Course Title:  PRODUCTION PLANNING AND INVENTORY CONTROL

Fall 2010 –C- Term

Andrew Roman  
Lecturer  
Ageno School of Business  
GOLDEN GATE UNIVERSITY

Contact Information  
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Telephone:  (650) 361-8140 (my work no.)  
Office Hours:  By Appointment

First Week of class:  October 24, 2010  
Last Week of class:  December 18, 2010

Course Description:
Surveys the design, development, implementation and management of production planning systems, including master production scheduling, aggregate planning, material requirements planning, capacity and inventory planning and production activity control. You will be exposed to contemporary approaches such as just-in-time, theory of constraints and the relationship of enterprise-level planning and control systems to the overall materials flow.

Course Objectives for this 8-Week OP 121 CyberCourse:
After taking this OP 121 course, YOU will be able to:

- Develop and Design a Production Plan and an Inventory Control Management System for your company.

- Effectively analyze MPC data using the MPC concepts, tools, and applications learned in this course.

Additionally, at the conclusion of this course, you will be able to articulate and apply the following tools and techniques:
• The Elements, Processes, and Technologies comprising the field of MPC.
• Demand Management and the MPC environment
• Sales and Operations Planning process in the firm
• Enterprise Resource Planning (ERP) – How MPC Decisions are supported by ERP
• Supply Chain Inventory Management – Independent Demand Items
• Master Production Planning Techniques – BOM structure for the MPS
• Material Requirement Planning (MRP) in MPC – Using the MRP System
• Distribution Requirements Planning in the Supply Chain – DRP Techniques
• Just-In-Time in MPC – Supplier/Customer Coordination supported by JIT
• Capacity Planning and Utilization – Capacity Planning & Control in MPC
• Production Activity Control Techniques -- Theory of Constraints (TOC)
• MPC System Design – Strategy and Options – Integrating MRP and JIT
• The Development and Strategy of Operations and Process Design
• Supply Chain Management and MPC Systems – Supply Chain Optimization
• Implementation Issues in MPC Systems – Integration, Transformation, Benchmarking

**Prerequisites:** OP 100, Is suggested, (but not required)

**Discussion of the background importance for this course:**

Strong global competition affects industries everywhere. With the value of world trade in purchasing materials and services now at more than $2.0 trillion per year, banking, law, data processing, airlines, and consulting services operations are beginning to face many of the same international pressures as manufacturers. Trading blocs such as EU, NAFTA, and the even newer CAFTA further change the competitive landscape in materials and purchasing for both services and manufacturing. Regardless of which area of the world you live in, if you face international competition, the challenge is to produce services or products that can compete on a global market, and to design the manufacturing and materials management processes to back them up. (Krajewski, 8th ed.,)

**Required Materials**


• Various articles/readings may be handed out in class and/or posted on web page.
• Students should try to regularly read current business periodicals, such as the SF Chronicle, SJMN; Business Week; Wall Street Journal, and APICS, the Performance Advantage, so that they can relate and apply the Principles and Tools of
 Manufacturing Planning and Control (MPC) learned in this class to operations and service issues in today’s real world production operations.

**Required Software**

- Any type of word processor
- Power Point
- Excel

**Book Store:**
To purchase course books and materials from eFollett, GGU's official online bookstore, please see the “Important Info” section of this course.

**Golden Gate University Library**

There is a special library portal set-up for operations and supply chain management topics, containing links to major web sites for information. The portal address is: [http://internet.ggu.edu/university_library/opsman.html](http://internet.ggu.edu/university_library/opsman.html).

For remote access to the library, you will need to enter your last name and student ID# (located on the front of your ID card) or Cyber Campus username. Be sure to type in ALL 7 digits of your ID number, including the starting 0. Ex.: 0123456. To configure your browser, go to [http://library.ggu.edu/screens/wam.html](http://library.ggu.edu/screens/wam.html).

