

**Term:** Spring 2006 – Updated 01-09-06

**Section:** Monday and Wednesday Evenings 6.00 – 7.15; Building 42, Room 2124  
7.30 – 8.45; Building 42, Room 2124

**Course Number:** MAN 6726

**Course Title:** Advanced Strategic Management and Business Policy

**Catalogue Description:** An analysis of how the enterprise evaluates, allocates, and deploys the various resources that it controls in order to develop and achieve its integrated strategic objectives.

**Course Pre-conditions** Last semester of MBA course work and **3.0 graduate program of study entering GPA**

**Instructor:** Dr. Steven Williamson [swilliam@unf.edu](mailto:swilliam@unf.edu)  
Office: 42/3127  
Office hours: by appointment  
Phone: 620-1347

**Required Text:** Sun Tzu: The Art of War (on-line) – <http://www.sonshi.com/learn.html>

**Capstone Business Simulation Team Member Guide** – is available only from Dr. Williamson. Students must register and pay on-line. This will be thoroughly covered in class.

**Home Page:** You will find a great deal of helpful information located on my home page – <http://www.unf.edu/~swilliam/>  
The files can be accessed using Acrobat Reader 5.0 or higher.

**Course Content:** *MAN 6726 will be presented in a manner that is consistent with the Hydra Strategic Analysis and Planning Model, which provides a framework for strategic analysis and planning. The model combines and integrates many strategic concepts that are applicable to all organizations. The Model may be found on Dr. Williamson’s Home Page under Class Notes Folder.*

**Procedure:** Classes will be conducted primarily on a seminar basis. All students are expected to be prepared for class and to be active participants in class discussions. **CLASS ATTENDANCE IS REQUIRED.** Three or more contiguous absences without instructor notification will result in a grade of F.

**Grading:** Your final grade will be based on the class assignments.

|              |            |                            |                   |
|--------------|------------|----------------------------|-------------------|
| 90 and above | = A (in %) | In-class CapSim exam       | 50                |
| 80 - 89      | = B        | CapSim Team Results        | 30                |
| 75 - 79      | = B-       | CapSim Strategy Evaluation | 20                |
| 65 - 74      | = C        | Team Article Reviews       | 15                |
| Below 65     | = F        | Individual Article Reviews | 15                |
|              |            | TH Exam                    | 30                |
|              |            | ETS Exit Exam              | 20                |
|              |            | Final Team Peer Evaluation | <u>20</u>         |
|              |            | <b>Total</b>               | <b><u>200</u></b> |

#### CapSim Objectives

**and Learning Outcomes:** CapSim is an integrative business simulation game. The objectives of the CapSim requirement both mirrors and reinforces the overall course objectives. There are five primary objectives.

- To teach the importance of learning and then adhering to the rules and constraints of the game.
  - Learning success is measured by exam score, simulation performance, and strategy evaluation.
- To teach the integration and reciprocal nature of business decisions
  - Learning success is measured by simulation performance, and strategy evaluation.

3. To teach the linkage between strategy development, strategy implementation and organizational performance.
  - Learning success is measured by simulation performance, and strategy evaluation.
4. To require the application and integration of functional business course related skills to make decisions in relation to an interactive and dynamic enterprise environment.
  - Learning success is measured by simulation performance, and strategy evaluation.
5. To interact and work effectively in a team environment
  - Learning success is measured by simulation performance, strategy evaluation, and peer review.

**CapSim Business Simulation:**

100 points of the total 200 points are directly related to the CapSim Business Simulation. 50/100 are associated with the CapSim Exam while 30/100 are associated with your team's CapSim performance 20/100 are associated with the evaluation of your strategy development and deployment.

**CapSim Exam:**

Your in-class CapSim exam will consist of about 75 objective questions, most of which will be multiple-choice. It is designed to test your knowledge of the CapSim simulation and rules. You must have a complete understanding of the simulation to pass this exam; a general knowledge will not get you through. If you fail to thoroughly prepare for the CapSim Exam, you put yourself in danger of not graduating. A score below 80 percent on the CapSim exam significantly reduces your chance of an A in this class and a score below 60 percent automatically eliminates any chance for an A begins to jeopardize a B.

**CapSim Business Simulation Results:**

Three practice decision periods and eight official game decision periods have been scheduled. In the event that the games parameters change, additional decision periods may be added to the simulation without prior notification to you. Thus, team strategy should be view the firm as an on-going concern. The six teams within the industry will compete for the maximum of 30 points allocated to this simulation. Please note that a portion of the CapSim standings is cumulative and a poor start can have a lingering effect. Being part of a non-performing team will negatively influence individual grades. Please keep in mind that results, not efforts, are rewarded.

**CapSim Strategy Evaluation:**

Initially, (i.e., before the first round) you must create an "End Game" Objective for your Simulated Firm.  
First Round – Pre-Decision:

1. Develop competitive strategy to achieve End Game.
2. Create annual objectives for achieving strategy (how to support strategy) before making decisions.
3. Indicate how each decision supports objectives.

2<sup>nd</sup>-8<sup>th</sup> Pre-Decision:

1. Indicate level of success achieved for each objective from previous round.
2. Evaluation of performance results from previous round.
3. Evaluate competitive strategy's progress toward achieving End Game.
4. Create annual objectives for achieving strategy (how to support strategy) before making decisions.
5. Indicate how each decision supports objectives.

Final Review 8<sup>th</sup> Decision Post-Decision

1. Indicate level of success achieved for each objective from previous round.
2. Evaluation of performance results from previous round.
3. Evaluate competitive strategy's progress toward achieving End Game.

Reports are submitted weekly during the game via [www.turnitin.com](http://www.turnitin.com) and the final report that must include all reports previously submitted to turnitin will be submitted in a hard copy format for grading. Feedback will not be provided to individual teams regarding their CapSim strategies. However, a direct relationship seems to exist between a team's completeness on their strategy reports and their CapSim team performance.

**Article Analyses:**

Your team will read, analyze, and present one article per team member on Strategic Management during the semester. If a team has 5 team members, that team will have an assignment of 5 articles. Each team member

should be assigned primary accountability for analysis and presentation of one article. The designated team member will receive an individual grade for the analysis as well as the composite grade for the assignment. Each analysis will be graded for article selection, content (answering the required questions) and context (grammar, structure, and preciseness). It is imperative that you write well to receive a passing grade on all written assignments. **All grading formulas and methods will be clearly explained.** All assignments must be written utilizing APA format or the “Student Paper Typing Instructions” that can be found on my home page and comply with the “Written Communications Requirements” section of this syllabus. The final product of each written assignment will include one hard copy of the article analysis and a copy of the article itself. The analysis also must be submitted to [www.turnitin.com](http://www.turnitin.com). Please insure that your team only transmits one copy to turnitin. Please utilize 1 inch margins top, bottom and right and a 1.5 inch margin on the left. Use an eleven (11) point Times Roman font. Each written analysis should be no more than 3 single spaced pages, not including the cover page. The seven underlined terms in the required questions should be utilized as headers for your analysis. The cover page should identify the article, the team, team members, and date due. Begin each analysis with the article’s **APA Reference Page citation. Article analysis is due the evening of presentation.**

**Article presentations** are to be informal – no dress-up, no PowerPoint, and team is to remain seated at normal seats, however, Presenting team should provide a one page summary handout to the class at the time of presentation. Each presentation, including questions should take no more than about 15 minutes.

