Operations Management: M&IS 34060-001 - CRN: 15602 Spring 2016 - ONLINE

Instructor: Dr. B. Eddy PatuwoOffice: A-403 BSAOffice Hours: Mondays and Wednesdays: 12:30 – 3:00pm, and other times by appointmentE-mail: epatuwo1@kent.eduTelephone: 330-672-1163Teaching Assistant:Andrew Bastian will announce his office hours during the first week of class.Class email: ksuompm@gmail.com

IMPORTANT: Please specify which class you are in when emailing Andrew or me.

- **Text Book** : **Operations Management,** 12th ed., by W.J. Stevenson, McGraw-Hill, 2015 (KSU ed.) with "CONNECT PLUS." You may buy the textbook+ConnectPlus from the bookstore or directly from the publisher website (\$76.50): http://shop.mheducation.com/mhshop/productDetails?isbn=1259574938
- To register for Connect, follow the link to Homework#1(HW1) on Blackboard. **DO NOT register by going directly to Connect Website.** Because the tests are open-book-open-note, <u>you can only use the printed copy of the</u> <u>textbook during the tests.</u> **During the tests, you CANNOT USE the e-book.**

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register by going directly to Connect Website.
Because the tests are open-book-open-note and are supervised by ProctorU, you can only use the
printed copy of the textbook during the tests. You CANNOT USE the e-book during the tests.

Class Website : Lecture notes and videos, extra problems/solutions and sample tests are on Blackboard.

McGraw-Hill Connect website:

Prerequisites : M&IS 24056 - Fundamental of Business Statistics.

Learning Objectives:

- Understand the strategic importance of operations and how operations can provide a competitive advantage in the marketplace.
- Understand the relationship between operations and other business functions, such as Marketing, Finance, Accounting, and Human Resources.
- Understand the concept of natural and special variations in managing operations, particularly in managing quality and inventory.
- Know how to do statistical process control and understand the concepts behind it.
- Know how to use forecasting models and understand the basic concepts behind forecasting.
- Know how to use basic inventory models to manage inventory.
- Know how to use the basic queueing models to manage waiting lines.
- Know the concepts behind MRP and how MRP operates.

1

• Know the basic concepts behind project management and how to schedule a project using CPM and PERT models.

Course Logistic:

<u>Caution</u>: Online class requires that you be <u>self-discipline</u>: following syllabus, getting readings done, watching lectures, doing homework on time, and taking TESTS – not the last minute – because technology glitch always happens. Some chapters (10, 18, 3, 13, 12 and 17) are quite technical in nature and require significant amount of time to "understand." Reading all chapters and watching all lectures one or two days before the test usually give disastrous result. <u>IT TAKES TIME</u> TO UNDERSTAND TECHNICAL MATERIAL.

- Even though this is an online course, I am available in my office during office hours and other times by appointment, and so is Andrew during his office hours. Some difficult materials are better explained face-to-face, than by emails. If it is possible, please make an effort to see me or Andrew in person if you need help.
- Lectures. You are to read all of the assigned chapters and view the online lectures posted on Blackboard. Watching and UNDERSTANDING "all" lectures is very important before you attempt to do any homework and sample test; it will help you to better understand the material covered and help you see the big picture as well as details in every chapter discussed.
- **McGraw-Hill Connect Homework (Total = 100 points)**. There will be **nine (9) Connect homework** given throughout the semester (see deadlines in the schedule). You have 3 attempts for each HW and the highest score will be recorded. Each homework is worth 10 points and a 10-point bonus is given to you as HW10. Access to HW is given within the lesson plan for each chapter.
- **Solutions.** Solutions to problems appeared in the text book are given in Appendix A at the end of the text book. Some more-detailed solutions are on posted on Blackboard.
- Test (Total = 400 points). There will be 5 open-book, open-note tests (including one optional final exam). The test with the lowest score will be dropped; only 4 tests will be counted. There is no make up for missing tests without valid excuse.
- You WILL take ALL your exams online (Blackboard) with ProctorU supervision. ProctorU is an online testing service and is required by Kent State University. With ProctorU you can take the exams virtually anywhere and anytime as long as your computer has <u>a webcam</u> and you have a <u>reliable internet connection</u>. <u>Please watch this video</u> to understand what to do when you take a test with ProctorU: http://www.proctoru.com/videopops/demovideo.php

I also post two documents on Blackboard explaining what ProctorU is and how to register and to take the exams for this course. You must **register at least 72 hours in advance** (3 days) prior to taking the exam <u>or else you have to pay a fine</u>. To register, go to <u>www.proctoru.com/kent</u>

• You have the option to <u>take the tests on paper</u>. If <u>you do not have webcam and reliable internet</u> <u>connection</u>, you may take the exam on paper/pencil outside my office. Please schedule with Andrew or me ahead of time.

