

BUS ###: Behavioral Issues in Operational Analysis and Execution

Fall 2015

Note: There is no Pass/Fail option for this class

Instructor: XXXXXXXXXXXXXXXX

Room: Room###

Class: Days##, Hours##

Office Hours: Days##, Hours##

Course Overview

Through the increased availability of operating data, managers are beginning to gain a stronger understanding of the complex nature of the environments within which they develop and execute their decisions. One of the greatest risks however is in the interpretation of that data – Specifically, the risk lays in the leap from asking questions like “How does the data vary across contexts and condition?”, to questions like “Why does this variance happen?”.

There are many paths that analysts can go down in attempting to explain the wide variety they may see in their data. Foremost should be understanding whether such variation is largely an artifact of the data’s collection, coding or structural nature. Of the variance not accounted for by data-structural dimensions, much will be a function of the rules and policies put in place at the organizations in question, and the broader legal and economic contexts. This kind of variance typically has the kind of cause-and-effect structure managers can feel fairly comfortable with – These are things that can be changed (at some appreciable cost perhaps) with a predictable outcome provided. Or they are things that can’t be changed and therefore can be dropped from further consideration. Assuming other issues remain constant that is.

But here is precisely where purely mechanistic considerations can fail. Often even accounting for these well-defined sources of variance, other very important ones still exist. These are the sources of variation that often ‘don’t’ remain constant when managerial levers are pulled. They include facets of human psychology and sociology, and play out both in individual work performance and group dynamics. They are present in both service and production settings, both within individual firms and across supply chains. And they are typically not this kind of thing managers have a clear control over. HOWEVER, that doesn’t mean we can’t attempt to account for them if we have a better understanding of how they work.

The field of **Behavioral Operations Management** (BeOps) explores the interaction of human behaviors and operational systems and processes. Specifically, it has the goal of identifying ways in which human psychology and sociological phenomena impact operational performance, as well as identifying the ways in which operations policies impact such behavior.

In this course students will be exposed to a variety of on-hands activities that have been used by leading scholars in the BeOps field to demonstrate and study behavioral dynamics in a range of work contexts. Each activity will give students the opportunity not only to engage in the activity, but will also provide the class with a set of data they can analyze in the following class session – Allowing a consideration of the dynamics experienced, a thoughtful discussion around the theory described in each chapter, and a foundation for extending considerations.

Course Text

The Handbook of Behavioral Operations Management:

Social and Psychological Dynamics in Production and Service Settings

Bendoly, Van Wezel, Bachrach Eds., Oxford Press 2015 ISBN-13: 978-0199357222

Associated Resources and Forums

Access to the most recent versions of electronic activities and supplements: www.ombehavior.com

All students are encouraged to leverage the “**Operations Management in Practice**” group on **LinkedIn**

Grading 20% in-class activity participation. 20% in-class discussion participation
30% analysis assignments, 30% quizzes/exams (*preparation and skill-checks*).

In-class Activity and Discussion Participation

The course is designed to incorporate significant portions of in-class lab-time during which students will be able to engage in structured activities and later analyze collective results. While *attendance* in class is technically *voluntary*, participation in scheduled class exercises is *expected*. In-class Activity participation scores will be based on student preparedness and attentive involvement (positive participation) in in-class activities. At the end of a given activity, notes taken regarding the activity using the textbook's record-keeping templates should be sent electronically to the instructor (by a designated method). The collective data will be made available to students for consideration in subsequent session discussions.

Positive participation in in-class discussion of concepts and activities, and the analysis of activity data, is characterized by consistently providing insightful contributions to such in-class discourse. This is assessed at the end of the semester based on my classroom observations as well as (potentially) peer evaluations. Highly positive participation can push students above the boundary of two grades.

Negative participation involves things like talking about non-class issues during class discussion, not participating in activities, consistently arriving late or leaving early (without informing me ahead of time), etc. Consistent negative participation (again measured by my own observations and reports of your peers) can bring a student's grade down.

To that end, all students are required to sign the class's Ethics Contract (provided by email or online conference) and submit a signed copy to me within the first week of class (preferably the first day). Without a signed contract I will not be able to assign any points to assignments (i.e. scores on quizzes and homeworks will be "0"). Signing of the ethics contract is also part of the total participation grade in this course. Students are also encouraged guidelines established by our institution. A copy is included within this syllabus.

Q: Why is this so important?