#### **Required Questions:**

1. What is the author’s **intent** in writing this article?
2. What is the author's **basic argument**?
3. What are the **key relationships** the author describes and/or examines? What is the **theory** underlying these relationships?
4. If applicable, describe the **methodology** used. Based on the author’s intent, was the chosen methodology appropriate? What other method might have been chosen?
5. Summarize the **findings and / or conclusions** of the article.
6. Evaluate the **usefulness** of this article to scholars? managers? students? Could it have been made more useful? As a practitioner what can you take away from this article that you can incorporate into your philosophy of strategic management or in other words – what did you learn from this article that you could employ as a consultant?

#### **Article Selection:**

Each team will be expected to select the appropriate number of articles for approval. No more than one article may be selected from any given topic area. Each topic area covers multiple topics; your selected article may address any aspect of the topic.

1. Mission, vision, guiding principle, corporate values
2. Evaluation of Performance
3. External Environmental Approach (SWOT) , Resource Based View (RBV),
4. Competitive Advantage, Core Business
5. Product positioning, Product or Customer Profitability, Target Markets,
6. Portfolio Analysis of Strategic Business Units or Product Lines
7. Implementation of Strategic Plans
8. Corporate Governance and Boards of Directors, Executive Compensation

Approved Journals – Academy of Management Review, Academy of Management Journal, Academy of Management Executive, Journal of International Business Studies, Journal of Management, Strategic Management Journal, California Management Review, Sloan Management Review, Journal of Marketing, (others by permission)

Each team must select one article per team member and submit a formal request – Your request will include the topic area covered by each article, and the article’s Reference Page citation, and identify the accountable team

member. The request will need a cover page with your team information – i.e., the names of your team members. A simple grading structure of outstanding =3, acceptable = 2, unacceptable =1, missing =0 will be used to grade the article reviews. Research notes are not articles, and the Harvard Business Review isn't a Journal. In order to receive an outstanding for any article review, everything including your article selection must be outstanding.

**Exit Exam:** You will take the ETS MBA Exit Exam. You must register for your desired test date on BB – each date is limited to the first 35 that register. The dates are:  
Friday, March 10, 4.00 – 7.30 P.M.  
Friday, March 17, 4.00 – 7.30 P.M.  
You must go to the following ETS web sites:  
<http://www.ets.org/hea/mft/index.html> -- this site prepares you for the mechanics of the on-line exam.  
<http://ftp.ets.org/pub/corp/hea/ContMBA.pdf> this site introduces you to the exam questions and strategies.

### **Written Communication**

**Requirements:** Written Assignments will be graded for content and context. It is imperative that you write well to receive a passing grade on all written assignment (excluding in-class exams). **Grading formulas and methods will be clearly explained.** All written assignments must be written utilizing APA format. For APA format assistance, please refer to the *Publications Manual of the American Psychological Association* (available at the [University Bookstore](#)) or your [Student Typing Instructions \(STI\)](#). Where conflict exists, always utilize the instructions most specific to the assignment – for instance, the STI and APA require double spacing, but the article analysis instructions require single spacing – that assignment should be single spaced. The final product of each written assignment will include one clean copy of the research paper, case study, and/or article analysis. At a minimum, research products and case analyses (article analyses do not require the following) shall include a Release/Statement of Authenticity, a Table of Contents, an Executive Summary or Abstract, a Reference Page and the approved Research Proposal. Copies of all references cited in the paper/case **must** accompany the paper as an Appendix. Along with the paper copy of the final product, an electronic copy must be submitted to [www.turnitin.com](http://www.turnitin.com). Please register with [www.turnitin.com](http://www.turnitin.com) as soon as possible. **The class ID for this course is 1437072 and the password is spring06.** All assignments either should be stapled or clipped together. As an additional note, for your final exam, do not begin new sections of your exam on a new page. Only the Title and Reference pages belong on separate pages and neither of these will count toward your total.

### **Oral Communication**

**Requirements:** All students are required to make an oral presentation of their team's research findings or to lead a discussion of an article analysis. The in-class presentations will be informal in nature.

**Computer Applications:** Students must be proficient with statistical and spreadsheet packages for data analysis as well the web for [library research](#). Students must also utilize [Blackboard](#) and my home page <http://www.unf.edu/~swilliam/>

**Library Assignments:** **All research projects require library research.**

### **Team Participation and Contribution:**

I will utilize the team peer evaluations to award the 10 percent of your grade assigned to peer evaluations on the following basis: a mean average of 5 from those evaluating you would be multiplied by 4, thus equaling the 20 point maximum. In addition, teams are established through a self-selection process, the Professor is not King Solomon – There will be no professorial mediation of differences among team members. Select your teams carefully. I have witnessed lazy teams that drag an individual down and lazy individuals that rely on motivated teams to get through. Do not accept someone as a team member if you don't trust them to deliver on their work. Any team member that receives fewer than 60 percent of the points awarded for the peer review also will receive only that percentage of the points awarded for group assignments. There is no appeal process for participation grades. If you have questions, ask now.

### **Non-graded Requirements:**

You are required to submit [a final team peer evaluation](#). You are required to take the **MBA Exit Exam** and you are required to [complete your personal Blackboard Home Page](#) which includes uploading a recent picture of yourself. Finally, you are required to participate in professor initiated threaded class or team discussions. Failure to submit, complete, or participate in the above requirements by the stated deadlines will result in the loss of 5 points from your Final point total for each item not submitted.

### **Make-up Exams:**

Students may petition to be allowed to take a make-up exam. The petition must take the form an e-mail to the professor in which the reasons for needing the make-up exam are clearly stated. At the discretion of the professor the petition may be granted and the student permitted to take an appropriate make-up exam at the

convenience of the Professor.

## **Class**

**Attendance:** **Class attendance is required.** The Professor expects to be notified in writing (e-mails are preferred) as to the reason for all absences. Three or more contiguous absences without instructor notification will result in a grade of F.

## **Blackboard**

**Communication:** A “Blackboard Web Resource” page has been established for your class. The web address is <http://blackboard.unf.edu/>. I will post assignments and announcements on Blackboard from time to time. **You are accountable for checking Blackboard assignments.** All assignments posted on Blackboard should be considered the same as an assignment made in the classroom. You also will be required to utilize Blackboard for sharing information and threaded discussions.

**The professor will utilize the Blackboard e-mail function for contacting you. Thus, it is imperative that you either check your UNF e-mail on a regular basis or have your [UNF e-mail](#) forwarded to an e-mail account that you do check on a regular basis. You can find a link on my home page. Insuring you receive your e-mail communication is your responsibility.**

## **International Issue**

**Coverage:** The equivalent of one week will be dedicated to the discussion of international issues.

## **Environmental Issues Coverage:**

The equivalent of one week will be devoted to the discussion of the environment’s effluence on business and business decisions. See Hydra notes.

**Ethical Issue Coverage:** The equivalent of one class period will be dedicated to the discussion of ethical issues, however are students expected to field questions on ethical issues on all topics at all times. In addition, ethical concepts will be the foundation of much of our class discussion.

## **Academic Integrity:**

Exams are for the purpose of evaluating individual understanding of course material and the ability to communicate that understanding. Therefore, it is essential that everyone take his or her exam without assistance (i.e., cheating will not be tolerated). In addition, plagiarism, in any form, will not be tolerated. If there is any doubt as to what constitutes plagiarism, please review the definition at [www.turnitin.com](http://www.turnitin.com). All required research is expected to be original in that no recycled papers/topics from other classes are acceptable. Students are expected to adhere to the UNF code of conduct.