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|-------|-----------|-------|-----------|
| Grade | Points | Grade | Points |
| Α | 450 – 500 | C | 350 – 369 |
| A- | 435 – 449 | C- | 335 – 349 |
| B+ | 420 – 434 | D+ | 320 - 334 |
| В | 400 - 419 | D | 300 - 319 |
| В- | 385 – 399 | F | Below 300 |
| C+ | 370 – 384 | | |

• **Grading.** The following table gives the total points required for each grade.

- Note that there is NO extra credit for this class.
- For Spring 2016, the **course withdrawal** deadline is **Sunday, April 1, 2016**. Withdrawal before the deadline results in a "W" on the official transcript; after the deadline a grade must be calculated and reported.

ProctorU: Proctored exams for 100% Web-based

• All tests for this class are to be taken on Blackboard and are proctored via an internet (virtual) proctoring service (ProctorU.) You must have a **reliable high-speed internet connection**, a **webcam and a quiet room** to take the exams. This video explains the process: <u>http://www.proctoru.com/videopops/demovideo.php</u>

- <u>There is a time limit on all exams (see syllabus).</u> Each exam is available for <u>one day only on Mondays</u> <u>from 6:00 am till 11:59 pm</u>; see schedule for exam dates.
- Note that exams close automatically at the end of the scheduled availability whether or not you have completed it, so give yourself at least 3 hours to complete it before the due date/time.
- Again, make sure you have a reliable internet connection before starting your exam; once you start your exam, there is no way to pause it. If your internet times out during the test, you won't be able to get back to your work
- Students should schedule their exam with ProctorU <u>at least 3 days (72 hours) in advance</u> at: <u>www.proctoru.com/kent</u>. If you schedule the test less than 72 hours in advanced, you have to pay a FINE.
- Please schedule to take your tests **at the latest** 4 hours before the closing of the test, because it takes time for ProctorU to set up connection with your computer.
- Students who are uncomfortable with ProctorU can opt NOT to enroll in a web-based course, or schedule the paper exams with me. Check Flashline to see if there is a similar in-class course available.
- Students who have concern that their technology will fail or be unreliable should schedule their ProctorU test early in the testing window, so they have time to recover and/or reschedule the test if the technology fails, or take the tests on paper in my office by scheduling with Jessica or me ahead of time.
- Again, you have the option of taking the exam on paper/pencil outside my office. Please schedule with Andrew or me ahead of time.

The Following Policies Apply to All Students in this Course

- **A. Prerequisite:** Students attending the course who do not have the proper prerequisite risk being deregistered from the class.
- **B.** Enrollment: Students have responsibility to ensure they are properly enrolled in classes. You are advised to review your official class schedule (using Student Tools in FlashLine) during the first two weeks of the semester to ensure you are properly enrolled in this class and section. Should you find an error in your class schedule, you have until Sunday, January 31, 2015 to correct the error with your advising office. If registration errors are not corrected by this date and you continue to attend and participate in classes for which you are not officially enrolled, you are advised now that you will not receive a grade at the conclusion of the semester for any class in which you are not properly registered.
- **C.** Academic Honesty: Cheating means to misrepresent the source, nature, or other conditions of your academic work (e.g., tests, papers, projects, assignments) so as to get undeserved credit. The use of the intellectual property of others without giving them appropriate credit is a serious academic offense. It is the University's policy that cheating or plagiarism result in receiving a failing grade for the work or course. Repeat offenses may result in dismissal from the University.
- **D. Students with disabilities:** University policy 3342-3-18 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through the Student Accessibility Services (contact 330-672-3391 or visit <u>http://www.kent.edu/sas/index.cfm</u> for more information on registration procedures).
- E. Graduation: If you are eligible to graduate, it is your responsibility to apply for graduation before the set deadline (May Graduation: Apply before September 15th, August Graduation: Apply before December 15th, December Graduation: Apply before March 15th). If you apply after the deadline you will be assessed a \$200 late fee. Please see your academic advisor as soon as possible if you are uncertain as to your progress toward graduation. To apply for graduation complete the following steps: Log onto your Flashline account, then Click on the Student Tools tab, Look in the Graduation Planning Tool Box, and finally Click on Application for Graduation. If an error message appears, you must contact your advisor.