A: This is not a class of "1" - What you do effects the learning environment of those around you. I want to give everyone the best opportunity to take lessons away from the time they spend in class, and anything that detracts from those opportunities needs to be discouraged. Having said that, again, you will not be penalized for not attending class. If you feel that on certain days you have other priorities or will have a hard time avoiding negative participation of some kind... just don't come in (That's ok). But if you do come to class, come prepared to listen and work.

Analysis Assignments

As noted, the data collected in activities throughout the semester will be made available collectively to the students by the instructor (after receipt of individual student-recorded data for a given activity). Typically an analysis and discussion of the results will follow. Depending on the nature of the results, I might assign further analysis work to students, drawing specifically on the concepts discussed in specific chapters and with an interest in both ensuring a clean evaluation of the data and plausible interpretations that may extend the discussions of a given chapter,

Intermediate and End-of-term Quizzes/Exams

We will have intermediate semester quizzes (on the order of 20 minutes each) and a final exam. The intermediate quizzes will serve as a check to student preparation for class and absorption of prior material (i.e. having done readings, followed along on in-class examples, practiced with analysis and interpretation of data and theory etc.). The final exam is designed to check on whether students can identify what theories and demonstrative activities in general (from among those taught) may be most appropriate for specific managerial decision context assessment. Make-ups are granted only in rare occasions, with rationale filed and supported by the program office.

Class Schedule

Class sessions will be broken into two 8-week modules. The first module focuses on behavioral dynamics commonly encountered within organizations, the second on dynamics illustrated in inter-organizational settings.

Each week will focus on a single chapter in the text. The first session of a given week will begin with a preliminary discussion and then the execution of the in-class activity (individual student data recording; to be sent to the instructor by the end of the day). The second session of each week will focus on the analysis of the collected data.

Note for Instructors teaching a single 8-Week Module – Either of these module sequences can serve in a stand-alone capacity depending on whether the instructor wishes to focus on dynamics within organizations or in interorganizational (supply chain) contexts. Instructors are strongly encouraged to require the reading of chapters 1 and 2 prior to either 8-week module regardless of which is used.

Note for Instructors teaching Core coursework – Instructors are also encouraged to pick and chose chapters that complement Core coursework that might benefit from in-class activities. It is encouraged that a similar 2-session sequence is used (activity/analysis), and that chapters selected are followed in the same ordinal sequence as they appear in the text (their sequence in the text is designed to build upon prior chapter discussions)

Pre-Class Reading – Students should read Chapters 1 and 2 in preparation for the first day of class. Students should also always read the chapter whose activity is to be run, prior to the class session in which it is scheduled.

First 8-Week Module - Lessons in Production and Service Contexts

Week 1 : Chapter 3 - Synch and Swim : Managing and mismanaging process constraints and variability
Week 2 : Chapter 4 - Process and Perception : Kristen's Cookie Company from a behavioral point of view
Week 3 : Chapter 5 - Outflanking undecided, ever-changing puzzles : The role of Human Behavior in Scheduling
Week 4 : Chapter 6 - Hitting the Target : Process Control/Experimentation/Improvement in a Catapult Competition
Week 5 : Chapter 7 - The Wait or Buy Game : How to game the system that's designed to game you back
Week 6 : Chapter 8 - Seeing the Forest (And Your Tree) : Envisioning motivation and performance in work design
Week 7 : Chapter 9 - Satisfaction Architect : Service design and its behavioral implications
Week 8 : Chapter 10 - Sharing the Load : Group behavior and insights into simulating real-world dynamics

Second 8-Week Module - Lessons in Supply chains and integrative/enabling technology

Week 9 : Chapter 11 - Booms, Busts, and Beer : Understanding the dynamics of supply chains
Week 10 : Chapter 12 - Kicking the "Mean" Habit : Joint prepositioning in debiasing pull-to-center effects
Week 11 : Chapter 13 - Sharing the Risk : Understanding risk-sharing contracts from the supplier's perspective
Week 12 : Chapter 14 - A Chain of Hands : Pro-social integration in a coffee supply chain setting
Week 13 : Chapter 15 - Supply Chain Negotiator : A game of gains, losses and equity
Week 14 : Chapter 16 - ERP Simulator : Examining competitive supply chain team dynamics
Week 15 : Chapter 17 - The Fresh Connection : Inter-functional integration in supply chain management
Week 16 : Chapter 18 - Wrapping it Up : Behavior and decision making revealed in business simulation games