## **Important Notice:**

MAN 6726, “Advanced Strategic Management and Business Policy,” is the Capstone Course for the Coggin College of Business. In addition, a C is considered a passing grade in this course as it is in all other courses, however, you must have a 3.0 Program of Study GPA to graduate.

## **Weather or Disaster Event Policy:**

In the event that Jacksonville should become subject to a “weather event,” such as a Hurricane Warning (not a “watch”) or ice-storm, or total power blackout, you should consider this class as cancelled. If there is any uncertainty in your mind regarding class status, please check your class Blackboard for an announcement. All class cancellations will be posted on Blackboard. If any class assignment is missed due to a “weather event,” the assignment will become due one week (seven days) later.

## **Wall Street Journal:**

Each student enrolling in one or more Coggin College of Business (CCB) courses numbered 3000 is expected to read the Wall Street Journal

If you have a disability, as defined by the Americans with Disabilities Act (ADA), which requires a classroom accommodation or auxiliary aid(s), please inform one of us of your needs during the first week of class so that the appropriate action can be taken. You should also notify the Office of Disabled Services Programs at 620-2769 concerning any needs you may have.

As of Fall Term 2001, all UNF students are generated an Osprey email account. Students can find out their email account username, reset their password to the default, and set forwarding by visiting this link: <http://www.unf.edu/compserv/info/osp-acct.html>.

**Hydra Strategic Analysis and Planning Model** (outline)  
The Hydra Notes can be found under MAN 6726 at [www.unf.edu/~swilliam](http://www.unf.edu/~swilliam)

- Vision
- Values (If delineated, the strategic plan must also be consistent with values)
- Mission
  - Determine Firm's Current Performance level (ROA, EVA, Net Income, Profit Zone, Financial Evaluation to determine Firm's survival potential, Market Share and Market Share Movement by product/s and/or product line/s, Market Penetration, Customer Satisfaction Rating, Materials/Labor Scrap Rates). **In many cases the appropriate measures must first be determined before the current performance level can be measured.**
  - Identification of Current Strategy through Analysis of Strategic Thrusts and Projects (identification of all special and significant uses of resources designed to increase revenues or decrease costs)
  - Identification of **Value Creation** and Production Process/es
  - Internal Resource Audit of Human, Physical, and Organizational (capabilities and social) resources evaluated on a VRIO bases: Valuable, Rare, Imitable, Organization (exploitation)
  - Identification of Core Competencies, Core Business, Core Technology, and Non-core Resource Inefficient Candidates for Outsourcing
  - Identification of Current Business Strategy by product/s or product line/s
  - Identification of Product Positioning Strategy
  - Product/s or Product Line/s Profitability Analysis
  - Product/s or Product Line/s Consumer Motivational Analysis (Product, Price, Place)
  - Industry Structure, Conduct, Performance Analysis
  - Industry Life Cycle Analysis and Inherent opportunities
  - External Opportunities and Threats Generated from the Task and General Environment; Porter's Five Forces
  - Industry Attractiveness/Business Strength Matrix Analysis
- Determination of Desired State
- GAP Analysis
  - Specific Strategic Action Plan to Eliminate GAP
    - Restructuring the organization and decision authority as required
    - Redistribution of resources as needed
      - Tying resources to mission accomplishment
      - Resource allocation approaches
      - Process of resource reallocation
      - Implement cornerstones outsourcing model
    - Recommended Actions require resource budget
      - Approaches to budgeting
      - Budgeting for all levels of the organization
      - Managing the budget process
      - Including the proper incentives in the budget
    - Compensation plan developed to reinforce strategic plan
      - Make managers into owners B Risk
      - Determine which form of ownership is appropriate
      - Determine how the plan is to be administered
- Implementation through Operationalization of Strategic Plan
  - Every departments' and individuals' goals are spun directly off accomplishing strategic plan
- Continuous Evaluation and Adjustment

**SYLLABUS**  
**Spring 2006**

ECO 6415  
Decisions with Data

Dr. Mina Balamoune-Lutz  
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<http://www.unf.edu/~mbaliamo>

**1. OFFICE HOURS**

Tuesday and Thursday 9:30-12:00; other times by appointment. Walk-ins are acceptable.

**2. REQUIRED TEXTBOOKS AND OTHER READINGS**

- Keller, Gerald, *Statistics for Management and Economics*, 7th. Ed. (Albany, NY: Duxbury, Thomson Learning, 2004). This is the main textbook in this course.
- Anagnoson and DeLeon, *StataQuest 4*, 1997. ISBN 0534521371
- Wall Street Journal (WSJ).

**Please note:** CCB is a *Wall Street Journal* Partner School. Each student enrolling in one or more Coggin College of Business (CCB) courses numbered 3000 or higher is assessed a \$15 fee during each fall and spring semester. The fee is just \$15, regardless of how many CCB courses the student takes. The fee is assessed at the same time and in the same manner as all other UNF fees, and the student pays this fee when he/she pays his other tuition and fees. In return, each student is able to pick up a copy of *The Wall Street Journal* (WSJ) from locations within the College. Moreover, each student will receive access to all of the WSJ's on-line editions (e.g., European, Asian), as well as the *WSJ Employment Edition* and *Barron's*. Access to these publications is free during summer terms for students enrolled in these courses. Students who already have personal subscriptions can have the WSJ refund those dues. For information on that process, as well as more about CCB's partnership with the WSJ, please visit <http://www.unf.edu/ccb/wsj.htm>.

**3. PREREQUISITES**

Graduate Standing in the Coggin College of Business.

Since we will be using computers, students are expected to have a working knowledge of popular microcomputers. Students are also expected to have an understanding of basic business vocabulary and a good knowledge of algebra.

**4. COURSE OBJECTIVE AND APPROACH**

The main objective of this course is to provide the skills that will enable the student to successfully make business decisions and analyses using data. Upon successful completion of this course, students should be able to:

- a. Understand tests based on Chi-square distribution and how to apply them
- b. Use simple and multiple regression in a variety of contexts
- c. Perform inferences and testing based on regression results
- d. Do time series analysis and forecasting
- e. Understand the applicability, limitations, and appropriateness of the statistical/econometric tools for various kinds of business cases.

I will use lectures as well as applications and discussions. In addition, this course makes extensive use of computer applications. Students are encouraged and expected to participate in class discussions. Concepts and techniques learned in class are also applied in the research projects and other assignments.

**5. GRADING**

There will be three (3) exams, a 3-to-5 person research project, class participation/attendance, and several homework assignments. Exams I and II are in class exams. Exam III is a take-home exam. Exams carry equal weight (20 % each). The research project contributes 25% to the final grade. Participation, homeworks (other assignments) and attendance contribute 15%. Obviously, poor attendance lowers the participation grade. Frequent tardiness will be treated as poor attendance. The participation score for a missed class is zero.

Letter grades will be assigned as follows:

|         |                |              |                |
|---------|----------------|--------------|----------------|
| 95 –100 | A              | 76 – 79      | C <sup>+</sup> |
| 90 – 94 | A–             | 70 – 75      | C              |
| 86 –89  | B <sup>+</sup> | 60 – 69      | D              |
| 85      | B              | 59 and below | F              |
| 80 – 84 | B <sup>-</sup> |              |                |

## 6. PEER-LEARNING GROUPS

Students must form peer-learning groups (PLGs). Each PLG will consist of a minimum of 3 and a maximum of 5 students. PLG members work together on homework assignments and projects in this course throughout the semester. PLG members must designate a group leader who will be responsible for communicating with me on PLG-related work and issues. This will enhance efficiency and communication in the course. Needless to say that students are also welcome to talk to me individually. Students are encouraged to start forming PLGs during the first week of classes.

