

Course: BIT 3414 CRN: 11041 Instructor: Gary Fetter  
Description: Operations & Supply Chain Management Office: 2085 Pamplin Hall  
Term: Spring Semester 2009 Email: [gmf22@vt.edu](mailto:gmf22@vt.edu)  
Class Times: Tuesday & Thursday 12:15-1:45pm (Robeson 105) Phone: (540) 231-5115  
Web: VT Blackboard (<http://learn.vt.edu>)  
Office Hours: Wednesday 1:30-3:00pm

### **Course Description**

BIT 3414 is designed to provide an introduction to the processes that transform inputs into finished goods and services and the process related to the distribution of those goods and services. This course allows you to apply the quantitative decision making methods learned in BIT 2405 and 2406 to the production and delivery of goods and services. This course explores how to analyze processes, ensure quality, create value, and manage the flow of information, products and services across a network of customers, enterprises and supply chain partners.

### **Course Objectives**

By successfully completing this course, you should gain

- ✓ An understanding of how operations relates to other business functions (accounting, marketing, finance, etc.)
- ✓ An understanding of the strategic role of operations and supply chain management in a global business environment
- ✓ A working knowledge of the design and operation of productive systems
- ✓ Confidence in working with numbers and familiarity with Excel

### **Prerequisites**

BIT 2405 and 2406

### **Course Materials**

**Text:** Russell and Taylor, Operations Management: Creating Value Along the Supply Chain, 6<sup>th</sup> edition

**Computer Equipment:** You must have access to a computer that meets the recommended PC configuration (runs MS Windows) for students entering the Pamplin College of Business. The Pamplin computer lab has Microsoft Excel 2007 with Solver installed and JMP7 software.

**Website:** The course website on Blackboard ([learn.vt.edu](http://learn.vt.edu)) will contain class lecture notes, homework assignments, practice exams, and supplemental material in PDF format. Material will be available at least 1-2 days before class. I will handout class notes for the first two class sessions. You should check the website regularly and print the notes for subsequent class sessions.

### **Grading**

Grades will be comprised of the following:

10%	Class Participation and in-class assignments
15%	Homework
25%	Exam 1
25%	Exam 2
25%	Final Exam

Final Grades will be assigned based on the following:

A	93 – 100	C	73 – 76
A-	90 – 92	C-	70 – 72
B+	87 – 89	D+	65 – 69
B	83 – 86	D	60 – 64
B-	80 – 82	D-	55 – 59
C+	77 – 79	F	0 – 54

Important Dates from VT Course Calendar and Tentative Exam Schedule (Subject to change) All Exams are in-class.

Jan 20 <sup>th</sup>	First Day of Class
Jan 26 <sup>th</sup>	Last day to add classes.
<b>Feb 19<sup>th</sup></b>	<b>Exam 1 (TENTATIVE)</b>
Mar 2 <sup>nd</sup>	Last day to drop without a grade penalty.
Mar 7 <sup>th</sup> – 15 <sup>th</sup>	Spring Break
Mar 23 <sup>rd</sup>	Last day to resign without a grade penalty.
<b>Apr 2<sup>nd</sup></b>	<b>Exam 2 (TENTATIVE)</b>
Apr 17 <sup>th</sup>	Deadline for requesting rescheduling of final exams.
May 1 <sup>st</sup>	Last day to apply for course withdrawal.
May 6 <sup>th</sup>	Last day of classes.
<b>May 9<sup>th</sup></b>	<b>FINAL EXAM 1:05pm – 3:05pm</b>

### Class Policies

**Attendance:** Although class attendance will not be recorded, you are responsible for all material and announcements we discuss during class. Any changes to the syllabus, assignments, due dates, etc. will be announced in class. If you miss class, it is your own responsibility to obtain notes from another student on material and announcements that you miss. Class participation and in-class assignments are included as part of the course grade as outlined above. Class participation opportunities and in-class assignments cannot be made-up if you miss class.

