

**MAN 3506**  
**Section 004**  
**OPERATIONS MANAGEMENT**  
**Spring 2012**  
**3 Credits Course**

**Instructor:** Dr. Sunil Babbar  
**Office:** 215 Fleming Hall  
**Office Hrs:** Mondays & Wednesdays 8:45-10:50 a.m. and Tuesdays 6:30-7:00 p.m.  
Also by appointment. You do not need any appointment to come see me during my scheduled office hours (you can simply come by).  
**Office Phone:** 561-297-3179  
**Email:** Babbar@fau.edu  
**Class Time:** MW 11:00 a.m. -12:20 p.m.  
**Classroom:** BU 303

**PREREQUISITES:** MAN 3025: Introduction to Management and Organizational Behavior  
QMB 3600: Quantitative Methods in Administration

**Note :** As per the FAU *Undergraduate Catalog*, you ***must*** have **already completed** both these prerequisites ***with a passing grade*** (i.e. “C” or better). Anyone who has not completed these prerequisites ***prior*** to this semester is absolutely **not permitted** in this class and is **required to drop the class and inform me (the instructor) about it in writing via email within the first week of the semester.**

**REQUIRED COURSE TEXT:** *Operations Management: Processes and Supply Chains*, by Krajewski, Ritzman and Malhotra, 9<sup>th</sup> Edition, Prentice Hall, (ISBN: 978-0-13-606576-0).

**COURSE DESCRIPTION:** An introductory course in operations management (OM). Covers basic operations concepts and techniques in services and manufacturing. Includes service and product design, process analysis, project management, quality, supply chain, capacity, and inventory management. Ethics, international aspects, and the interdisciplinary nature of OM are highlighted where appropriate.

**LEARNING GOALS:**

- Students will demonstrate knowledge of operations management in areas including product and service design, process selection and process design, service operations, quality management, and supply chain management.
- Students will reinforce their learning of quantitative methods by applying mathematical and statistical techniques to address issues in project management, process analysis, statistical process control, and inventory management.
- Students will reinforce their writing skills through short answer questions on exams.
- Students will reinforce their critical thinking through context analysis and application and by solving problems related to operations management topics.

**IMPORTANT DATES:**

February 27 (Mon.) - **Midterm Exam**  
March 2 (Friday) - Last day to drop the course or withdraw without receiving an “F”.

*If you have a grade lower than “C” on the Midterm Exam, do think through very carefully if it is in your interest to stay on in this class beyond this date. I will NOT be supportive of requests for late withdrawals.*

- March 28 (Wed.) - **Quiz (at the very start of class – so you absolutely cannot be late to class!)**
- May 2 (Wed.) - **Final Exam (10:30 a.m.-12:10 p.m. in the usual classroom BU 303)**

**Note:** The start time for the final exam is not the same as the regular class time!!!  
**DO NOT be late for or miss any exam or quiz as no makeup in any way will be allowed!**

You must absolutely be on time for every exam and the quiz (no extra time will be given for being late). So, please *do give yourself enough cushion* by leaving for class earlier than usual on the day of the exam or quiz so that you are certainly there well in time.

**PASSING GRADE:** The minimum passing grade for this course is a “C”.

**EXAMS & GRADING POLICY:** There will be two in-class closed-book/notes exams (one midterm exam and one final exam). You do not need to bring a scantron for the midterm exam. However, you will be required to bring a scantron sheet (Form No. 882-E) with you only for the final exam. You will also have one closed-book/notes quiz on an article that you have to read. You are not allowed to bring any sheets of paper with you for the exams or the quiz. You are not allowed to leave the classroom during an exam or quiz. Please make sure you use the restroom or have a drink before the exam or quiz starts if you need to. You must have a government/FAU-issued picture ID with you in order to take any exam or quiz. Do remember to bring a calculator, ruler, eraser, and more than one pen or pencil to each exam. **All cell phones and/or communication devices of any kind must be turned off and stored away absolutely out of sight at all times during any exam or quiz** (any cell phone or communication device “seen” by the instructor during the exam or quiz session, irrespective of whether it is being used or not, will result in the student getting a zero for that exam/quiz). All your work must be only on the exam or quiz handed out to you. You must abide by any seating arrangement for the exams and quiz. Any student can be asked to move to another seat at any time. Each exam will be out of 100 points. I *may* throw in a few bonus points on the midterm exam. Please note that grades of Incomplete (“I”) are reserved only for students who are *passing* a course but have not completed all the required work because of exceptional circumstances.

