

# Supply Chain Management Course Number: 22:799:580 Course Title: Operations Analysis

#### COURSE DESCRIPTION

WELCOME TO OPERATIONS ANALYSIS. This course covers fundamentals of operational analysis for various performance issues encountered in real life business processes. The major topics include demand forecasting and demand management strategies, sales and operations planning (S&OP), inventory planning models and deployment, uncertainty and safety stock management, supply chain collaborative planning, business capacity planning, and fundamentals of project management. Case studies on analyzing and designing cost-effective solutions for improving a company's operational efficiency and profit margin are used. The objective is to help our students to develop a strong knowledge of analytical thinking skills and supply chain strategies toward operational excellence in a highly dynamic and competitive business environment.

# **COURSE MATERIALS**

**Book Title:** The Supply Chain Professional: Concepts and Analytics, 2<sup>nd</sup> Edition

**Author:** Jacobs and Lummus

**ISBN No.:** Print ISBN: 9781939297174, 1939297176

eText ISBN: 9781939297198, 1939297192

**Publisher:** Hercher

Aside from the bookstore, you can also order the e-book at <a href="https://www.vitalsource.com/">https://www.vitalsource.com/</a> or at <a href="https://www.vitalsource.com/">www.hercherpublishing.com/</a>. A hardcopy may be ordered from Campustext.com and shipped to your home though the publishers "Student Direct Purchase page" at <a href="https://hercherpublishing.com/Student\_Direct\_Purchase.html">https://hercherpublishing.com/Student\_Direct\_Purchase.html</a>.

In addition, you will be bringing your own non-programmable calculator (like this one: <a href="https://www.amazon.com/Casio-HI-820lv-bk-w-Portable-Calculator-8-digit/dp/B008ANLR6K/">https://www.amazon.com/Casio-HI-820lv-bk-w-Portable-Calculator-8-digit/dp/B008ANLR6K/</a>) and pencil/pen for exams. Supplemental materials/readings will be posted on Canvas and/or provided in class when necessary.

You should read and study the material covered in the readings and slides before the class in which the material is discussed.

# LEARNING GOALS AND OBJECTIVES

- This course is designed to help students develop skills and knowledge in the following area(s):
- 1. **Business knowledge.** MBA graduates will have a command of business theory and practice.

#### Students will demonstrate:

- a. Mastery of fundamental business concepts and an ability to integrate and apply these concepts to resolve practical business problems.
- b. Proficiency at analyzing and interpreting numerical data to resolve practical business problems.
- 2. **Ethical judgment.** MBA graduates will use reasoned and ethical judgment when analyzing problems and making decisions.

#### Students will demonstrate:

- a. Ability to critically evaluate business decision-making scenarios and develop innovative and ethical solutions.
- 3. **Global perspective.** MBA graduates will have the breadth of perspective necessary to lead effectively function in a global and diverse business environment.

#### Students will demonstrate:

- a. An understanding of how to conduct business internationally.
- 4. **Persuasive communication.** Students graduating with an MBA degree will be effect ive communicators.

# Students will demonstrate:

a. Ability to construct clear, concise, and convincing written business communication.

b. Ability to construct and deliver clear, concise, and convincing oral business communication.

Students develop these skills and knowledge through the following course activities and assignments:

Lectures. Lectures generally include theoretical knowledge (preparation in making the right decision) and practical examples and exercises (practice in developing and executing the decision) about specific operations and supply chain concepts. PowerPoint slide decks will aid the professor's presentation of the material to transfer the knowledge to the learners/students. Lectures make use of practical examples from business and industry, and interactive group and individual exercises to help ensure thorough comprehension of the material.

Homework and In-Class Assignments. Homework and in-class exercises are assigned to reinforce concepts in the course and for learners/students to practice newly acquired skills. Homework is submitted, graded, and reviewed in class to ensure knowledge transfer. These assignments are completed in groups as well as on an individual basis.

**Small Group Presentations.** Students are assigned to a small group (generally 4-6 students per group). Groups must work together as a team on homework and in-class assignments as instructed by the professor. Students are asked to develop a presentation of the assignment for the class, and deliver the presentation to the entire class. Presentations vary in length, but are generally limited to 20 minutes total, so students must be clear and concise in their communications.