**Contacting the instructor**

Email: aroman@mrattech.com
Telephone: (650) 361-8140 (my work no.)
Office Hours: By Appointment

**Course Requirements, Student Responsibilities.**

**A. Topic Research:** Students are required to submit three (3) one-page memos on their choice from any of the course's topics. The research must come from sources other than course materials (publications, web sites, or interviews) and it should add to the understanding of THAT topic. The memo should summarize what you learned from this resource and be submitted during the applicable session's active period. The acceptable memo format is shown in the Overview item in the Cyber Course Home session. Learning will be enhanced by observing or studying how actual organizations plan, implement, and manage MPC for SCM and leverage their 'Manufacturing Planning and Control' for Supply Chain Management. There will be a total of 3 one-page memos describing how MPC for SCM is done in an organization of the student's choice. Students may research a local company and determine and present any of the following:

- How the Supply Chain Inventory Management is done for Independent Demand Items
- Enterprise Resource Planning (ERP) – How MPC Decisions are supported by ERP within a firm
- The Sales and Operations Planning process in a firm
• Material Requirement Planning (MRP) in MPC – Using the MRP System
• MPC integration with other functional groups in the organization
• Just-In-Time in MPC – Supplier/Customer Coordination supported by JIT
• The use of technology in integrating the MPC for achieving best practices for effective Supply Chain Management within a firm
• Implementation Issues in MPC Systems – Integration, Transformation, Benchmarking in the organization

Students may choose, instead to research an organization using existing research sources (a library, the internet, etc.) Students may work alone, or in groups of two.

There will also be a brief book report written up on the supplemental reading book “Why ERP.” The guidelines will be provided by the instructor.

B: Term Project: Students individually will develop a comprehensive MPC design model that maps the current MPC technology applications to a specific industry or organization. Examples of models are contained in the lectures and textbooks. Students should select a model that they understand or develop their own that describes the MPC for SCM competency and supporting technology for future competitive advantage. Students should select an industry of interest that is either product or service-based. It can be specific to one country or worldwide, i.e. the consumer electronics industry in China, the retail industry in Europe, or the grocery industry in the US. The information for the paper will come mostly from outside research; however, interviews with industry knowledgeable personnel are encouraged. The result will be a term paper with observations and recommendations for competency evolution.

Requirements of the term project are:

• Proposal (Session #2): Students submit:
  1. Overview of the industry or organization including major activities, business strategies, primary strengths, and major challenges. This information should come from articles, web sites, personal experience and company reports.
  2. Key sources of information to be used in the research including web sites, publications and interview candidates.
  3. The process model you plan to use as the basis for your research of this industry or organization.

• Project Reports: (Due on Sessions #2, #4 & #6): Students will submit development reports on the model and application examples in the chosen industry or organization. This allows students to study how the topic content is being applied in a real world situation.

• Term Paper: (end of the term): The term paper should be a minimum of 10 double spaced pages, not including the executive summary of no more than 2 pages. The report should include at least five (5) outside references to support the findings and recommendations. The term paper needs to cover these areas:

1. Research = industry and company overview (max. content is 2 pgs unless paper exceeds 10 pgs)
2. Development = model of MPC best practices evolution (max. content is 5 pgs. unless paper exceeds 10 pgs)
3. Application = recommendations for this company/industry suggested by the model (min. content is 3 pgs)
Performance on the term paper project will be judged equally on these five criteria:

1. **Depth of Research**: how complex and complete was the industry information, including major companies and issues.
2. **Development Knowledge**: how complex and complete was the MPC methodology model from the course content.
3. **Application Insight**: how complex and complete were the MPC operations improvement recommendations.
4. **Clarity of the Composition**: how well was the paper organized and written, including graphics and attachments.

**C. Midterm and Final Exam**

There will be one mid-term and a final exam covering reading assignments, course material, assigned discussion questions and end-of-chapter problems.