### **Tests and Final Exam:**

- Exam 1, Exam 2, and the Final Exam will be based on material from class and the text (100 points possible for each exam).
- The Final Exam will be comprehensive.
- If you are unable to take an Exam at the scheduled time, arrangements must be made prior to the Exam. Excused absences will be handled in one of two ways:
  - You will be required to make-up the exam at a date and time determined by the instructor, or
  - The weight corresponding to that exam will be added to the Final Exam. The decision as to which alternative will be implemented is at the discretion of the instructor.

### **Homework Assignments:**

We will have homework assignments throughout the semester. The two lowest homework grades will be omitted in computing your homework average. These assignments are due on the date and time assigned. Assignments submitted one day late will be marked down 50%. If more than one day after

the due date for an assignment has passed, you will receive no credit for that assignment. Homework will be completed online as a quiz in Blackboard and must be submitted by the due date and time.

**Cell Phones, PDAs, etc.:**

Please turn off cell phones, PDAs, iPods, SEGA Nintendo DS, etc. before class starts. Cell phones, PDAs, iPods, etc. are prohibited during exams.

**Accommodations:**

If you need adaptations or accommodations because of a disability, have an emergency situation, or need special arrangements for any class related requirements, please make an appointment with me or stop by my office as soon as possible.

**Academic Honor Code:**

Exams are closed book and closed notes, but appropriate formula sheets will be provided with the exam. You may use calculators, but not PDAs, iPods, laptops, cell phones, or other electronic devices. The VT honor system (<http://www.honorsystem.vt.edu>) will be in effect for all assignments. All Exams and online assignments should be done individually. Working together with other students on homework assignments is permitted and encourage; however, copying another student's homework solutions is not permitted.

**Virginia Tech Principles of Community:**

Virginia Tech is a public land-grant university, committed to teaching and learning, research, and outreach to the Commonwealth of Virginia, the nation, and the world community. Learning from the experiences that shape Virginia Tech as an institution, we acknowledge those aspects of our legacy that reflected bias and exclusion. Therefore, we adopt and practice the following principles as fundamental to our on-going efforts to increase access and inclusion and to create a community that nurtures learning and growth for all of its members:

- ✓ We affirm the inherent dignity and value of every person and strive to maintain a climate for work and learning based on mutual respect and understanding.
- ✓ We affirm the right of each person to express thoughts and opinions freely. We encourage open expression within a climate of civility, sensitivity, and mutual respect.
- ✓ We affirm the value of human diversity because it enriches our lives and the University. We acknowledge and respect our differences while affirming our common humanity.
- ✓ We reject all forms of prejudice and discrimination, including those based on age, color, disability, gender, national origin, political affiliation, race, religion, sexual orientation, and veteran status. We take individual and collective responsibility for helping to eliminate bias and discrimination and for increasing our own understanding of these issues through education, training, and interaction with others.
- ✓ We pledge our collective commitment to these principles in the spirit of the Virginia Tech motto of Ut Prosim (That I May Serve).

**Miscellaneous:**

The Center for Academic Enrichment and Excellence offers a tutoring program. Each tutoring appointment is one hour in length, but may be extended if the tutoring schedule permits. Tutoring takes place Monday through Thursday. Additional information concerning this program is available at the web site <http://www.cae.vt.edu>.

You are encouraged to keep up with the course requirements. If you experience difficulties with any software, the course website, other course material, or any other aspect of the course, please let me know immediately so that we can work together to successfully resolve any problems. It is my hope for everyone to have an enjoyable and successful Spring semester!

This course is partly a quantitative course. As with any course of this type, it is essential to keep up with course requirements. If you experience difficulties with the course web site or any other course materials, please let me know as soon as possible so that we can work through any problems together.

If there is some problem that results in you frequently being late for class, leaving early, or not attending class, or having problems with some aspect of the course, please contact me.

**Tentative Course Topics (All Topics and schedule are subject to change):**

<b>Topics</b>	<b>Chapters</b>
Intro to Operations & SCM	1
Quality Management	2
Statistical Quality Control	3
Product Design	4
<b>Exam 1</b>	
Service Design	5
Processes	6
Facilities	7
Supply Chains	10
Global Logistics	11
<b>Exam 2</b>	
Inventory Management	13
Sales & Operations Planning	14
Resource Planning	15
Lean Systems	16
Scheduling	17
<b>Final Exam</b>	