**Examinations.** The course includes two examinations to formally assess learners' knowledge and comprehension. Exams are thought provoking and managerially oriented and generally use an essay format with calculations.

# **PREREQUISITES**

Proficiency requirements.

#### ACADEMIC INTEGRITY

*I do* NOT *tolerate cheating*. Students are responsible for understanding the RU Academic Integrity Policy http://academicintegrity.rutgers.edu/

I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, "On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment." I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work. Don't let cheating destroy your hard-earned opportunity to learn. See <a href="mailto:business.rutgers.edu/ai">business.rutgers.edu/ai</a> for more details.

# **ELECTRONIC DEVICES**

Electronic devices are optional and not needed to perform the work required of you in class. If a laptop, tablet, or other device is being used, it should only be used for class-related activities.

Why do I state this? Several studies (and my past experience) have shown that students using electronic devices in class spend a great deal of time on non-class-related activities and that these

distractions negatively impact both learning and grades (e.g., Ellis, Y., B. Daniels, & j. Andres

(2010), *Research In Higher Education Journal* 8(1), pp.1-10). Using electronic devices in class also can hinder instruction and learning, not only for the student using the device but also for other students. Recent studies have supported the fact that non-class-related use of electronic device distracts and impacts the learning of other students nearby (e.g., Fried, C. B. (2008), Computers & Education 50(3), pp.906-914; Turner, R. (2011), *VIU Faculty of Education* 2(1), pp.1-39).

If I find that a device is being used for non-class related activities, you may be asked not to bring it with you to class again.

# **COURSE POLICIES**

- 1. The syllabus may be modified at the professor's discretion to improve effectiveness and meet the needs of the class.
- 2. You are expected to be present at **all** scheduled classes. The only exceptions follow those consistent with University policy. **There may not be make-up exams or assignments**.
- 3. You are expected to come prepared to the class. At a minimum this means that you have read and completed any assigned material or problems.
- 4. Please silence your cell phone during class and refrain from text and IM messaging.
- 5. **No electronic devices will be permitted during examinations.** The only possible exception will be calculators or laptops if exams are administered on-line.

- 6. **Recording Lectures:** All unauthorized recordings of class lectures/discussions are prohibited. Recordings to accommodate the needs of individual students must be approved in advance, for personal use during the semester only. Redistribution of approved recordings are prohibited.
- 7. Assignment Due Dates: All assignments (including exams) are due when specified, not later. All written assignments are to be typed and presented in a highly professional manner. The only exception may be exams requiring written responses (e.g., blue books).
- 8. You are expected to check your Rutgers email and Canvas regularly for current course information. This will be the primary means of communication used for the course. "When in doubt, check your Rutgers email and Canvas."
- 9. I expect that you will find that I am very accessible and available to speak with you. I encourage you to contact me with any questions that you have about the course or your career. I truly am happy to help you!
- 10. All University policies will be followed in this course.

#### GRADING POLICY

The purpose of examinations is to provide students with an opportunity to synthesize, integrate, and report on the topics discussed, and materials provided in Operations Analysis by responding to thought provoking, managerially oriented questions. Exams will be evaluated based on the thoroughness and thoughtfulness of the student's responses as well as the student's integration of the course material into his/her responses. Problems will be evaluated based on the correctness of each answer. Exams require the ability to critically analyze quantitative information, and communicate clearly and effectively in a written fashion.

Homework assignments are graded in much the same fashion as examinations described above. However, grading of assignments is intended to be a bit more developmental than exams which are evaluative in nature.

Final grades are determined in a simple additive, mathematical nature. In other words, I simply sum or tally the exam and assignment grades, and provide the result as an accumulated final course grade. Your final grade is not subject to negotiation. Mistakes are possible – we are all human. If you feel that I have made an error, I will be happy to review a written argument, provided that it has been submitted to me within two days of receiving your final grade. Clarify

the precise error I made and provide all due supporting documentation. If I have made an error, I will gladly correct it. However, I will adjust grades only if I have made an error.

There will be no extra credit offered.

#### **Grading Scale:**

### The average class GPA is targeted to be in the range 3.4 - 3.6.

The distribution will look like the following:  $\sim$ 40% of A/A-;  $\sim$ 60% of B+/B/B-;  $\sim$ 10% C+/C/C-; optional F.