By the January 24, PLG leaders must e-mail me the list of members in their respective groups, each member's name and e-mail address, each member's educational background (business, engineering, health, accounting, etc.) and current professional activity (type of industry). In previous semesters, most research projects conducted by students involved data related to their professional activity. In addition to the obvious benefits to the student who brings the data and uses the project to tackle important issues at his/her workplace, teaming up with students with full time professional activities provides an excellent opportunity for other PLG members to benefit from the experience by studying these issues and learning about industries and activities in Northeast Florida, in general, and Jacksonville in particular.

## 7. ASSIGNMENTS

Students are expected and encouraged to complete assigned readings prior to class. The take-home exam, homeworks and projects are to be turned in by the due date. There will be no make-up for missed exams, unless the student has a valid and verifiable excuse. Unless specified otherwise, all assignments associated with this course must be handed in as hard copies. E-mails, faxes, or other electronic formats will not be accepted.

## 8. GROUP PROJECT

Students will perform multiple regression estimations using data from their professional activity (if working) or from other sources. Students using other sources are strongly encouraged to use financial data from the Wall Street Journal. More details will be provided after we cover regression analysis.

Groups must submit a proposal identifying the topic and the variables to be included in the project, and the source of data by March 16.

For cross-sectional data, use at least 4 independent variables and at least 40 data points (observations). For example, if you start with 5 independent variables you should have at least 50 observations; if you start with 6 independent variables you should have at least 60 observations; and so on. For time-series data, use at least 50 observations and 2 independent variables.

The project has two parts: (1) A 20-25 minute class presentation (everyone in the group must be able to present the work). (2) A written report. The paper must be typed and presented in no less than 4 and no more than 8 double-spaced pages (excluding references, tables and appendices), 12PT font, and one-inch margins (top, bottom, left and right).

The following are requirements for the completion of a good research project for this course.

- a. Explain why you have selected the independent (explanatory) variables.
- b. Correct for any econometric problems (multicollinearity, heteroscedasticity, etc.) and show how you performed the correction.
- c. Discuss the overall significance of the model.
- d. Discuss and analyze the impact of changes in each of the explanatory (independent) variables on the dependent variable.
- e. Make recommendations with regard to the findings and implications of your model.
- f. Perform a forecast for the dependent variable. If you are working with time-series data forecast at least two (2) periods in the future. If you are working with cross-sectional data perform a forecast at the means of the explanatory variables

## **9. TIME SERIES ANALYSIS AND FORECAST – GROUP ASSIGNMENT**

PLGs must collect daily data from the Wall Street Journal on the value in US Dollar of a foreign currency from the following list of countries (or regions):

**Euro Zone, Great Britain, Japan, Australia, Canada, Switzerland, New Zealand, Norway, Sweden, Russia, South African, Egypt, Mexico, Chile, Peru, Argentina, Brazil, Singapore, and South Korea.**

Data must be for the period January 16- April 14, 2006. This assignment contributes one third of the participation/homeworks/attendance grade (or 5% of the overall grade for this course).

## **10. ORAL COMMUNICATION REQUIREMENTS**

Oral communication skills will be demonstrated through presentation of the research project and class participation.

## **11. INTERNATIONAL COVERAGE**

As markets become more global, understanding how business is conducted in other countries becomes increasingly important. We will use many examples and problems that deal with global issues. I will also use international data from my empirical research on some macroeconomic variables, as well as international data from other sources, to illustrate the behavior of certain time series in developed and developing countries.

## **12. WRITTEN COMMUNICATION**

Written communication skills will be demonstrated through interpretation of the results in the take-home exam, and in the research reports.

## **13. CLASSROOM PROTOCOL**

Disturbance of **any kind** is not acceptable.

## **14. ACADEMIC INTEGRITY**

"UNF places high priority on and strives to uphold the highest standards of academic integrity while protecting the rights of students and faculty. Should any instructor find evidence of cheating, plagiarism, or other inappropriate assistance in work presented by a student, the instructor should inform the student of the action to be taken" (UNF current Catalog).

At minimum, the action I will take for any incidence of violation of academic integrity will be an F (failing grade) in the course and dismissal of the student committing the violation from the class.

## **15. STUDENTS WITH DISABILITIES**

If you have a disability as defined by the Americans with Disabilities Act (ADA), which requires a classroom accommodation or auxiliary aid(s), you should inform me of your needs during the first week of class so that I may take appropriate action. You should also immediately inform the Disability Resource Center of your disability and the assistance you need. The Disability Resource Center is located in Building 10, Room 1201 [Tel: 904- 620-2769 (Voice), 904- 620-2969 (TDD/TTY)].

## CLASS SCHEDULE

| Date          | Topics   | Textbook Assignment<br>(required reading)  |
|---------------|--|--|
| Weeks 1 and 2 | Introduction and review  | Chapters 4, 7 and 8<br>We will review some sections from these chapters in class |
| Week 3        | The Chi-Square Distribution<br>-Goodness-of-fit tests  | Chapter 16 and handouts  |
| Week 4        | The Chi-Square Distribution<br>-Tests of independence and homogeneity  | Chapter 16 and handouts  |
| Week 5        | Chi-squared Tests (cont.)  | Chapter 16 and handouts  |
| Week 6        | Review of main topics<br><b>Exam I</b> (in class) on <b>February 9</b><br>Linear correlation and simple regression   | Chapter 17   |
| Weeks 7-9     | Linear correlation and simple regression (cont.)<br>Multiple Regression<br><b>February 23:</b> Instructor is out of town; students work on library assignment  | Chapter 17<br>Chapter 18   |
| Week 10       | <b>Exam II</b> (in class) on <b>March 16</b><br>Multiple Regression - Inferences and Testing   | Chapters 18 and 19<br>Handouts   |
| Weeks 11      | Spring Break (March 20-24)   |  |
| Week 12       | Multiple Regression - Inferences and Testing (cont.)<br>Multicollinearity, Autocorrelation, and Heteroscedasticity<br>Model Building.  | Chapters 18 and 19<br>Handouts   |
| Week 13       | Time Series Forecasting  | Chapter 20<br>Handouts   |
| Week 14       | Summary of the main topics and more applications<br>Exam III (Take-home) <b>distributed on April 11</b>  |  |
| Week 15       | <b>Exam III collected on April 18</b><br><b>Research Projects Due</b><br>Group Presentations (Part I)<br>Course evaluation<br><b>No class on April 20</b> – To make up for the take-home exam time.  |  |
| Week 16       | <b>Group assignment on time series analysis is due</b><br>Group Presentations (Part II).<br>Presentations will be during the time scheduled for final examination.<br>Final exam schedule is available online at:<br><a href="http://www.unf.edu/registrar/finals.html">http://www.unf.edu/registrar/finals.html</a> |  |

**MAN 6501 SYLLABUS**  
**Modeling and Management of Operations**  
**Fall 2005**

6:00 p.m. - 7:15 p.m. TR (Section 81636): Room 39 / 1026, in J. Brooks Brown Hall (College of Health)  
 7:30 p.m. - 8:45 p.m. TR (Section 81637): Room 39 / 1026, in J. Brooks Brown Hall (College of Health)

|   |  |
|---|--|
| Professor: <b>DR. JAY COLEMAN</b><br>Home Page: <a href="http://www.unf.edu/~jcoleman">www.unf.edu/~jcoleman</a><br>Fax: 620-2782<br>Phone: 620-1344<br>Office: 42/3139<br>E-Mail: <a href="mailto:jcoleman@unf.edu">jcoleman@unf.edu</a> | Hours: 2:00 - 3:00 p.m. & 4:25 p.m. - 5:55 p.m. TR<br>or by appointment<br><br>Many questions are easily handled via e-mail, and I<br>check e-mail often; please feel free to use that option. |
|---|--|

**COURSE PREREQUISITES AND DESCRIPTION:**

Prerequisites: ECO 6415 (Decisions with Data). Planning and control of the process of producing and distributing goods and services. Emphasis is on reducing costs while maintaining or increasing output, quality, and customer service. Includes an introduction to optimization and simulation techniques that are useful for addressing problems in production and distribution, as well as problems in finance, marketing, and other areas of management.

