

**UNC CHARLOTTE  
BELK COLLEGE OF BUSINESS**

**OPER 3100 Operations Management – Spring 2017**  
**001 WF 9:30am – 10:45am COLVD 3120**

**Course content:** Accessible via Canvas

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Office: Friday 253B

Office hours: Tuesday & Thursday 1:00 – 2:00pm (email to schedule appt.)

**Syllabus:** This document contains the policies and expectations established for this course. Be sure to read the entire syllabus carefully before continuing in this course. These policies and expectations are intended to create a productive learning atmosphere for all students. Unless you are prepared to abide by these policies and expectations, you risk losing the opportunity to participate further in the course. The standards and requirements set forth in this syllabus may be modified at any time by the instructor. Notice of such changes will be by announcement in class and/or by changes to this syllabus posted on the course Canvas website.

**Text and Materials:**

- (1) Operations & Supply Chain Management, 14<sup>th</sup> Edition, Jacobs & Chase, 2014  
ISBN: 978-0-07-802402-3
- (2) Presentations, recorded lectures, practice problems/solutions, grades, and updated information regarding the course will be posted on Canvas.
- (3) Bring a calculator to each class. Space permitting laptop computers are also allowed in the class except during exam times.

**Prerequisites:** MATH 1120; STAT 1220; ACCT 2121, 2122; ECON 2101, 2102; INFO2130; Junior Standing.

**Catalog Description:**

An introduction to, and development of, the management functions in manufacturing and non-manufacturing organizations. A systems approach to the organizational environment, the basic operating functions, the problems and decisions a manager encounters and solution techniques and models. Computer applications are included where appropriate.

**Learning Objectives:**

The operations function involves managing the activities and resources necessary to make products and/or provide services to customers. Therefore, it is a basic function that must be performed in all business organizations. Management of operations in today's business environment usually involves significant computer usage and mathematical/statistical modeling. This class provides a working understanding of the models and techniques useful in operations management. Examining selected problem areas and widely recognized modeling approaches for dealing with them will build students understanding and foundation of such techniques. Specific student learning objectives include, but are not limited to:

- (1) Developing basic optimization models using linear programming.
- (2) Applying appropriate forecasting models to measure forecasting accuracy.
- (3) Select and apply appropriate inventory models for various inventory management systems.
- (4) Schedule projects using critical path method and project evaluation/review techniques.
- (5) Use the materials requirements planning methodology to develop productions plans.
- (6) Apply statistical tools to develop and interpret quality control charts.

### **Course Format:**

Hybrid courses have been described as "the most prominent instructional delivery solution" since they provide the ever-growing and increasingly diverse academic world with the flexibility of online learning along with valuable collaboration achieved through face-to-face student-instructor interaction.

Students will be expected to self-study posted materials on Canvas prior to each class session. Topics will be introduced to students online in the form of presentations and lecture recordings, while class time will be reserved for the review of topic materials and working-out associated problems. The curriculum covered in this course is largely quantitative in nature, therefore it is strongly recommended that students continuously practice problems related to the covered chapters to properly prepare for quizzes and examinations.

### **Grading:**

**Exams:** Four semester exams and a cumulative final will be administered. The lowest of the five exam grades will be dropped for a total of four exam grades (25% each) being used in the final grade calculation. Students may choose to take all five exams and drop the lowest. The cumulative final exam is optional for any student with a course average greater than or equal to 69.5%. Any student with a course average below a C (< 69.5%) at the end of the semester is required to take the cumulative final.

The final course grade will be calculated based on the following scale, no additional rounding will occur.  
A: 100-89.5% and above; B: 89.4-79.5%; C: 79.4-69.5%; D: 69.4-59.5%; F: 59.4-0.0%.

**Exams are closed book and notes, no exceptions.** Applicable formulas will be provided for all quizzes and exams. Exams are a form of intellectual property belonging to those who create them. Therefore, the exam materials must remain in the instructor's possession or control. Exams may not be taken outside of the lecture hall or copied for any reason. Failure to return an exam after taking or reviewing it or removing an exam from my presence at any time or copying an exam will be considered theft of intellectual property. Such action will result in an exam grade of zero and may warrant further disciplinary action.

