 8 modules by the respective deadlines, they are credited 5/8 of their 5%)

(2) Certification: The other 5% of the student's grade comes from the actual certification. This is a Pass/No Pass situation- either they Pass with a 700 or better and receive their 5%, or they fail the certification and receive 0%.

#### What is the process for the Certification?

Once the students complete <u>all 8 modules</u>, they will receive a link to schedule their Excel certification exam. Each student has 2 opportunities to take the exam (anymore, and they will have to go to an outside testing center, and pay for the exam themselves).

The scheduler will close on the deadlines posted below. Any student who needs to reschedule their exam at that point will have to contact Sara.

Tests will be taken in <u>Sage Hall Testing Center</u>. Students must arrive at the beginning of their scheduled time, or they will be turned away and forced to reschedule.

Students who fail their first attempt (or do not take the certification exam during the 1st week it is offered) will receive another link to schedule their 2<sup>nd</sup> attempt from Sara.

# What the student needs to do to get started?

The first thing you will need to do is to watch the PowerPoint shown on the first day of classes. This is a *MANDATORY* PowerPoint - please no not ignore it - is takes 8 minutes and is vital for the students to understand the intricacies of the certification process.

The students will all have access to a special Excel Certification Canvas page. This page is completely separate from this OPSM 3830 class, and will hold all pertinent information for the Excel Certification. All Announcements and Messages will go through this page. You need to be checking this page at least once a day for any announcements. This page will also have instructions, FAQs, and discussion boards that will help guide your students through the Excel certification process.

Grading: Dr. Paul Rowe will be receiving reports of the modules the students complete. The Monday after the deadline for each section, I will receive a spreadsheet with the modules your students have completed by the deadline. Once testing starts, Dr. Paul Rowe will sending me the testing scores at the end of each testing week.

#### Other Information:

If students have certified previously (<u>either the basic Excel certification or the Expert Excel certification</u>), they will need to send Sara proof of certification by the first deadline in order for it to count toward their grade. These students will receive their full 10%.

If students are enrolled in multiple classes requiring the certification, I will have that information and their training modules and certification will count for all applicable classes (they do not have to certify twice, etc...)

I reiterate that the Exam **MUST** be taken on campus. All students must plan accordingly.

Any questions can be addressed to me Dr. Paul Rowe or Sara and they should get back to the students in a timely manner. Their contact information is included below.

# **Contact Information:**

Sara Martin Dr. Paul Rowe
940-565-3481 919-537-2120
Sara.Martin@unt.edu Paul.Rowe@unt.edu

**BLB 206** 

# Fall Semester by week:

Week 1: August 26th- 31st - all classes will show the Excel Certification video

Week 2: September 3<sup>rd</sup>-6<sup>th</sup> – Canvas page is set up; codes for GMetrix given out

Week 3: September 9<sup>th</sup>- 13th

Week 4: September 16th-20th Core Skill Review Modules 1-3 due by 11:59 PM, Sunday,

September 22<sup>nd</sup>

Week 5: September 23<sup>rd</sup>-27th

Week 6: September 18th-October 4th

Week 7: October 7<sup>th</sup>-11<sup>th</sup> Practice Exam Modules 1-3 due by 11:59 PM, Sunday, October 13<sup>th</sup>

Week 8: October 14th- 18th

Week 9: October 21st-25th

Week 10: October 28th-November 1st Project Modules 1-2 due by 11:59 PM, Sunday,

November 3<sup>rd</sup>

Week 11: November 4<sup>th</sup>-8<sup>th</sup> Scheduler for first round closes at 12 PM November 8<sup>th</sup>(office will send names over to Sage Hall)

Week 12: November 11<sup>th</sup>-16<sup>th</sup> First Round of Testing (Slots available Monday-Saturday) Scheduler opens for Round 2 testing & closes at 12 PM November 15<sup>th</sup>

Week 13: November 18th-23rd Round 2 testing (Slots available Monday-Saturday)

Week 14: November 25th-29th Thanksgiving Break Nov. 28th-29th

<u>Week 15:</u> December 2<sup>nd</sup>-6<sup>th</sup> Pre-Finals week. Any off-campus certifications must send proof of certification to instructor and office by 5 PM on Friday, **December 6<sup>th</sup>(Reading Day)** 

<u>Week 16:</u> December 9<sup>th</sup>-13<sup>th</sup> Finals Week December 14<sup>th</sup>- Commencement

Students can complete the G-Metrix training modules earlier than scheduled, if desired, in order to gain earlier access to the certification exam scheduling tool.