**About the Final Exam:** The **final exam** will include material (in the form of multiple choice, true and false, discussion, and detailed numerical problems) covered after the midterm exam. In addition, **the final exam will also include material (in the form of about 30 multiple choice and/or true and false type of questions worth about 30-45 points) from the entire (comprehensive) course material** to ensure that you have a sound understanding of underlying terms, definitions, concepts, and objectives (the content) of every topic covered in this entire course (including those covered for/prior to the midterm exam). As such, for the final exam, you **MUST** carefully review the entire content of the course and make sure that you understand well the definitions, fundamental concepts (both conceptual and numerical), and objectives of every topic covered throughout the entire course. Doing so will be an important requisite for doing well on the final exam. On the final exam, there will be no “detailed numerical problems” for you to solve *all the way through* on material covered prior to the midterm exam (however you must understand the underlying logic/concepts for such numerical problems as that could be tested through multiple choice/true or false type questions that contain numbers and/or require some calculations). Detailed numerical problems on the final exam will only be on material covered after the midterm exam.

I will be using the +/- grade system. Your overall course grade will be determined as follows:

MIDTERM EXAM . . . . .	35%	93-100	= A	73-76.99	= C
QUIZ . . . . .	10%	90-92.99	= A-	70-72.99	= C-
FINAL EXAM. . . . .	45%	87-89.99	= B+	67-69.99	= D+

THE EXAM YOU SCORE THE	83-86.99 = B	63-66.99 = D
HIGHEST ON..... 10%	80-82.99 = B-	60-62.99 = D-
	77-79.99 = C+	< 60 = F

Your course average/course grade can thus be computed as:

$$\text{Overall Course Average} = .35*(\text{Your score on the midterm exam}) + .1*(\text{Your score on the quiz}) + .45*(\text{Your score on the final exam}) + .1*(\text{Your highest score on any one of the two exams}).$$

**CLASS ATTENDANCE:** You must always be in time for class so you set a good example and do not disturb others. Please strictly refrain from leaving the classroom (with you books/backpack) before the entire class session is over as that is disruptive both to your fellow students and the instructor. If you know prior to the start of class that you need to leave early for some very important reason, then please do extend courtesy to all by making it a point to inform the instructor at the start of class that you will be leaving early, and sitting close to the door of the classroom so you can quietly leave with minimum disturbance to the class (not doing any of these will be deemed as disrupting the class). No attendance will be taken, but you *must* be present in all class sessions to be able to understand the material and be in a position to do well. You will be responsible for everything said and assigned in class irrespective of whether you are present in class or not. It is your responsibility to get to know someone in class (including having that person's contact information) at the very start of the semester and to obtain from her or him any assignment and notes for any class you have to miss. If you miss a class for any reason other than an emergency or without the instructor's prior permission, it is *your responsibility* to get and carefully review the notes from that class from someone in class and to read the related material carefully from the text before you ask the instructor to review or help with any material you missed. You must bring with you and show the instructor the notes you have copied for the missed class and the work you have put in to go through that material and make up for the class missed when you ask for help on it.

**HOMEWORK ASSIGNMENTS:** You will be given homework assignments in this course. However, it will be a few weeks before you are given your first "assignment" as the starting introductory chapters/topics in the course are qualitative and do not lend themselves to numerical problem-type assignments as such. It is your responsibility to be in class so you know exactly what is assigned and when. **You are not required to turn in these assignments to the instructor (they will not be collected).** They are only for you to practice. However, you **MUST** do these assignments very promptly, diligently, and in a timely manner, as they will serve as a good review for the exams, and more importantly, help provide you with honest feedback on your understanding of the material covered. The assignments are for your review of the material and you *must carefully do and understand every part of every assigned problem in order to pass and do well in this course.*

**EXAMS & MAKE-UP POLICY:** No student is allowed to take an exam or quiz without having a ID. You must place a government/FAU picture ID on your desk when taking any exam or quiz. All exams and the quiz will be closed-book closed-notes. The exams and quiz *must be taken at the time scheduled* the student is responsible for **keeping the dates for these in mind from the very first day of class and before making any other commitments.** Irrespective of circumstances, no exam or quiz will be given to student any earlier or later than the time that exam is scheduled for the class. If ill, you must present a physician's statement that outlines the nature of the illness and also specifically states that the illness severe enough to prevent your attendance. **There will be absolutely no makeup exam or quiz in this course irrespective of circumstances.** You must have the instructor's written permission to miss an or the quiz. If an exam is missed with the instructor's written permission, then the weight of that exam

be added to the other exam. If the quiz is missed *with the instructor's written permission*, then the weight the quiz will be added by distributing it equally to the exams. The final exam must be taken by every student. If an exam or quiz is missed without the student having the instructor's written permission, the student will receive a zero for that exam or quiz (*absolutely no exceptions*).