**Student Responsibilities.**

This course consists of both quantitative and qualitative materials. Students are encouraged to carry out both quantitative and qualitative course learning aspects to have a complete learning experience. Students should attend the on-line cyberclasses regularly; read assigned material; work on practice problems and assignments, learn the material as we cover it, and review it before exams.

**Course Procedure**

For every week, there will be readings, and discussion questions per each chapter to read, analyze, and answer. There will be one midterm, one final exam, three one-page memos, and one term paper. You may follow the weekly material with the Power Point Presentations. You will have assigned readings to be done prior to each class, including the first class. Each week one question discussion will be assigned to lead a debate on a current event focused on ‘MPC for SCM.’ All students are expected to actively participate in the week’s discussion, with frequent original postings. You will also be expected to write-up 3 one-page memo-style reports describing how MPC and Supply Management is done at an organization of your choice.

**Course Evaluations**

Your grade will be made up of a number of components. These include the weekly discussion questions, the problems; and the 3 memo-style one-page papers; the mid-term and final. There will be a 10% penalty for each day that an assignment is late. All the work assigned and due each week must be turned in by the final deadline for each week, which will be each Sunday at 11 PM.

**Grading Policy**

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<tr>
<th>Grading Policy</th>
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<tr>
<td>Weekly DQs and problems</td>
<td>20 %</td>
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<tr>
<td>Midterm</td>
<td>25 %</td>
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<td>The Three Memos</td>
<td>20 %</td>
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<tr>
<td>Term Project</td>
<td>25 %</td>
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<tr>
<td>Weekly debate</td>
<td>10 %</td>
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<tr>
<th>Grade</th>
<th>Skills</th>
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<tr>
<td>A</td>
<td>Contributions are prompt, timely, relevant, self-initiated; remarks are raised freely on all assignments throughout the course; there is no attempt to dominate conversation.</td>
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<tr>
<td>B</td>
<td>Student generally keeps up with the discussion. Needs some prompting to contribute.</td>
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<td>C</td>
<td>Participation is spotty; picks and chooses topics to get involved. Demonstrates little initiative.</td>
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<tr>
<td>D</td>
<td>Some participation, makes relevant remarks</td>
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<tr>
<td>F</td>
<td>No participation</td>
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<table>
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<tr>
<th>Grading</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93% - 100%</td>
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<tr>
<td>A-</td>
<td>90% - 92.9%</td>
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<td>B+</td>
<td>87% - 89.9%</td>
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<td>B</td>
<td>83% - 86.9%</td>
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<td>B-</td>
<td>80% - 82.9%</td>
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<td>C+</td>
<td>77% - 79.9%</td>
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<td>C</td>
<td>73% - 76.9%</td>
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<td>C-</td>
<td>70% - 72.9%</td>
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<td>D+</td>
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<td>D</td>
<td>63% - 66.9%</td>
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<td>0% - 59.9%</td>
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**Instructor Bio**

**ACADEMIC:** Instructor Andrew Roman holds a BSEE and also a BSME (IE) from the University of Toledo; an MSEE from the University of Dayton; and an MBA from San Jose State University Lucas Graduate School of Business, and also currently was just awarded in May 2009 the MS ISE (MS in Industrial and Systems Engineering) degree with a dual major in Supply Chain Engineering, and in Service Systems Engineering, from the SJSU Davidson Graduate School of Engineering. Instructor is also board certified by APICS, holding the CPIM certification, (Certified in Production and Inventory Management,) and most recently has been awarded the newest APICS certification, called CSCP (Certified Supply Chain Professional.) Instructor is also certified by ASQ as a Six Sigma Black Belt practitioner. Instructor is also an adjunct lecturer at SJSU Lucas School of Business in Operations and Supply Chain Management.