Ms. Sara Martin (sara.martin@unt.edu) and Dr. Paul Rowe (paul.rowe@unt.edu) will be leading the Microsoft Excel Certification process efforts this semester. They will be running the CANVAS page associated with these efforts. They will track student progress and provide the status reports after the various deadlines and testing weeks to me. Please let them know if you have any questions as they are your primary point of contact for G-Metrix training and Excel certification. GMetrix and excel certification grades will be posted at the end of the semester when we have received the grades for all students.

# **Contact Information for Excel certification and Gmetrix:**

Sara Martin 940-565-3130 sara.martin@unt.edu BLB 206 Dr. Paul Rowe 940-369-5257 Paul.Rowe@unt.edu

#### **Research Participation (10%)**

As part of your learning experience in this course, you will be required to participate in research studies conducted by faculty members of the Department of Marketing, Logistics and Operations Management. Your participation in this research will make up 10% of your final class grade.

To fulfil the requirement, you **must** create an account on the College of Business SONA page—<u>unt-cob.sona-systems.com</u>—which is a web application that allows you to browse available studies. Credit will be assigned based on the length of time the study takes to complete and whether you participate online or in the COB behavioral Lab (BLB 279):

- Short online studies (5-15 minutes) earn 1 credit
- Medium online studies (15-30 minutes) earn 2 credits
- Long online studies (30-45 minutes) earn 3 credits
- On-campus, lab studies (30-45 minutes) earn 5 credits

To fulfill the 10% course requirement, you must earn a total of **10 SONA credits** throughout the semester (i.e., 1 credit = 1 percent of your final grade). All credits earned will be added to your final course grade at the **end** of the semester. Additional extra credit points may be available at the discretion of your professor.

To sign up, please visit <u>unt-cob.sona-systems.com</u>. If you have questions, DO NOT contact your professor. Contact the behavioral lab manager by email at <u>COB.REP@unt.edu</u>. Your questions will be addressed promptly.

\*\*Note: Access the studies early and often to make sure you have first access to available studies. Once you sign up, the lab manager will update you periodically about new studies that have been posted.

"When is the deadline for students to participate?"

Answer: The deadline for participation in studies for credit

**Answer:** The deadline for participation in studies for credit is December 1, 2019.

"What can students do if they can't or don't want to complete surveys?"

Answer: They can complete a 2-page research article critique paper for SONA credits. One article is worth 2 SONA credits. Please contact <a href="mailto:cob.rep@unt.edu">cob.rep@unt.edu</a> and they will assign you articles for the critique. They will also review them and assign credits accordingly.

Thanks in advance for your participation! Have a great semester!

# **Exam Review:**

There is no class assigned for the review of the material but I provide practice problems with solutions that should help you prepare for the exams.

**<u>DISABILITY ACCOMODATION</u>**: The College of Business Administration complies with the Americans with Disabilities Act (ADA) in making reasonable accommodation for qualified students with a disability. If you have an established disability as defined in the ADA and would like to request accommodation, please see me as soon as possible. My office location, office hours, email address, and office phone number are shown on this syllabus.

**ACADEMIC DISHONESTY:** Any student that engages in any form of academic dishonesty related to this class will receive a failing grade on the exam or assignment, and a failing grade in the course. In addition, the case will be referred to the Dean of Students for appropriate disciplinary action.

# Academic dishonesty includes cheating and plagiarism.

The term "cheating" includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (3) the acquisition, without permission, of tests or other academic material belonging to a faculty member or staff of the university; or (4) any other act that gives a student an unfair advantage.

The term "plagiarism" includes, but is not limited to: (1) the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment and (2) the unacknowledged use of materials prepared by another person or agency in the selling of term papers or other academic materials. (Source: Code of Conduct and Discipline for the University of North Texas.)

# ACCEPTABLE STUDENT BEHAVIOR (Required in all UNT classes)

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable, disruptive, and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct is found at: <a href="https://deanofstudents.unt.edu/conduct">https://deanofstudents.unt.edu/conduct</a>.