**SEEING YOUR EXAMS & QUIZ, YOUR SCORES ON THESE, AND YOUR COURSE GRADE:**

I go over the midterm exam and the quiz in class so you know why you have missed points, if any, on them (so do not miss any class!). If you have questions on the midterm exam or quiz or need further clarification please do ask at the time when I go over them in class. Grading, whether you consider it easy or hard, is determined by the instructor and is the same for everyone. As such, your score on any exam or on the quiz is final and not subject to change unless there is something that I have clearly overlooked. I do go over/grade these *very carefully* and there is in general very little chance of my having overlooked something. Any issue relating to the midterm exam or the quiz must be brought up no later than a week after the time that the exam or quiz is returned/gone over in class (irrespective of whether you are present or not at the time it is returned). The matter of your grade on the midterm exam or the quiz cannot be brought up or considered later in an effort to try and bump up your course average or grade or for any other reason.

Please do not ask me at any time what you need on the final exam or on the quiz to make a certain course grade - as that is all explained on this syllabus and for you to determine/calculate. If you wish to know your score on the final or *to see your final exam, you must come by my office (Fleming Hall, Room 215) only on Thursday May 3<sup>rd</sup> between 7:50-10:00 a.m.* If you do not come by to see your final exam on May 3<sup>rd</sup> at the specified time, then you can only see your final exam during either the first week of the Summer (Term 1) 2012 semester or the first week of the Fall 2012 semester (and no later). My office hours for Summer 2012 and for Fall 2012 will be posted on my office (FL 215) door at the start of the Summer (Term 1) and Fall 2012 semesters respectively. Your grades are based only on your performance on the exams and quiz and **nothing outside of that can/will be considered (or should be brought up by you in any way as I will not respond to any such request and/or communication)**. The grades are final and not subject to change based on any other considerations (whether you understand the material, are graduating, not passing, will lose your scholarship, have a job offer, need only a few more points to pass etc) as I want the process to be fair, clear, and the same for every student. As such, please do not bring up such "other" consideration(s) – for those requests will not receive a response. I really want to see you all do well but also want you to earn the grade like everyone else in the class.

**CLASSROOM SEATING:** During any of the class sessions, **you absolutely must not sit next to someone you might be tempted to talk to during class (especially friends!)**. Please realize that you are in class to learn and to contribute to the learning experience. You can always socialize with and talk to friends outside of class. Please be very conscious of your conduct and not distract the instructor or disturb the class in any way. Your distracting the instructor and/or class in any way through disruptive conduct will pull your course grade down by at least one grade! As students, you must strictly abide by any seating instructions given. ***Any non-conformance to seating instructions or any other type of misconduct/disturbance on your part will result in a reduction of your overall course grade.*** A repeat misconduct will result in a more severe penalty that may include your receiving an "F" for the course and being barred from attending class. It is every student's responsibility to not diminish the learning experience of others through any kind of misconduct.

**CODE OF ACADEMIC IRREGULARITY POLICY:** Students at FAU are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over others. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and

individual responsibility. Harsh penalties are associated with academic dishonesty. For more information see University Regulation 4.001 at [http://www.fau.edu/regulations/chapter4/4.001\\_Code\\_of\\_Academic\\_Integrity.pdf](http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf)

**DISABILITY POLICY:** In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register in a very timely manner with the Office for Students with Disabilities (OSD), which on the Boca Campus is located at SU 117 (Phone: 561-297-3880), and follow all OSD procedures. If you have a disability and need classroom accommodations, it is your responsibility to complete all formalities with OSD and notify me as soon as possible. I will be glad to work with you and be of help to you. Please see me privately after class or during my office hours.