**PROFESSIONAL:** Instructor Andrew Roman has over 35 years of high technology industry operations management, marketing and sales, and consulting experience for both domestic and international companies. Currently, (and for the past 15 years)

Most recently instructor has been developing and refining best practices and procedures to be adopted in the implementation of WMS Execution Systems using the latest real time RF Data Collection Bar Code Scanning Systems for Distribution Centers, (DCs,) Warehouses, and 3PL (3d Party Logistics) Services provider warehouses, as well as other private and public warehouses.

**Course Outline**

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<tr>
<th>OP 121</th>
<th>Fall 2010</th>
<th>Course Assignments Plan</th>
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(Syllabus may be Subject to Change with reasonable notice as the course develops)

### Week 1 Date: Sunday Oct. 24th thru Sat., Oct. 30th, ‘10 will be first week of CyberClass, (Your week can start on Sunday Oct. 24th by looking at power point slides, and reading the pre-assigned chapters, Discussion Questions., Problems.) Thereafter each week will start on Sun., and concludes on the following Sat.

**Readings and Pre-assignments:**

- Read Ch. 1: ’Manufacturing Planning and Control (MPC’)
- and also read Ch. 1A: ‘Enterprise Resource Planning (ERP’)
- Write-up Discussion Questions for: Ch. 1: DQ 1 (on p. 10.)
- And for Ch. 1A: DQ 1, 2; and Problem 1 (on pg. 30)

**Topics:**

- The market, economic, technological, and organizational elements that influence MPC system design.
- The detailed MPC issues and functional unit decisions addressed and supported by ERP.

**Learning objectives for Wk1:**

- Master the key MPC system task components and learn how to make them respond to a company’s needs.
- Learn the scope of ERP implementation and know how ERP helps integrate overall company operations.

### Week 2 Date: Sunday Oct. 31st , thru Sat., Nov. 6th, ‘10 Your First “MPC in SCM” Term Paper Proposal Report is due by Sat Nov. 6th 12 Mid.

**Readings and Pre-assignments:**

- Read Chapters Ch. 2: ’Demand Management’
- and also read Ch. 3: ‘Forecasting’
- For Ch. 2: Write up DQ: 1, 2; and do Problem 1 (on pg. 52.)
- For Ch. 3: DQ: 1; (on p. 79.) Do Problems 2, 3; (on p. 79 – p. 80)

**Topics:**

- What role does demand management play in the manufacturing and control (MPC) system? And what are the communications linkages between demand management, other MPC modules and customers? What are the needs for forecast information within the firm; what techniques are useful in generating detailed forecasts?