**No excuses** will be accepted after the final letter grades have been assigned.

Midterm	30%
Final	30%
Presentation	10%
Homework	30%

#### **COURSE SCHEDULE**

The course schedule is provided in a separate document and is available on Canvas.

# SUPPORT SERVICES

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination. More information can be found at <u>ods.rutgers.edu</u>.

[Rutgers University-New Brunswick ODS phone (848)445-6800 or email dsoffice@echo.rutgers.edu]

[Rutgers University-Newark ODS phone (973)353-5375 or email ods@newark.rutgers.edu]

If you are *pregnant*, the Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy.

[Rutgers University-New Brunswick Title IX Coordinator phone (848)932-8200 or email jackie.moran@rutgers.edu]

[Rutgers University-Newark Office of Title IX and ADA Compliance phone (973)353-1906 or email TitleIX@newark.rutgers.edu]

If you seek *religious accommodations*, the Office of the Dean of Students is available to verify absences for religious observance, as needed.

[Rutgers University-New Brunswick Dean of Students phone (848)932-2300 or email deanofstudents@echo.rutgers.edu]

[Rutgers University-Newark Dean of Students phone (973)353-5063 or email DeanofStudents@newark.rutgers.edu]

If you have experienced any form of *gender or sex-based discrimination or harassment*, including sexual assault, sexual harassment, relationship violence, or stalking, the Office for Violence Prevention and Victim Assistance provides help and support. More information can be found at <a href="http://vpva.rutgers.edu/">http://vpva.rutgers.edu/</a>.

[Rutgers University-New Brunswick incident report link: <a href="http://studentconduct.rutgers.edu/concern/">http://studentconduct.rutgers.edu/concern/</a>. You may contact the Office for Violence Prevention and Victim Assistance at (848)932-1181]

[Rutgers University-Newark incident report link:

https://cm.maxient.com/reportingform.php?RutgersUniv&layout\_id=7 . You may also contact the Office of Title IX and ADA Compliance at (973)353-1906 or email at <a href="TitleIX@newark.rutgers.edu">TitleIX@newark.rutgers.edu</a>. If you wish to speak with a staff member who is confidential and does **not** have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or email <a href="run.vpva@rutgers.edu">run.vpva@rutgers.edu</a>]

If students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate, you should submit a request via <a href="https://temporaryconditions.rutgers.edu">https://temporaryconditions.rutgers.edu</a>.

If you are a military *veteran* or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. <a href="http://veterans.rutgers.edu/">http://veterans.rutgers.edu/</a>

If you are in need of *mental health* services, please use our readily available services.

[Rutgers University-Newark Counseling Center: <a href="http://counseling.newark.rutgers.edu/">http://counseling.newark.rutgers.edu/</a>]

[Rutgers Counseling and Psychological Services-New Brunswick: http://rhscaps.rutgers.edu/]

If you are in need of *physical health* services, please use our readily available services.

[Rutgers Health Services – Newark: <a href="http://health.newark.rutgers.edu/">http://health.newark.rutgers.edu/</a>]

[Rutgers Health Services – New Brunswick: <a href="http://health.rutgers.edu/">http://health.rutgers.edu/</a>]

If you are in need of *legal* services, please use our readily available services: http://rusls.rutgers.edu/

Students experiencing difficulty in courses due to *English as a second language (ESL)* should contact the Program in American Language Studies for supports.

[Rutgers-Newark: PALS@newark.rutgers.edu]

[Rutgers-New Brunswick: eslpals@english.rutgers.edu]

If you are in need of additional *academic assistance*, please use our readily available services.

[Rutgers University-Newark Learning Center: <a href="http://www.ncas.rutgers.edu/rlc">http://www.ncas.rutgers.edu/rlc</a>

[Rutgers University-Newark Writing Center: <a href="http://www.ncas.rutgers.edu/writingcenter">http://www.ncas.rutgers.edu/writingcenter</a>]

[Rutgers University-New Brunswick Learning Center: https://rlc.rutgers.edu/]

[Optional items that many faculty include:

- Students must sign, date, and return a statement declaring that they understand the RU Academic Integrity Policy.
- Students must sign, date, and return a statement declaring that they understand this syllabus.]