**COURSE MATERIALS:**

**TEXT:** *Operations Management: Modeling & Management of Operations (MAN 6501)* (paperback, B. Jay Coleman, Ph.D., Editor), McGraw-Hill Primis, 2002, ISBN 0-390-27909-9, specially designed for this course. Material is from *Introduction to Operations Research* (7th Edition) by Frederick Hillier and Gerald Lieberman, and *Operations Management* (7th Edition) by William J. Stevenson. This book will be non-traditional in appearance. I asked the publisher to put together a paperback version of the two combined textbooks, containing only those chapters from the two texts that we cover during the course.

**PROBLEM-SOLVING SOFTWARE:** You will also have need for the LINDO linear programming package to solve linear and integer programs. You can download a free demo copy of LINDO from the [LINDO web site](http://www.lindo.com) (www.lindo.com). Also, I have written several Microsoft Excel templates which are available for you to use, and are downloadable from the **documents section** of the Blackboard Account for this course.

**INTERNET SOFTWARE:** In order to access all materials available on this web site and in the Blackboard Account for this class, you will need Internet access on your system, and a web browser such as Netscape or Internet Explorer. Moreover, you will also need to download and install [Adobe Acrobat Reader](#), which is available free of charge from the Adobe web site, in order to read the many printed materials which are in Portable Data Format, or PDF.

**COPIES OF POWERPOINT SLIDES USED IN CLASS:** Copies of all PowerPoint slides used during the in-class lectures can be downloaded in Adobe Acrobat (PDF) format, from the **documents section** of the Blackboard Account for this course. I would encourage you to download and print copies of the slides in advance of their coverage in class.

**ANSWERS TO HOMEWORK PROBLEMS:** I will assign practice homework problems on a regular basis (see later sections of the syllabus). Answers to the large majority of these practice problems *from the textbook* are maintained in a reserve folder at the university library. You can check out this folder from the library. Answers to practice homework problems *of my own design* can be found in the **documents section** of the Blackboard Account for this course. Answers to a relatively small number of the practice problems from the textbook can also be found in the Blackboard Account.

**GLOSSARY OF TERMS:** I have developed one relatively brief glossary covering terminology associated with just-in-time and Japanese manufacturing techniques. It may be downloaded in Adobe Acrobat (PDF) format from the **documents section** of the Blackboard Account for this course.

**SUMMARIES OF CERTAIN TOPICS:** In a very small number of cases, there is specific material that I want you to know, but which we will not necessarily cover in the lectures. This material is presented in brief summary pages, which are downloadable in Adobe

Acrobat (PDF) format from the **documents section** of the Blackboard Account for this course.

**MAJOR FORMULAS AND TABLES:** Single-page listings of the major formulas and tables that we will cover in the course can be downloaded in Adobe Acrobat (PDF) format from the **documents section** of the Blackboard Account for this course. Any formula or table found on these pages will be provided to you on tests.

+ Other handouts/readings deemed necessary.

## COURSE OBJECTIVES:

Upon successful completion of the course, you will be able to:

- Identify the planning and control functions (e.g., production planning and scheduling, inventory management, quality control) associated with the production and distribution process, which converts resources into goods and services, and delivers them to customers,
- Identify and discuss the key issues involved with performing each function,
- Identify appropriate qualitative and quantitative approaches that are available to solve problems within each function, including (but not limited to) linear programming, integer programming, and simulation modeling,
- Use appropriate qualitative and quantitative approaches to develop problem solutions that reduce costs while maintaining or increasing output, quality, and customer service,
- Identify other business problems (e.g., in finance, marketing, and other areas of management) for which linear programming, integer programming, and simulation modeling are applicable, and develop solutions for such problems.

## COURSE OVERVIEW:

**It will be assumed that you have a working knowledge of the topics covered in ECO 6415: Decisions with Data, the prerequisite for this class.** Some topics of great relevance to operations management have already been covered in the ECO course, namely forecasting methods (moving averages, exponential smoothing, time series decomposition, and multiple regression).

The following topics will be partially covered, probably in the following order. We will by no means completely exhaust each topic. Some of the topics may be tied together in their presentation. You will be informed of specific assignments in class. *The text in your version of the two combined textbooks is arranged roughly in the order in which you see topics presented here. However, you will see chapter number references in your book that appear out of place, given that the two versions are abridged versions of the normal texts.*

- Introduction to Operations Management (Chapter 1 from Stevenson, pp. 277-308)
  - Overview of the Emphasis, Orientation, and Objectives of Operations Management
  - Three Basic Functions of a Business
  - Manufacturing vs. Service systems
  - Types of Operations Environments
  - Types of Manufacturing Environments
- Introduction to Operations Research: The "Modeling" of Operations (Chs. 1 and 2 from Hillier / Lieberman, pp. 1-22)
  - History, definitions, common applications and techniques
  - Steps in an OR Study
- Introduction to Linear Programming (Ch. 3 from Hillier / Lieberman, pp. 24-67, 79)
  - Overview
  - A Simple Illustration
  - Terminology
  - Common Applications
  - Assumptions
  - The Standard Form
  - Special Conditions
  - A LINDO Solution
- Linear Programming Applications
  - Product Mix
  - Blending
  - Staffing / Scheduling
  - Network Applications
    - Distribution Planning (Transportation / Trans-shipment): Minimum Cost Flow