**Learning Objectives**

- Learn to apply what role does ‘Demand Management’ play in
<table>
<thead>
<tr>
<th>Week 2</th>
<th>for Wk 2</th>
<th>the Manufacturing Planning and Control (MPC) system and how do different manufacturing environments shape the demand management activities?</th>
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<td>- Master what are the most used techniques for intermediate-term forecasts and what are the metrics of forecast quality?</td>
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<td>Week 3</td>
<td>Date:</td>
<td>Sunday Nov. 7th thru Sat., Nov. 13th, '10</td>
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<td>Readings and Pre-assignments:</td>
<td>Read Ch. 4: ‘Sales and Operations Planning’ (S &amp; OP)</td>
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<td>Read Ch. 5: Master Production Scheduling (MPS);</td>
<td>For Ch. 4: DQ: 1, and 3 on p. 147 and Problems 2, on pg. 148 Do DQ.: 1, on p. 171 Probs.: 1 on p. 171</td>
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<tr>
<td>Topics:</td>
<td>The fundamental activities and techniques effective in S &amp; OP The role and need for Master Production Scheduling in MPC.</td>
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<tr>
<td>Learning objectives for Wk 3</td>
<td>- Master what are the fundamental activities in S &amp; OP and what techniques are effective to link S &amp; OP with other MPC Functions.</td>
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<td>- Become skilled at the basic MPS tasks and techniques and how to convert the MPS into a final build schedule.</td>
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<td>Week 4</td>
<td>Date:</td>
<td>Sunday Nov. 14th thru Sat., Nov. 27th, 2010 “MPC in SCM” 2nd Term Paper Progress Report is due by Sat. Nov 20th, 12 Midnight.</td>
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<td>Readings and Pre-assignments:</td>
<td>Read Ch. 6: Material Requirements Planning (MRP) (28 pgs.) Write up DQ: 1, (p. 210) and do Problem: 1, (p. 210) Read Ch. 7: Capacity Planning and Management (25 pgs.) Answer DQ: 6, (p. 266;) Do Problems: 1, 2, 3; (p 266 -- 267 )</td>
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<td>Topics:</td>
<td>Understand where MRP fits into the overall MPC system framework and how it is related to other MPC modules. Discover the role of capacity planning in MPC systems and how capacity is managed in various manufacturing environments.</td>
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<td>Learning objectives for Wk 4</td>
<td>- Learn how to produce the basic MRP record and how to use it</td>
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<td>- Master how to estimate capacity requirements and practice effective CRP techniques for managing capacity utilization</td>
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<td>Week 5</td>
<td>Date:</td>
<td>Sunday Nov. 21st, thru Sat., Dec. 4th, 2010 “MPC in SCM” (Also this is the week of the Midterm Exam)</td>
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<td>Readings and Pre-assignments:</td>
<td>Read Ch. 8: Production Activity Control (PAC) (21 pgs.) And Write Up DQ: 4, 8; (p. 294) P 2, 5, (p. 295 - 296) Midterm Exam covering the material of the first 4 weeks.</td>
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<td>Topics:</td>
<td>Recognize how PAC relates to other aspects of MPC and the basic concepts and models used for shop-floor and vendor scheduling and control</td>
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<td>Learning objectives for Wk 5</td>
<td>- Master how to design and implement PAC system in several different kinds of production environments.</td>
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<td>Week 6</td>
<td>Date:</td>
<td>Sunday Nov. 28th, thru Sat., Dec. 4th, ’10 --- “MPC in SCM” 3d Term Paper Progress Report is due by Sat. Dec. 5th,12 Midnight.</td>
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<td>Readings and Pre-assignments:</td>
<td>Read Ch. 9: Just-In-Time (JIT) (18 pgs.) Write up DQ: 1, (p. 354) and do Problems: 1, 2; (p 355) Read Ch. 11: Order Point Inventory Control Methods (21 pgs.) Write up DQ: 3, 4 on p. 440; Do Prob. 1 on Pg. 440</td>
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<td>Topic:</td>
<td>Master the basic principles of JIT and learn how to apply them.</td>
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Controlling independent demand inventory management in MPC.

### Learning objectives for Wk 6
- Become skilled at being able to apply JIT’s key features and how to control their impact on MPC systems
- Understand what are the functions of independent demand inventory management and how to implement routine inventory decision and how performance is measured.

### Week 7
**Date:** Sunday Dec. 5th, thru Sat., Dec. 11th, 2010
The Third One-Page Memo is due by Sat. Dec. 11th, 12 Mid.

**Readings and Pre-assignments:**
- Read Ch. 10: *Distribution Requirements Planning (DRP)* (22pgs) Write up DQ: 1, on p 380; and do Problem: 3 on p. 382
- Read Ch. 10A: *Management of Supply Chain Logistics* (20 pgs) Write up DQ: 1 on p. 417 and do Problem 1 on p. 417

**Topic:**
- How DRP works with the MPC system and how it is used to manage the demand and supply of field inventories for SCM
- What is the scope of Logistics Management in Supply Chains, and how do Logistical decisions influence other MPC decisions

### Learning objectives for Wk 7
- Master how DRP works in an actual firm and implement DRP into the MPC system to meet Supply Chain needs.
- Recognize what are the primary logistical activities and tasks required in moving material in the Supply Chain

