**MGT 6501 Operations Management**

**Scheller College of Business, Georgia Institute of Technology**

**Instructor**

**Morvarid Rahmani (**[**morvarid.rahmani@scheller.gatech.edu**](mailto:morvarid.rahmani@scheller.gatech.edu)**) OR**

**Ravi Subramanian (**[**ravi.subramanian@scheller.gatech.edu**](mailto:ravi.subramanian@scheller.gatech.edu)**)**

**Course Description**:

In a dynamic, global, and competitive world, an understanding of the processes and policies essential to delivering products and services to customers (i.e., matching supply with demand) is necessary to effect sustainable improvements in an organization’s critical competitive dimensions such as cost, delivery, flexibility, and quality. This course focuses on concepts related to the strategic design and management of these processes and policies. The course comprises both instructional as well as case-based sessions. Additional readings from the Wall Street Journal and other sources will be used to supplement the cases and assigned textbook chapters. We will also briefly treat the ethical and social implications of the production and delivery of products and services through selected readings.

**Required Text**:

*Matching Supply with Demand: An Introduction to Operations Management* (2nd Edition, 2009), by Gérard Cachon & Christian Terwiesch, McGraw-Hill/Irwin (ISBN: 978-0-07-352516-7).

**Other Required Materials**:

* Cases and Simulation to be purchased from <http://cb.hbsp.harvard.edu/cb/access/xxxx>
* Additional course material posted as a zipped folder on T-Square. Locate the course by logging in at <https://t-square.gatech.edu>
* The Goal (any edition) by Eliyahu M. Goldratt & Jeff Cox, North River Press.

Obtaining or requesting any material (including textbooks with markings, class notes, cases, readings, etc.) or any help from previous students or students in other sections of the course will violate the Georgia Tech honor code and is not allowed. Likewise, sharing or offering to share any material with or otherwise helping future students or students in other sections of the course will violate the Georgia Tech honor code and is not allowed.

**Office Hours**:

TBD and by appointment (#include Room Number). Please email me, suggesting a few dates/times that work for you and we will work out a mutually convenient time. Email is the best way to get in touch with me.

**Grading**: Final grades will be based on a curve. Evaluation components **(total 50 points)** include:

* Group Case Write-Up 1 **10 points due by 11:55 pm on MMDDYY via T-Square**
* Group Case Write-Up 2 **10 points due by 11:55 pm on MMDDYY via T-Square**
* Final Exam **20 points HH:MM – HH:MM on MMDDYY**
* Class Participation **10 points**
* Assignment submissions will be handled on T-Square. Therefore, late submissions will not be possible.
* Group evaluations – for you to evaluate individual contributions towards your group’s work – will be conducted through an online survey towards the end of the semester.
* Please make re-grading requests for an evaluation component within one week of your receipt of the evaluation.

***Final Exam***:

* The Final Exam will be open book and open notes.
* Sharing of course material, notes, or the textbook is not allowed during the exam.
* You will require a calculator for every class and the final exam, so please carry one with you at all times (sharing of calculators is not allowed during the exam).
* Please resolve any scheduling conflict or inform me of any circumstance in advance.
* Discussing the contents of an exam with students who have not yet or have already taken the exam (either within or outside of your section) will violate the Georgia Tech honor code and is not allowed.

***Group Case Write-Up***:

* Groups should submit a written analysis of the two cases marked with a (\*) in the detailed session plan. Each case write-up is due by 11:55pm on T-Square before the day when the case is scheduled to be discussed in class.
* Write-ups must address the assigned case questions posted on T-Square, and may be up to five pages in length (single-spaced, 11 point font, 1 inch margins), plus up to five pages of exhibits.
* Write-ups should be to-the-point and could either be organized based on the case questions or be written in essay/bullet form with the answers to the case questions contained within.
* Your group’s grade for the case write-up will be based on the quality and depth of analysis and the soundness of recommendations made.

***Class Participation***:

I expect each of you to be prepared and ready to contribute for every class. Please be punctual, turn electronics off, and participate courteously. Please always occupy the same position in the classroom (to the extent feasible) and always place your name card/tent in front of you. While class attendance counts towards participation, habitual late arrivals or other distractions will more negatively influence the class participation grade in comparison to absence from class.

* Laptop Policy: Please do not use laptops/tablets/smartphones during class. The exception to this policy is our Supply Chain Management Simulation session (Session 2).

**Georgia Tech Honor Code:** Students are expected to act and must expect their peers to act according to the highest ethical standards, as outlined in the honor code at [www.honor.gatech.edu](http://www.honor.gatech.edu). The marking of attendance for anyone other than the person himself/herself constitutes a significant violation of the instructor’s and your colleagues’ trust and also the honor code. For questions involving honor code issues, please get in touch with me or visit [www.honor.gatech.edu](http://www.honor.gatech.edu).

**Detailed Session Plan**

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| --- | --- | --- | --- | --- | --- |
| **Week** | **Session** | **Topic** | **Textbook**  **Chapters** | **Case/*Articles*** | **Readings** |
| 1 | 1 | Introduction to Operations Management (OM) | | | |
| 2 | Supply Chain Simulation **(Bring Laptop to Class)** | | | |
|  |  |  |  |  |  |
| 2 | 3 | Strategic Role of OM | 1, 2.6 |  | Operations-Based Strategy |
| 4 | Process Analysis – **Case** | 2.1-2.4,  3 | Kristen’s Cookie Co. | A Note on Process Analysis  *Massey’s CEO Defends Its Safety Practices* |
|  |  |  |  |  |  |
| 3 | 5 | Impacts of Variability | 7.1-7.6,  7.9-7.12, 8 | *Why Even Sunny Days can Ground Airplanes*  *The Meat Market* | Note on Variability, Buffers, and Inventory |
| 6 | Variability in Service Operations – **Case** |  | **Manzana Insurance – Fruitvale Branch\*** | *Life Insurers Pressed on Lost Policies* |
|  |  |  |  |  |  |
| 4 | 7 | Inventory Management | 2.5, 6,  13.1-13.4 |  | *Working Capital and Supply Chain*  *CVS Accused of Selling Expired Products* |
| 8 |
|  |  |  |  |  |  |
| 5 | 9 | Inventory Management – **Case** | 14 | HP DeskJet Printer Supply Chain |  |
| 10 | The Newsvendor Model –  Balancing Excess & Shortage | 11.1, 11.2,  11.4-11.8  13.7 |  | *Stores Anxiously Watch Back-to-School Sales* |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 11 | Revenue Management  Supply Chain Coordination through Financial Mechanisms | | 15  16.3-16.5 | The Case of Blockbuster Video | *Which is Better - Outsourcing or Shared Services*  *Lobster Glut Slams Prices* | |
| 12 | The Bullwhip Effect & Supply Chain Coordination through Information | | 16.1,16.2 |  | *Bullwhip Hits Firms as Growth Snaps Back*  *Clarity is Missing Link in Supply Chain* | |
|  |  |  | |  |  |  | |
| 7 | 13 | Supply Chain Management – **Case** | |  | **Sport Obermeyer\*** |  | |
| 14 | Lean Operations | |  |  | *Latest Starbucks Buzzword: ‘Lean’ Japanese Techniques*  Management by Stress | |
|  |  | |  |  |  |  |
| 8 | 15 | | Quality Management and Six Sigma | 9 |  | *Where Process-Improvement Projects Go Wrong*  *BP Decisions Set Stage for Disaster* |

**Notes: A write-up is due for the two cases marked with an asterisk\*; Readings highlighted in blue relate to ethical/social issues.**