- Maximum Flow
  - Financial Planning / Portfolio Selection
- Introduction to Integer Programming (Ch. 12 from Hillier / Lieberman: pp. 109-137; 155-157, 163)
  - General Integer Variables
  - 0/1 Integer Variables
  - Types of Integer Programs
  - Innovative Uses of 0/1 Variables
  - Solving Options
- Integer Programming Applications
  - Capital Budgeting (Project Selection)
  - Assignment
  - Facility Location (Set Covering)
  - Shortest (or Longest) Path in a Network
- Introduction to Monte Carlo Simulation (Ch. 22 from Hillier / Lieberman: pp. 187-195, 200-204, 213-229, 241-243)
  - Description / Overview
  - Advantages / Disadvantages
  - Steps in the Simulation Process
  - An Example of Monte Carlo Simulation
  - Simulating in Excel
- Aggregate Production Planning (Ch. 14 from Stevenson: pp. 309-324, 328-329, 334-337)
  - Overview
  - Changeable Operational Factors in the Intermediate Term
  - Inputs to the Planning Process
  - Techniques for Developing the Plan: Mixed Integer Programming
  - Presenting the Plan Using the Solution Grid
- Inventory Management for Independent Demand Items (Ch. 13 from Stevenson: pp. 343-358, 360-376, 380-386; Ch. 15 from Stevenson: pp. 420-422)
  - Functions and Types of Inventory
  - Key Costs and Decisions
  - Perpetual vs. Periodic Systems
  - ABC Classifications (Pareto Principle)
  - Non-Lumpy Demand, Perpetual Review Items:
    - Quantity: EOQ, Quantity Discount Model
    - Timing: Reorder Point, Safety Stocks and Fill Rates
  - Determining Costs and Inventory Levels
  - Non-Lumpy Demand, Periodic Review (Fixed Order Interval) Items
  - Lumpy (Discontinuous) Demand (from Chapter 15 in Stevenson)
    - The Time-Phased Order Point (TPOP) Grid
    - Lot-Sizing Models (FOQ, EOQ, POQ, PPB, LFL)
- Inventory Management for Dependent Demand Items
  - Distribution Requirements Planning (DRP)
    - Distribution System Structure
    - Dependent Demand in Distribution Systems
    - Shortcomings of Traditional Inventory Management Methods
    - Example of DRP Logic
  - Material Requirements Planning (MRP) (Ch. 15 from Stevenson: pp. 404-422, 425-434)
    - Dependent Demand Items in Manufacturing
    - MRP Inputs (Bill of Material, MPS, Inventory Status File)
    - Component Planned Order Release Explosion
- Quality Control (Ch. 9 from Stevenson: pp. 447-467, Ch. 10 from Stevenson: pp. 469-499)
  - Overview of Terminology
  - Types of Inspections
  - Acceptance Sampling vs. Process Control
  - Statistical Process Control:
    - Control Chart Overview
    - Control Charts for Variables: X-Bar and R charts
    - Process Capability Analysis (Cp, Cpk)
    - Control Charts for Attributes: p-charts
    - How to Read a Control Chart (Runs Tests)

- Special Considerations in Process Control
- Just-in-Time and Japanese Manufacturing Techniques (Ch. 11 from Stevenson: pp. 520-551; Ch. 16 from Stevenson: pp. 552-582; Glossary of Japanese Manufacturing Terms and Names)
  - Goals and Objectives of JIT (and a Discussion of Similar Terms)
  - JIT and Japanese Manufacturing Techniques and Concepts: SMED, Heijunka (Level Loading / Mixed Model Production), Kanbans (Push vs. Pull Production), Kaizen, Source Inspection (Poka-Yoke, Jidoka, Andons), Keiretsu & Sole/Single Sourcing, Quality Loss Function

The following is an *approximate* breakdown of the coverage of the above topics:

| <i>Topic</i>                                       | <i>Portion of Course</i> |
|--|--------------------------|
| Introduction to Production / Operations / Modeling | 5%                       |
| Introduction to Linear and Integer Programming     | 20%                      |
| Introduction to Monte Carlo Simulation             | 10%                      |
| Aggregate Production Planning                      | 10%                      |
| Independent Demand Inventory Mgt                   | 20%                      |
| Dependent Demand Inventory Mgt (MRP and DRP)       | 10%                      |
| Quality Control                                    | 10%                      |
| JIT and Japanese Manufacturing Techniques          | 5%                       |
| Tests (including final)                            | 10%                      |
| <b>Total</b>                                       | <b>100%</b>              |

#### GRADING POLICY:

(Midterm test dates are tentative. If a test date is moved, it will be moved to a later date, very likely within one week of the date shown.)

|                                |     |   |
|--------------------------------|-----|---|
| Midterm #1                     | 25% | (September 29, Thursday)  |
| Midterm #2                     | 25% | (November 3, Thursday)  |
| Final (somewhat comprehensive) | 25% | (6:00 class: Dec. 6, Tuesday (3:00 - 4:50); 7:30 class: Dec. 8, Thursday (7:30-9:20)) |
| Problem Set                    | 25% | (Due November 29, Tuesday)  |

**NOTE: There is no extra credit work available in this course.**

#### GRADE SCALE:

Unless otherwise notified, a standard 10-point grading scale will be used, where  $A \geq 90$ ,  $80 \leq B < 90$ ,  $70 \leq C < 80$ , and  $F < 60$ . **No plus or minus grades will be assigned.**

#### TESTS:

Tests will be closed book / closed notes, problem-oriented and open-ended in nature. With rare exception, you will not be expected to memorize lengthy formulas or complex relationships. Concerted effort will be made to see that tests are returned within one week of the test date.

An outline of a sample test is provided in the **documents section** of the Blackboard Account for this course. The sample test gives an idea of the style of questioning and the typical format of the test.

On *any* work done out of class to be handed in, unless otherwise instructed, your work should be typed on 8.5 x 11 paper, using only the front of the page. The work should be neat and in a sequential manner. **Multiple sheets should be stapled.** Points will be deducted otherwise. You are expected to be neat and succinct. Written discussion should be placed first, followed by any supporting documents, but only if such items are requested.

#### HOMEWORK:

Practice homework will be assigned virtually every class meeting, which you should be able to complete after the lecture of that day. The practice homework is problem oriented. Its purpose is to help you become proficient at the "mechanics" of solving problems like those discussed in class. It will partially prepare you for the problem-solving portion of the exams. (To solve exam problems well, you will also need to be familiar with concepts, terms, purposes of a technique, when and where a technique is best applied, etc. This part comes from the reading, being attentive in class, good note-taking, studying consistently, and being able to "think": that is, being able to apply your knowledge in a slightly different context.) The practice homework will **not** be taken up for grading. Although you can complete the practice homework at your leisure, I would strongly encourage you to do it as it is assigned, for maximum benefit. Should you have specific questions about practice homework problems, please consult with me. The answers to all practice problems *from the textbook* will be maintained on reserve in the aforementioned homework answer folder in the library. Answers to practice homework problems *of my own design*, as well as a relatively small number of practice problems from the textbook, can be found in the **documents section** of the Blackboard Account for this course.

### PROBLEM SET:

You will be required to develop solutions for a set of comprehensive problems drawn from the group of topics covered in the course. You will be required to work in *groups of at least three but not more than four individuals*. Your group members will be of your own choosing, and you are not to do any work with other group members. When you determine who will be in your group, let me know.

Once you have performed ANY problem set work with another student in the class, that person will be by definition assumed to be in your group (i.e., you can't work part of the assignment with one person, and then decide to switch groups and work with another person.) In other words, you must choose your group before you start work. Only one document will be handed in by the group, and all individuals in a group will receive identical grades. The problem set will be provided to you later in the semester.

You will be required to evaluate the performance of yourself and each of your teammates on eleven different performance factors. The **team performance evaluation materials** found in the **documents section** of the Blackboard Account for this course will be used by each member of the group to evaluate every other individual member of the group. Each team member will receive a Total Performance Rating, which will be the average numerical evaluation across all eleven factors from all teammates.

I will assign one grade for the problem set. However, each teammate's grade for the project *may* potentially be adjusted **downward** based on the team member's Total Performance Rating as compared to the average Total Performance Ratings of the rest of the team. If the ratio between a team member's Total Performance Rating and the average Total Performance Ratings of the rest of the team is in my opinion significantly less than 1.00, this ratio will be multiplied by the problem set grade I assign to get that team member's grade.

