MGT. 4233

OPERATIONS MANAGEMENT ANALYTICS

Spring 2018

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Objectives:
   In any organization, the quantitative analysis of information to improve decision making ("Analytics") is exploding in all functional areas. The primary objective of this course is to study several applications of analytics in operations management. This course will build your skills in two critical computer-based tools of the operations manager (or any manager), namely spreadsheets and database management systems.

Books and Materials Required:
There are no required textbooks for this course.

There is a note packet for the course. It is available at the OSU Bookstore.

You will need a USB Flash Drive or some other means (e.g. BuckeyeBox) to store your files when you are not in the lab since the lab computers are often wiped and reimaged..

Other materials, such as additional lecture notes and assignments will be handed out in class or available on the course web site.

Computer Access
   In keeping with the course objectives, much of what we do will be computer-based. You will need to use Microsoft Excel and Microsoft Access for Office 2010 or better and also access the course web site. If you have been admitted to the College of Business, there are several well-equipped labs available in Mason Hall with all of the hardware and software you will need. If you are a non-business student, you will need to contact the Information Technology Services office on the third floor of Mason to get access. In addition, you may utilize your own computer system and software (if you have it). Microsoft Office software is available from OCIO (ocio.osu.edu/software/mslicense/agreement), at deeply discounted prices.

Office Hours
   When you need one-on-one assistance, please feel free to contact me. Prior to asking for assistance on software questions, however, I do expect you to have tried the resources available in the lab (the lab proctor and the software manuals). Most answers can readily be found there.

I realize that this material can be challenging (even frustrating) at times, so I try to be available through a variety of means. In lieu of limited scheduled office hours, you can contact me via phone (office or home), voice mail or email (best). Often, questions can be answered via the same medium. Otherwise, we can make arrangements to meet at a mutually agreeable time.
In the past, students have found these methods very effective in communicating with me. However, if you ever have difficulty reaching me, I want to know, so I can try to make it easier.

Course Web Site
   There is a web site set up on Carmen that we will use extensively. It is an important source of course information (e.g. a copy of this syllabus and the schedule are there.) Any changes to the syllabus or schedule will appear there as well. You should check it regularly (e.g. at least once if not twice weekly.) The web site will also contain course materials, handouts, homework answers, etc. Perhaps most importantly, the web site will have information regarding your grades in the course. The web site is only accessible to students registered to this course, and your grades are only accessible to you.
http://carmen.osu.edu

Evaluation:
Your course grade will be based on the following graded materials.

Database Quiz	60 points
Systems Simulation Quiz	50 points
Excel Quiz 1	50 points
Excel Quiz 2	50 points
8 Cases	175 points total
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Total	385 points

Case Assignments:
Each case assignment is due when indicated. To facilitate the logistics of turning in assignments, any electronic files will be submitted to the course web site.
Submitting the assignment before the deadline meets the requirements. A 50% penalty will be assessed for assignments submitted within 24 hours after the specified due date (i.e. one day late). A 100% penalty will be assessed for any assignment submitted more than 24 hours after the specified due date.

NOTE: Plan for the unexpected! Be forewarned: excuses such as these will not be accepted:
"I am turning this in late because I didn't expect the:
- Computer lab to be closed   *- Disk to crash*
- Network to be down   *- Printer to jam*

NOTE: Everything turned in will be evaluated according to accepted business standards. Correct spelling, grammar, punctuation, and appearance will be considered in grading of all assignments. Executives require these characteristics of their communications, because how you present yourself and your work reflects on you and the company for which you are employed.

Disability Accommodation - If you need an accommodation based on the impact of a disability, you should arrange an appointment with me as soon as possible. I rely on the Office For Disability Services for assistance in verifying the need for accommodations and developing accommodation strategies. If you have not previously contacted the Office for Disability Services, I encourage you to do so.

Academic Misconduct – Material submitted for course grade must be your own work. Please be informed that I must follow Faculty Rule 3335-5-54, which requires that requires "all instances of what he or she believes may be academic misconduct" be reported to the University Academic Misconduct Committee. Academic misconduct is a serious threat to the integrity and value of your diploma.

Mtg			TOPIC	ASSIGNMENT DUE
			MGT 4233 **SCHEDULE**	**2018**
1	9-Jan	Tue	LEC: Course Intro	
2	11-Jan	Thu	Evaluating Commercial Software	
3	16-Jan	Tue	LEC: Data and Databases	
4	18-Jan	Thu	Extracting Information from Databases	Software Assessment
5	23-Jan	Tue	Extracting Information from Databases	Database part 1
6	25-Jan	Thu	Database Queries	
7	30-Jan	Tue	LEC: Spreadsheet Engineering	Database part 2
8	1-Feb	Thu	Monte Carlo Simulation	
9	6-Feb	Tue	Database Quiz	
10	8-Feb	Thu	Monte Carlo Simulation	
11	13-Feb	Tue	Purchasing under uncertainty	Monte Carlo Simulation
12	15-Feb	Thu	Excel Simulation Modeling	
13	20-Feb	Tue	Excel Simulation Modeling	
14	22-Feb	Thu	Supply Chain Modeling, Optimization Modeling	Inventory Simulation
15	27-Feb	Tue	Supply Chain Modeling, Optimization Modeling	
16	1-Mar	Thu	LEC/LAB: Systems Simulation	Supply Chain Modeling
17	6-Mar	Tue	Systems Simulation - ExtendSim	
18	8-Mar	Thu	Excel Quiz 1	
	13-Mar	Tue	SPRING	
	15-Mar	Thu	BREAK	
19	20-Mar	Tue	Systems Simulation - ExtendSim	
20	22-Mar	Thu	Systems Simulation - ExtendSim	
21	27-Mar	Tue	Systems Simulation - ExtendSim	
22	29-Mar	Thu	LEC: Excel Tools for Data Mining & Visualization	Systems Simulation
23	3-Apr	Tue	Data Warehousing and OLAP Pivot Tables	
24	5-Apr	Thu	Systems Simulation Quiz	Data Warehouse
25	10-Apr	Tue	Preparing Data for Analysis: Importing, Transforming	
26	12-Apr	Thu	Excel Quiz 2	
27	17-Apr	Tue	Methods for Data Preparation	
28	19-Apr	Thu	Methods for Data Preparation	Call Center Data