### Week 8
**Date:** Sunday Dec. 12th, thru Sat., Dec. 18th, ’09 (Last Week of Class)
Your final Term Paper is due by Thur., Dec. 16th, 2010

**Readings and Pre-assignments:**
- Read Ch. 12: *Strategy and MPC Systems Design,* (25 pgs.) Write up DQ: 4 on p. 465; and do Problem 3 on page 466
- Read Ch. 12: *Strategy and MPC Systems Design,* (25 pgs.) Write up DQ: 4 on p. 465; and do Problem 3 on page 466

**Final Exam covering the material of the second 4 weeks.**

**Week 8. Date:** Sunday Dec. 12th, thru Sat., Dec. 18th, ’09 (Last Week of Class)
Your final Term Paper is due by Thur., Dec. 16th, 2010

**Readings and Pre-assignments:**
- Read Ch. 12: *Strategy and MPC Systems Design,* (25 pgs.) Write up DQ: 4 on p. 465; and do Problem 3 on page 466

**Topic:**
- Be aware of how to choose your MPC design options and their tradeoffs to best support achieving your corporate strategy and making it fit with your Production Process Design for the SC

**Learning objectives for Wk 8**
- Balancing critical alternatives in designing an MPC system to meet a firm’s evolving needs for their Supply Chain Management.
- Managing the key implementation issues for integration of MPC systems within your company to effectively focus on improving you competitiveness across the Supply Chain.
EXAMPLE MEMORANDUM

October 24, 2010

To: OP 121 Students

From: Andrew Roman

Re: One-Page Memos

Your writing matters. Clearly, as a student your ability to express your ideas in writing influences your success in many of your courses, and will especially effect your outcome in this course. However, in your working career, writing is even more important. Executives judge a manager’s competence based upon their writing skills. Lucid and persuasive writing will magnify your abilities and enhance your reputation in your current or future organization.

In many business organizations, the one-page memo has become an art form. Because of both a overage of information and shortage of time, complex ideas must be presented quickly in strait forward manner. Ed Harness, former CEO of Procter & Gamble put it this way:

“The one-page memo isn’t just a training exercise at P&G. We use it as an integrated tool for decision making. Important decisions are usually based upon input from many different parts of the organization, and the one-page memo forces managers to think concisely, separating fact from opinion.”

In this OP 121 class, you will be asked to perform topic research and review literature and present these reports in the form of one-page memos. In evaluating the memos, four criteria are used:

1. Following directions - Make sure you write in memo style, address it to the assigned recipients, and start off with your recommendation early in the memo so that the busy executive can glean the key points.
2. Analysis - Have you identified the key issues in the case and are appropriate theories and concepts applied in the analysis of these issues? Is your interpretation supported by facts from the case? Is your argument logical?
3. Clarity - Is the writing clear and concise? Is there a statement of your recommendations at the start and a summary of your justifications at the end? Is there a logical flow to the argument?
4. Presentation - Are there errors in spelling, typing, grammar, or punctuation? Is the memo professional in appearance?

As the name implies, the analysis section of these one-page memos are to be 1) a maximum of one page in length, 2) single spaced, and 3) no smaller than 10
point font. You are allowed to include an attachment that presents the facts arranged in a table format on a second sheet.

The syllabus indicates the dates the one-page memos are due, the cases the memos cover and the issues to be analyzed. All memos are due at the beginning of the class period in which they are assigned. We will be discussing these in class so if you wish to refer to your memo during class discussion, you will need to make a copy for yourself.

Writing can be a painful learning process, but if you are serious about a successful career in business, it is vital that you master the ability to write clearly. This course requirement is designed to help you sharpen your skills in this difficult, but essential craft.