### ACADEMIC DISHONESTY POLICY:

Cheating, plagiarism, or other inappropriate assistance on examinations or the problem set will result in a grade of "F" for the course. Any take-home portion of a test, or work on a problem set, is to be treated identically to an in-class test: the work should be entirely your (or your group's) own, with absolutely no outside help or influence. ***When working on the problem set, you should not discuss the assignment with anyone outside of your own group or outside the class.***

Moreover, and according to University policy, if you become aware of any misconduct related to academic integrity, you should inform me or another proper authority (e.g., the dean, associate dean, department chair, etc.).

### MISSING A TEST / LATE PROBLEM SET:

Those missing a test due to an excused absence will have an opportunity to make up the test at a later time agreed upon with me. The make-ups will probably be difficult and stringently graded. If you know you will be missing a test beforehand (for a very good reason--defined by me), arrangements generally can be made to take it early.

In order to be considered for a make up of an in-class test, you **must** notify me (via phone, fax, e-mail, or personal conversation with me) either **before** the day of the in-class test, or within one calendar day of the in-class test, that you will be missing, or have missed, the test. Failure to do so will result in a grade of zero for the exam. Exceptions to this policy will only be made in very extreme cases.

Failure to hand in the problem set **in class** on its due date will result in a reduction of the maximum grade by one letter grade for **each day** that the assignment is late. If the assignment is handed in more than 6 days late, the grade will be zero. An assignment handed in after class on the due date will be considered one day late.

### ATTENDANCE:

Roll will not be taken, but regular attendance is both important and encouraged. You will have difficulty in the course without it.

## DISABILITIES:

Individuals who require reasonable accommodations must contact the [Disability Resource Center](#) in the first floor of Building 10, 904-620-2769, as soon as possible.

## IMPORTANT DATES:

- September 5 (Monday) - Labor Day (no effect on our class).
- November 7 (Monday) - Last day to withdraw (the registrar's academic calendar can be found [here](#)).
- November 11 (Friday) - Veteran's Day (no effect on our class).
- November 24-26 (Thursday-Saturday) - Thanksgiving Holiday (no class on Thursday).
- December 1 (Thursday) - Last class meeting.
- December 5-9 (Monday-Friday) - Final exam week: 6:00 class exam is Tuesday, December 6, at 6:00 - 7:50; the 7:30 class exam is on Thursday, December 8, at 7:30 - 9:20 (the complete final exam schedule can be found [here](#)).

The complete university matriculation calendar can be found [here](#).

## WALL STREET JOURNAL PARTNERSHIP

Each student enrolling in one or more Coggin College of Business (CCB) courses numbered 3000 or higher is assessed a \$15 fee during each fall and spring semester. The fee is just \$15, regardless of how many CCB courses the student takes. The fee is assessed at the same time and in the same manner as all other UNF fees, and the student pays this fee when he/she pays his other tuition and fees. In return, each student is able to pick up a copy of *The Wall Street Journal* (WSJ) from locations within the College. Moreover, each student will receive access to all of the WSJ's on-line editions (e.g., European, Asian), as well as the *WSJ Employment Edition* and *Barron's*. Access to these publications is free during summer terms for students enrolled in these courses. Students who already have personal subscriptions can have the WSJ refund those dues. For information on that process, as well as more about CCB's partnership with the WSJ, please visit <http://www.unf.edu/ccb/wsj.htm>.

## DAILY HOMEWORK PROBLEMS: (I may add to or change this list periodically.)

Chapter numbers are in **bold** (these are the chapter numbers from the full version of each text):

1. Linear programming assumptions: **3**: 3.3-1, 3.3-2, 3.4-1, 3.4-2
2. Basic linear programming formulation problems: **3**: 3.1-6(bcd), 3.1-7, 3.1-8, 3.1-9(a), 3.1-10, 3.1-11(a), 3.2-1(a), 3.2-3(b), 3.4-7(a), 3.4-8, 3.6.1(a), 3.6-2(a), 3.6-3(a); **Note: You need not do any parts of these problems that ask you to get a graphical solution!**
3. Advanced linear programming formulation problems: **3**: 3.4-9(a), 3.4-10(a), 3.4-11(a), 3.4-12(a), 3.4-12(a: but this time, formulate as a maximum flow problem, where M1 and M2 each have 250 tons produced), 3.4-14(a), 3.4-15(a), 3.4-16(a), 3.4-17(a), 3.4-18(a), 3.4-19(a), 3.4-20(a), 3.6-4(a), 3.6-5(a), 3.7-1(a)
4. Linear programming LINDO solutions: **3**: Solve each of the following using LINDO: 3.1-4, 3.1-5, 3.2-4, 3.2-5, 3.2-6(b), 3.2-6(c) ); On the following, simply solve in LINDO: 3.1-11(b), 3.4-7(c), 3.4-9(b), 3.4-10(b), 3.4-11(b), 3.4-12(a) (formulate as a maximum flow), 3.4-12(b), 3.4-13(c), 3.4-14(b), 3.4-15(b), 3.4-16(b), 3.4-17(b), 3.4-18(b), 3.6-4(a), 3.6-5(a),
5. General Integer Programming formulation problems: **12**: 12.1-6(a), 12.1-7(a), 12.3-5(a)
6. Basic 0/1 Integer Programming formulation problems: **12**: 12.1-1(a), 12.1-2(a), 12.1-3(a), 12.1-4(a), 12.1-5
7. Mixed Integer Programming formulation problems: **12**: 12.1-8(a), 12.3-4(a), 12.3-7(a)
8. 0/1 Integer Programming formulation problems with Innovative Uses of 0/1 Variables: **12**: 12.3-1(a), 12.3-2, 12.3-3, 12.4-1(a,c), 12.4-3(a)
9. Advanced 0/1 Integer Programming formulations: Formulate the following as integer programs: **12**: 12.4-6(a) (shortest path), 12.4-8(a) (set covering), 12.4-9 (set covering), 12.4-10 (set covering), 12.4-11, 12.4-12, 12.6-7 (assignment)
10. Integer Programming LINDO solutions: **12**: Solve each of the following using LINDO: 12.1-1(c), 12.1-2(c), 12.1-4(c), 12.1-8(b), 12.3-4(b), 12.3-7(b), 12.3-1(b)
11. Manual Simulation: **22**: 22.1-1(abc), 22.1-2(a), 22.1-3 (abcd), 22.4-6(ab)
12. Simulation using Excel: **22**: 22.4-6 (cd -- use Excel), 22.4-8(abc -- use Excel), 22.4-14(b -- use Excel), 22.6-3 (simulate 20 times on Excel), 22.1-3(e) (simulate 20 times on Excel)
13. Aggregate Planning using Mixed Integer Programming: **14**: Formulate the following problems as mixed integer programs: 2a, 2b, 3 (ignore the "hint" in parentheses), 10 (do plan B, but allow for any number of additional workers at \$200 each (don't limit it to just one new hire), don't allow any firings, and ignore the "i.e." phrase in parentheses), 11 (ignore the restriction on having the same number of