**OTHER COMMENTS:**

- I look for each one of you to challenge yourself, make a commitment, do well, and get even more out of the course than you expected coming in. Do your part and be assured that *I will not let you down!*
- Please take personal responsibility and help shape a healthy learning environment by not distracting others or the instructor in any way during the class - for I do not expect and will not be accommodating of any such conduct! **All cell phones/pagers/communication devices must be turned off during all class sessions. They must be turned off and stored absolutely out of sight during any exam or quiz.**
- Please slow me down, have me repeat or explain anything you do not understand in class. The objective is for you to not only learn but also to feel comfortable and enjoy that learning experience. But, keep in mind, you must not miss class and must do all the work assigned in a timely manner.
- Any cell phone or communication device “seen” (even if not being used at the time) by the instructor during an exam or quiz will result in the student getting a zero for that exam or quiz – without exception. You are absolutely not allowed to pull out and place on your desk or use a phone or communication device of any kind during class or during any exam or quiz. If a student is found doing so on any exam or quiz, the student will receive a zero and be asked to leave the room immediately (no exceptions!). You are absolutely not allowed to use a calculator on any kind of communication device during any exam. If you do so, the device will be confiscated and a zero given for the exam.
- Absolutely no tape, video, or any kind of recorders are allowed at any time in this course unless written permission via email is obtained from the instructor by the student to do so for a particular class lecture in the case of an emergency.
- I will bring the graded exams, handouts, etc. only once to class. **Anything missed must be picked up from my office during my office hours.** The student is responsible for all announcements, assignments given, and material covered in class *irrespective* of whether s/he is present or not.
- Class participation is encouraged. You should raise issues and ask questions so that you generate discussion, understand the material, broaden your horizon, and make the course a good learning experience.
- Changes (if any) to this syllabus will be at the discretion of the instructor and will be announced in class. The student is responsible for knowing and following any and all announcements made in class irrespective of whether the student is present or absent when such announcements are made.

**COURSE CONTENT & SCHEDULE:** Material on the topics listed below will be covered from the and from sources *outside the text*. All material (from or outside the text, covered in class or assigned for reading) shall be considered equal in importance and may be on the exam. You **must** be present in all meetings in order to keep up with, and understand the material covered. Other than those that might be

specified in class, you are not responsible for the supplements to any chapters in the textbook. The topics/chapters will be covered in class in the order listed.

CHAPTER*	TOPIC	Pages you must read for the exam from the Textbook
1	Introduction to Operations Management & Competing with Operations	2-24
3	Process Strategy	92-100; 105-113
2	Project Management	52-58; Lower half of p. 67 (“Assessing Risks”)
7	Process Layout and Constraint Management	Class notes only

**MIDTERM EXAM (February 27, Monday)**

4	Process Analysis	122-129; Middle of page 133-141
5	Process Performance and Quality	174-top paragraph on p. 183; 184-196; Process Capability Ratio on middle of p. 197; Middle of p. 199-201

**Note:** An article titled “TQM It’s As Easy As ABC” will be assigned for reading. This article will be handed out to you soon after the midterm exam. You will have a quiz on this article on **March 28<sup>th</sup>** - so do read the article (including its appendix) **VERY CAREFULLY**.

**QUIZ (March 28, Wed., at the very start of class on the article “TQM? It’s As Easy As ABC”)**

6	Capacity Planning	218-225
-	Scheduling	Class notes only
12	Inventory Management	414-middle of p. 424
8	Lean Systems	294-307; 313-315
9	Supply Chain Design	322-343
10	Supply Chain Integration	354-360; “Design Collaboration” section on p. 364

**Note:** You MUST REVIEW the entire content of the course for the approximate 30 comprehensive multiple choice and/or true and false type of questions that will also be on the final exam from the entire course content (including material covered for the midterm exam). On the final exam, detailed numerical problems and discussion questions will only be from the material covered after the midterm exam.

**FINAL EXAM (May 2, Wednesday, 10:30 a.m.-12:10 p.m. in the same classroom BU 303.)**

**Note:** **The start time for the final exam is not the same as the regular class time!!!**  
**DO NOT be late for or miss any exam as no makeup in any way will be allowed!**

\* Please refer to the pages you must read from the textbook as noted in the above/prior section (you are not responsible for anything from the textbook outside of those pages). Your notes (from class) will be *extremely important* (so review these very carefully and completely) for the exams. Don’t forget to read the assigned article carefully for the quiz on March 28<sup>th</sup>. For the final exam you must carefully review the entire course content (except for the article you had the quiz on).