# Some examples of disruptive behaviors include:

- Refusal to comply with faculty or staff
- Challenges to authority
- Actions that distract the class from the subject matter and/or discussion
- Continually and persistently speaking without being recognized in the classroom or in the office
- Repeatedly leaving and entering the classroom without authorization while class is in session
- Loud, distracting, or erratic behavior inappropriate to the setting
- Answering cell phones or allowing them to continuously ring in class, or in the office
- Overt hostility, defiance, or insults on Blackboard and email
- Excessive e-mails, phone calls, and other means of communication demanding attention outside of class times or business hours

# EMERGENCY EVACUATION PROCEDURES FOR BUSINESS LEADERSHIP BUILDING:

- Severe Weather In the event of severe weather, all building occupants should immediately seek shelter in the designated shelter-in-place area in the building. If unable to safely move to the designated shelter-in-place area, seek shelter in a windowless interior room or hallway on the lowest floor of the building. All building occupants should take shelter in rooms 055, 077, 090, and the restrooms on the basement level. In rooms 170, 155, and the restrooms on the first floor.
- Bomb Threat/Fire In the event of a bomb threat or fire in the building, all building occupants should immediately evacuate the building using the nearest exit. Once outside, proceed to the designated assembly area. If unable to safely move to the designated assembly area, contact on or more members of your department or unit to let them know you are safe and inform them of your whereabouts. Persons with mobility impairments who are unable to safely exit the building should move to a designated area of refuge and await assistance from emergency responders. All building occupants should immediately evacuate the building and proceed to the south side of Crumley Hall in the grassy area, wests of parking lot 24.
- **HELPFUL HINTS FOR STUDENTS:** Try not to miss class unnecessarily. Each of you has many demands on your time (i.e. work, family, school events, etc.); but attendance is helpful for most students to grasp the course material and to be productive. Please actively communicate with others about relevant issues (e.g., instructor about absences, your team about missing planned meetings, classmates about class notes, etc).
- 1) You must know the rules and expectations of the course; therefore, study the syllabus, know the course requirements, and understand how grades are computed. If you are not sure, please ask. I am available to help you. If you can't meet with me during my office hours, make an appointment.
- 2) Students are responsible for checking their Vista-Blackboard. This is the primary means of communication outside of the regular class meetings. Each student should check these at least once each day. If I need to send the class important information before the next class (i.e. assignment hints, help, etc.), then I may send it via WebCT e-mail, and/or post it on Vista-Blackboard.

- 3) Email is the only way to insure that I receive a message from you. If you need to contact me outside of class or office hours, please use email (using WebCT e-mail only), and I will respond as quickly as possible. You may also use email to notify me of absences or make appointments. Generally, I try to respond within 24 hours (Mon. Thurs.). My phone should be used as a last option.
- 4) This course will be demanding of your time, so do not procrastinate getting behind compounds the difficulty associated with achieving your desired level of success in this class. Below are some suggestions to help you prepare for classes and exams.
  - > Read assigned materials before the lecture to better prepare you to understand material during class.
  - > Take notes in class as some material presented may not be covered in the text or may be covered in more depth than the text.
  - Review assigned materials prior to class (prepares you in class participation). If you have a question or don't understand something, this reminds you to ask for clarification at the beginning of class.
  - ➤ Talk with other students to clarify notes and eliminate confusion about materials covered in class. Discussions with other students about materials presented in class may help you better understand new concepts.
  - > Do team assignments individually <u>before</u> meeting as a team to prepare the team submission. You'll learn more by helping each other. Team meetings should not be used for working problems/writing the assignment, but rather for comparing answers, resolving discrepancies, and preparing a final submission (editing and proofing) for the team.
  - Before an exam, go back through the material to make sure you understand each of the concepts and can do any calculations. Some material on the exams will come only from the text in other words, <u>you are</u> responsible for all material assigned in the text, which may or may not be covered during lectures.