**POLICY ON PLAGIARISM**

Please note the following excerpt from Chapter 4 of the GGU Student Handbook:

*Golden Gate University requires that students be honest in their academic work. Academic dishonesty is viewed as an ethical issue and the violation of the principles expressed in the University's Statement of Educational Mission. It defrauds all those who depend upon the integrity of the University, its courses, and its degrees.*

*Faculty are responsible for making every reasonable effort to foster academic conduct. In every course, students shall be told what constitutes cheating and plagiarism, and appraised of permissible procedures in class work, written assignments and examinations. Examinations shall be appropriately monitored to prevent students from copying of exchanging information, and examinations and answers to examination questions shall be secured in such a way that students cannot have prior access to them. Students shall be clearly told what plagiarism is, and how to avoid unintentional plagiarism by carefully following accepted scholarly practices - accurately recording sources of materials to be cited, quoted, paraphrased or summarized, and acknowledging these sources in footnotes or by the use of direct quotes.*

*If a faculty member, test administrator or proctor believes that there is evidence of academic dishonesty on the part of a student or group of students, it is the person's responsibility to take action in accordance with University policy.*

GGU's Library's home-page has useful links, including "Writing and Presenting" and "Citing Sources", so our students should not be permitted to claim "ignorance of the law"--as the old saying goes, should be no excuse.

There is a brief web tutorial for students on how to avoid plagiarism. Its focus is to prevent them from accidental plagiarism but it may be of interest:

[http://www.ggu.edu/university_library/research/citing_sources/avoiding_plagiarism](http://www.ggu.edu/university_library/research/citing_sources/avoiding_plagiarism)
Research and Documentation:

6 Free Resources (Live and Online) for GGU Students

1. For detailed information on using and citing sources using APA, MLA, and other styles, consult A Writer's Reference by Diana Hacker, the textbook used in GGU English composition classes, available in the GGU Bookstore, or consult the free website http://dianahacker.com/writersref/resdoc.html

2. The University Library’s web site offers a wealth of information to guide you through the research process. Resources include a sample research paper and detailed information on evaluating and citing sources. Available at http://internet.ggu.edu/university_library/

3. An online tutorial, Core Research Skills, is designed to help you find, evaluate, and use library and online sources in your projects and papers. In every step of the tutorial, a reference librarian is available to help with specific research needs and questions. The tutorial is free and can be accessed at http://www.ggu.edu/cybercampus/FreeDemo

4. At the Writing Center, located in Room P-25 at the San Francisco campus, you work one-on-one with experienced writing tutors (most of them GGU instructors) who are familiar with the types of writing assignments common in GGU courses.

5. The Online Writing Lab (OWL) offers online writing help to GGU students. OWL tutors help you solve specific problems in the work you submit, and guide you through the writing process. The OWL is available at http://www.ggu.edu/academic_programs/division_general_ed/english_communications/online_writing_lab

6. Ask your instructor about Turnitin.com. Turnitin helps you avoid unintentional plagiarism. When you submit a paper to Turnitin’s website, it searches 4.5 billion pages of web and printed sources, documents any matches, and give you the source for each match. You can then be sure your sources are properly documented. Any instructor can set up Turnitin for his or her students to log in to. In addition, Turnitin’s homepage has research resources available to anyone at http://www.turnitin.com without logging in.

Documenting Sources:

Just 4 Rules

1. For short passages (usually under 40 words) quoted word for word, put the quoted material inside quotation marks (like this is), and provide the author, date, and page number in parentheses right after the quotation (Jones, 1999, p. 76).

2. For longer quotations, instead of quotation marks, the quoted material gets its own paragraph, and the entire paragraph is indented (given wider margins than the rest of the paper, like this paragraph). Then the author, date, and page number appear in parentheses at the end of the paragraph, and outside the last period. (Jackson, 2003, p. 229)
3. If you use material from another source but change the wording (called paraphrasing), give the author and date in parentheses (Jones, 1999).

4. At the end of the paper, give full bibliographical information for all your sources on a page called References. There are different styles for documenting sources. GGU recommends the APA style, which is used in the social sciences. An instructor, however, may require another style, so ask. APA references (for a web site, book, and journal article) look like this:

References