3

| | Suggested Chapter Readings/Lecture Topics/Videos | | | |
|--|---|--|--|--|
| Part #1: | | | | |
| Wk#1: Jan 18-24 | Chapter 1. Introduction to Operations Management | | | |
| | Watch Video: What is Operations Management? | | | |
| | • HW#1 – Chapter 1 – Open until Sunday, 11:59 pm, January 31, 2016 | | | |
| Wk#2: Jan 25-31 | Chapter 9. Management of Quality | | | |
| | Watch Video Documentary: Deming: The Prophet Unheard | | | |
| | HW#2 – Chapter 9 – Open until Sunday, 11:59 pm, January 31, 2016 | | | |
| | | | | |
| Wk#3: Feb 1-7 | Chapter 10. Quality Control | | | |
| | Watch Video: Deming: Red Bead Experiment | | | |
| | • HW#3 – Chapter 10 – Open until Sunday, 11:59 pm, <u>February 7, 2016</u> | | | |
| TEST 1: (Chapters 1, 9 | 9, & 10): Monday, February 8, 2016 (open from 6:00 am till 11:59 pm). Time: 90 min. | | | |
| Part #2: | | | | |
| Wk# 4, 5, 6: | Chapter 18. Waiting Lines (Queueing) Models | | | |
| Feb 9 – 28 1 | * HW#4 – Chapter 18 – Open until Sunday, 11:59 pm <u>February 28, 2016</u> | | | |
| | | | | |
| Wk#6, 7: Feb 22-Mar | 6 Chapter 3. Forecasting | | | |
| | HW#5 _ Chanter 3 _ Onen until Sunday 11:59 nm March 6 2016 | | | |
| | • HW#5 – Chapter 3 – Open until Sunday, 11:59 pm <u>March 6, 2016</u> | | | |
| TEST 2: (Chapters 18 | & 3): Monday March 7, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. | | | |
| | | | | |
| Part #3: | & 3): Monday March 7, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. | | | |
| | & 3): Monday March 7, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. Chapter 15. <u>Supply Chain Management</u> | | | |
| Part #3: | & 3): Monday March 7, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. Chapter 15. <u>Supply Chain Management</u> • Watch Video (Link on Blackboard): Global Supply Chain Management | | | |
| Part #3: Wk#8, 9: Mar 8- 20 | & 3): Monday March 7, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. Chapter 15. <u>Supply Chain Management</u> Watch Video (Link on Blackboard): Global Supply Chain Management HW#6 – Chapter 15 – Open until Sunday, 11:59 pm <u>March 20, 2016</u> | | | |
| Part #3: | & 3): Monday March 7, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. Chapter 15. <u>Supply Chain Management</u> • Watch Video (Link on Blackboard): Global Supply Chain Management | | | |
| Part #3: Wk#8, 9: Mar 8- 20 Mar 23-29 | & 3): Monday March 7, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. Chapter 15. <u>Supply Chain Management</u> Watch Video (Link on Blackboard): Global Supply Chain Management HW#6 – Chapter 15 – Open until Sunday, 11:59 pm <u>March 20, 2016</u> Spring Recess (no school) | | | |
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| Part #3: Wk#8, 9: Mar 8- 20 Mar 23-29 Wk#9, 10, 11: Mar 14 – Apr 10 TEST 3: (Chapters 15 Part #4: Wk#12, 13: April 12 - 24 | & 3): Monday March 7, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. Chapter 15. <u>Supply Chain Management</u> Watch Video (Link on Blackboard): Global Supply Chain Management HW#6 – Chapter 15 – Open until Sunday, 11:59 pm <u>March 20, 2016</u> Spring Recess (no school) Chapter 13. <u>Inventory Management</u> HW#7 – Chapter 13 – Open until Sunday, 11:59 pm <u>April 10, 2016</u> & 13): Monday, April 11, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. Chapter 12. <u>Material Requirements Planning (MRP) & Enterprise Resource Planning (ERP)</u> HW#8 – Chapter 12 – Open until Sunday, 11:59 pm <u>April 24, 2016</u> | | | |
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| Part #3: Wk#8, 9: Mar 8- 20 Mar 23-29 Wk#9, 10, 11: Mar 14 – Apr 10 TEST 3: (Chapters 15 Part #4: Wk#12, 13: April 12 - 24 | & 3): Monday March 7, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. Chapter 15. <u>Supply Chain Management</u> Watch Video (Link on Blackboard): Global Supply Chain Management HW#6 – Chapter 15 – Open until Sunday, 11:59 pm <u>March 20, 2016</u> Spring Recess (no school) Chapter 13. <u>Inventory Management</u> HW#7 – Chapter 13 – Open until Sunday, 11:59 pm <u>April 10, 2016</u> & 13): Monday, April 11, 2016 (open from 6:00 am till 11:59 pm). Time: 120 min. Chapter 12. <u>Material Requirements Planning (MRP) & Enterprise Resource Planning (ERP)</u> HW#8 – Chapter 12 – Open until Sunday, 11:59 pm <u>April 24, 2016</u> | | | |

Spring 2016 – Tentative ONLINE Class Schedule

Optional Final Exam (Test 5):

Monday, May 9, 2016 (open from 6:00am till 11:59pm). Time: 120 min. This semi-comprehensive test covers Chapters 10, 18, 3, 13, 12, 17 (problems only) – the lowest of the 5 test scores will be dropped.

4