# **Class Schedule**

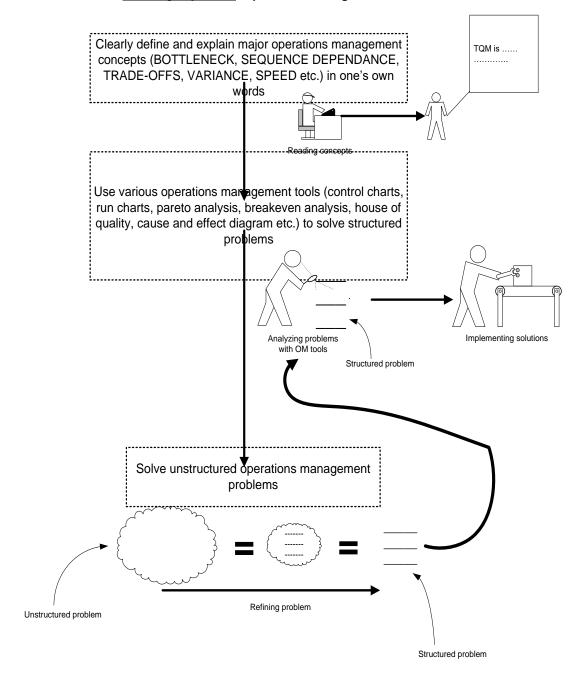
Date	<b>Assigned Readings</b>	Chapter Title		
	(chapters)			
Tuesday, August 27, 2019	Chapter 1	Introduction to Operations Management		
Tuesday, September 3, 2019	Chapter 2	Competitiveness, Strategy and Productivity		
Tuesday, September 10, 2019	Chapter 3; Chapter 4	Forecasting; Product and Service design		
Tuesday, September 17, 2019	Chapter 5; Chapter 6	Strategic Capacity Planning for Products and Services; Process Selection and Facility Layout		
Tuesday, September 24, 2019	Chapter 10; Chapter 9	Quality Control; Management of Quality		
Tuesday, October 1, 2019	Online Discussion 1 and 2			
Tuesday, October 8, 2019	Chapter 9	Management of Quality		
Tuesday, October 15, 2019	EXAM 1 (during regular class	hours on Chapters 1, 2, 3, 4 5, 6, 9, 10)		
Tuesday, October 22, 2019	Chapter 13	Inventory Management		
Tuesday, October 29, 2019	Online D	iscussion 3 and 4		
Tuesday, November 5, 2019	Chapter 11 and Chapter 15	Aggregate Planning; Supply Chain Management		
Tuesday, November 12, 2019	Chapter 11	MRP and ERP		
Tuesday, November 19, 2019	Chapter 12	MRP and ERP		
Tuesday, November 26, 2019	Online D	iscussion 5 and 6		
Tuesday, December 3, 2019	Chapter 14	JIT		
Tuesday, December 10, 2019	FINAL EXAM (during class hours on Chapters 11,12,13,14,15)			

<sup>•</sup> The instructor maintains the right to change the syllabus as necessary. Due dates

Assessment Item	Syllabus	Availability Period			Due date	
	(chapter	·				
	number)					
	-	From		То		
Quiz 1*	1, 2, 3 and 4	Wednesday, September 11, 2019	8:00 AM	Wednesday, September 11, 2019	11:30 PM	Wednesday, September 11, 2019
Quiz 2*	5, 6, 9 and 10	Wednesday, September 25, 2019	8:00 AM	Wednesday, September 25, 2019	11:30 PM	Wednesday, September 25, 2019
Quiz 3*	11, 12, 13, 14 and 15	Wednesday, November 20, 2019	8:00 AM	Wednesday, November 20, 2019	11:30 PM	Wednesday, November 20, 2019
Exam 1	See Details below	Tuesday, October 15, 2019	7:00 PM	Tuesday, October 15, 2019	9:00 PM	Tuesday, October 15, 2019
Exam 2	See Details below	Tuesday, December 10, 2019	7:00 PM	Tuesday, December 10, 2019	9:00 PM	Tuesday, December 10, 2019
Online Discussion 1	see details above in	Tuesday, October 1, 2019	6:00 PM	Tuesday, October 1, 2019	9:30 PM	Wednesday, January 30, 2019
and 2	"Case discussion"					
Online Discussion 3	see details above in	Tuesday, October 29, 2019	6:00 PM	Tuesday, October 29, 2019	9:30 PM	Wednesday, February 27, 2019
and 4	"Case discussion"					
Online Discussion 5	see details above in	Tuesday, November 26, 2019	6:00 PM	Tuesday, November 26, 2019	9:30 PM	Wednesday, March 20, 2019
and 6	"Case discussion"					
Research Participation						Sunday, December 1, 2019
Excel certification and						check the due dates above
Gmetrix						
	•					
	Syllabus: Chapters	1 to 6, 9 and 10.				
	Total Questions: 55					

	Syllabus: Chapters 1 to 6, 9 and 10.				
	Total Questions: 55.				
	Types of questions: Multiple choice and true and false; Mix of conceptual and problem solving questions.				
Exam 1/ Midterm	Closed book exam. Formula sheet, tables will be provided. Scranton will be provided.				
	Bring pen, pencils and calculators.				
	Please bring your <b>picture ID</b> to the exam.				
	Exam Duration: 2 hrs.				
	<u>Exam Duration</u> : 2 hrs				
	Closed book exam. Formula sheet will be provided. Scranton will be provided.				
	Bring pen, pencils and calculators				
Exam 2/ Final	Bring pen, pencils and calculators <b>Types of questions</b> : Multiple choice and true and false	, Problem	solving and conceptual		
Exam 2/ Final		e, Problem	solving and conceptual		
Exam 2/ Final	Types of questions: Multiple choice and true and false	e, Problem	a solving and conceptual		

# **Learning objectives: Operations Management**



# **Graphic syllabus: Operations Management**