- A calculator will be required for completion of several problems on exams.
- Students can use a basic four-function, scientific or financial calculator.
- **Graphic calculators (TI-83/84/89/Inspire) are not necessary for solving exam problems and therefore, are not permitted during the exam period.**
- Mobile devices including phones, tablets, laptops and smart watches cannot be used during the exam as calculators, or for any other purpose, and must be kept in your bags/pockets during the exam period.
- Applicable formulas and distribution tables will be provided in the exam booklet. Personal formula and distribution table sheets are not permitted.
- Any evidence of cheating, a violation of the exam procedure policies or any general violation of the academic integrity code will result in an exam grade of zero and the incident will be escalated to the Academic Integrity Review Board.

Should a student miss an exam because of missing a class, that student will receive a grade of zero. If the excuse is approved before the date of the examination (**proper documentation required**) then the student will take the make-up exam within three school days (M-F). **Students who miss more than one exam should drop the class otherwise they will be given an F.**

**Posting grades:** Students will have access to their exam grades via Canvas. The course grades posted on Canvas are for informational purposes only. The official overall grade is computed and kept in the instructor's grade book.

**Suggested Problems:** Students are expected to complete all the suggested chapter problems. Practicing and solving the problem sets is the best way to learn and prepare for the exams. Solutions to the suggested problems will be provided.

## Policies

**Attendance & Participation:** Students must attend all lectures, examinations and presentations. Class attendance is highly correlated with learning the material and performing well on the course examinations. Note that (1) some topics discussed in the classroom are not covered adequately in the textbook, thus the instructor will present alternative approaches, and (2) historically, those who skip the class tend to make less than their target grades and (3) the instructor refuses to answer questions due to absenteeism. A student that misses a class is responsible for obtaining any needed information (e.g., notes, announcements, assignments, etc.) from fellow students. **Students are expected to contribute to the active class discussions.**

**Class Preparation:** Students are expected to study the textbook and other posted materials (notes, presentations, etc.) **prior to each respective lecture.** Additionally, students must be prepared to intelligently contribute to active class discussions and answer questions related to the current topics.

**Class Cancellation:** If I am unable to attend class or the University is closed unexpectedly, assume the material will be moved forward to the next meeting unless otherwise specified.

**Assignments Policy:** This 3-credit course requires three hours of classroom or direct faculty instruction and six hours of out-of-class student work each week for approximately 15 weeks. Out-of-class work may include but is not limited to: required reading, library research, written assignments, and studying for quizzes and exams.

**Academic honesty/integrity:** THE UNC CHARLOTTE CODE OF STUDENT ACADEMIC INTEGRITY governs the responsibility of students to maintain integrity in academic work, defines violations of the standards, describes procedures for handling alleged violations of the standards, and lists the applicable penalties. The following is a list of prohibited conduct in that Code as violating these standards: A) Cheating; B) Fabrication and Falsification; C) Multiple Submission; D) Plagiarism; E) Abuse of Academic Materials; and F) Complicity in Academic Dishonesty. For more detail and clarification on these items and on academic integrity, students are strongly advised to read the current UNCC undergraduate course catalog.

**The instructor may ask students to produce identification at examinations and may require students to demonstrate that graded assignments completed outside of class are their own work.**

**Religious Accommodation for Students:** The University of North Carolina at Charlotte is committed to diversity, nondiscrimination and inclusiveness, and to supporting its students, regardless of religious affiliation or non-affiliation, in accordance with state and federal laws and regulations. As part of this commitment, the University makes good faith efforts to accommodate a student's religious practice or belief, unless such accommodation would create undue hardship. Details associated with this policy can be found by visiting <https://legal.uncc.edu/policies/up-409>.

**Philosophy of teaching:** I demand meaningful learning, which can be interpreted by being able to translate the ideas, free of errors, into your own words and solve problems that are structurally different from those presented in class and textbook(s). Hence, always try to learn the materials by concentrating on the underlying principles. I will try to make you think by asking you questions and problems, which may not be directly covered during the class lectures.

### **Miscellaneous:**

- **The instructor reserves the right to change the course outline, and the course contents.**
- **There will be no extra credit offered for any individual student during the semester.**
- **The instructor will keep all exams.**
- **All electronic & mobile devices such as cell phones, laptops, tablets, etc. must be kept silent during the lecture.**

**Statement on Diversity:**

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

**Tentative Course Outline:**

- **Course Introduction**
- Linear Programming
- Project Management
- **Exam I**
- Forecasting
- Aggregate Sales Planning
- **Exam II**
- Inventory Management
- Materials Requirements Planning
- **Exam III**
- Operations Scheduling
- Process Capability & Statistical Quality Control
- **Exam IV**
- **Final Exam (Cumulative)**