- part-timers in any period in which they are used, and ignore the comment about trying to make up backlogs as soon as possible), 12
14. Presenting Solutions Using the Solution Grid: Fully complete the aggregate plan solution grids for the LINDO solutions to problems 2a, 3, 10b, 11, and 12 in Chapter 12 (the LINDO input files and solutions can be found in the homework answers on reserve, as well as in the **documents section** of the Blackboard Account for this course.)
  15. ABC Classification: **13:** 1, 2, 33a
  16. Economic Order Quantity: **13:** 3, 4, 5, 6, 7, 8, 28a, 32b, 33b
  17. Economic Order Quantity: See extra EOQ Problems and Solutions from the **documents section** of the Blackboard Account for this course.
  18. Quantity Discount Model: **13:** 13 (use 16.67% holding cost rate), 14ab, 15, 16, 17, 25a
  19. Quantity Discount Model: See extra Quantity Discount Problems and Solutions from the **documents section** of the Blackboard Account for this course.
  20. Perpetual Review Reorder Points and Safety Stocks: **13:** 18, 19, 20, 21ac, 22, 23, 24, 25b, 26ab, 27a, 28b, 32a
  21. Fill Rates: **13:** 27b, 28cd, 29, 30
  22. ROP, SS, and Fill Rates: See Extra ROP & SS Problems and Solutions from the **documents section** of the Blackboard Account for this course.
  23. Fixed Order Interval Model: **13:** 21b, 26c, 31, 32c
  24. Time-Phased Order Point Models: **15:** 14ab, 15; Also on 14 and 15, do LFL, EOQ (already requested on 14), and POQ as well; When doing 14, assume BI=30, SS=10, LT=1; Also assume that when doing EOQ and POQ, take the average demand over the last **7 periods** only (I did not include the blank period at the beginning of the horizon in my calculations); When doing 15, assume BI=80, SS=20, LT=1, and also use H=.65/week for EOQ and POQ work
  25. Distribution Requirements Planning: Do DRP problems at end of this homework problem list (below)
  26. Material Requirements Planning: **15:** 1-3, 5, 9 (ignore part c), 10-13, 18 (do all parts of all questions, except for those parts requesting assembly time charts); Note: On #11c, use LFL for all items, and build on the MPS in solved problem #2
  27. Material Requirements Planning: See extra MRP Problems and Solutions from the **documents section** of the Blackboard Account for this course.
  28. X-Bar and R-Charts: **10:** 1, 2, 3, 4, 12a, 20(all but e)
  29. Process Capability Analysis: **10:** 17, 21, 22, 23, 24, 25, 26; Also calculate the natural tolerances and the Cp indices for the following problems: 1 (assume specs of 23.5-25.5), 2 (assume specs of 0.96-1.04), 3 (assume specs of 2.7-3.5), 4 (assume specs of 77-83), 12 (assume specs of 3.4-4.3)
  30. Statistical Quality Control (X-bar and R charts, Cp indexes): See extra Statistical Quality Control Problems and Solutions from the **documents section** of the Blackboard Account for this course.
  31. p-Charts: **10:** 5abcfgh, 6, 9
  32. Runs Tests: **10:** 12b, 13, 14 (use problem 9's data for part (a)), 15

**DRP Problems:**

- I. Assume that a central distribution center (CDC) serves three regional distribution centers (RDCs); Forecasts at each of the RDCs for the next eight weeks are as follows:

| Week: | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  |
|-------|----|----|----|----|----|----|----|----|
| RDC 1 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| RDC 2 | 10 | 10 | 10 | 10 | 20 | 20 | 20 | 20 |
| RDC 3 | 5  | 15 | 10 | 10 | 0  | 15 | 0  | 15 |

Compute planned order releases for all three RDCs as well as the CDC, assuming the following order quantities (or lot-sizing rules), safety stocks, and lead times for each DC:

- |  |  |
|--|--|
| <p>a. CDC: Q=200, SS=0, LT=2, BI=150<br/>                 RDC1: Q=50, SS=15, LT=1, BI=50<br/>                 RDC2: Q=30, SS=10, LT=1, BI=20<br/>                 RDC3: Q=20, SS=10, LT=1, BI=15</p> | <p>b. CDC: Q=LFL, SS= 0, LT=2<br/>                 RDC1: Q=POQ, SS=15, LT=1<br/>                 RDC2: Q=LFL, SS=10, LT=1<br/>                 RDC3: Q=POQ, SS=10, LT=1</p> <p>(All BI's same as for (a))<br/>                 (For POQ, use H=1, S=100)</p> |
|--|--|

- II. Again assume that a central distribution center (CDC) serves three regional distribution centers (RDCs); Forecasts at each of the RDCs for the next eight weeks are as follows:

| Week: | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  |
|-------|----|----|----|----|----|----|----|----|
| RDC 1 | 35 | 30 | 25 | 25 | 30 | 40 | 50 | 60 |
| RDC 2 | 20 | 20 | 10 | 10 | 20 | 30 | 10 | 20 |
| RDC 3 | 5  | 15 | 25 | 25 | 35 | 15 | 0  | 15 |

- a. CDC: Q=250, SS=0, LT=3, BI=200  
 RDC1: Q=100, SS=25, LT=2, BI=100  
 RDC2: Q=40, SS=20, LT=1, BI=75  
 RDC3: Q=40, SS=10, LT=1, BI=45
- b. CDC: Q=PPB, SS= 0, LT=3  
 RDC1: Q=LFL, SS=25, LT=2  
 RDC2: Q=LFL, SS=20, LT=1  
 RDC3: Q=LFL, SS=10, LT=1  
 (For each RDC, assume BI=SS;  
 For CDC, use BI=200, H=1, S=100)  
 (Also for each RDC, assume that you  
 have scheduled receipts that exactly cover  
 the gross req's in the first "LT"  
 periods of the grid.)

## NOTICE OF POTENTIAL CHANGE

All of the above (e.g. schedules, policies, and assignments) is intended to be a good representation of what you can expect in this course. However, the instructor reserves the right to make changes as deemed appropriate.

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## **Business Environment: United States**

### **Syllabus**

Instructor: Dr. Cheryl Van Deusen  
Office:  
Telephone:  
FAX:  
email:  
homepage:  
Class Hours: To be determined (TBD)  
Office Hours: TBD

#### **I. TEXTBOOKS, ETC.**

Required: Friedman, Thomas L. *The World is Flat*. Anchor Books, New York, 2005.  
Required: Journal articles as assigned.  
Required: *The Wall Street Journal* (subscription available through UNF portal).  
Recommended: *The Economist* (current issues; library or subscription).

#### **II. PURPOSE OF COURSE**

This is a required course in the GlobalMBA program. The purpose of this course is to familiarize students with the business environment in the United States through reading and discussion of current business topics, as well as through organized visits to various companies. Because students will already have taken analogous courses in Germany, Poland and China, the course will help students to identify those aspects of the American business environment that make it unique.

#### **III. LEARNING OBJECTIVES**

Upon successful completion of the course, the student will be able to:

The learner will:

- describe the business environment in the US
- compare and contrast the business environment in the United States with those of Germany, Poland, and China
- compare and contrast the factors that continue to influence diverse business practices today
- describe the changing relative economic power of the United States and the implications for future business relationships
- demonstrate the ability to research and analyze a company and present that research in a concise, engaging format

#### **IV. COURSE REQUIREMENTS**

The course consists of both standard classroom activities and visits to businesses.

Business visits consist of several full-day visits to companies. Attendance and active participation is required of all students. Business attire is required. These visits include discussions with top-level executives (e.g., CEO, COO, CFO), as well as plant tours. In order to prepare properly for these visits, a team of students will research the company and present their findings to the class during the week before the visit. A different team will lead a post-visit debriefing session.

In addition to presentations about companies, classroom activities include reading assigned material and being prepared to discuss that material in class every day. Both general readings and current periodicals are required. Every student is expected to bring at least one relevant article from the *Wall Street Journal* or other business periodical for discussion each class day. Articles should highlight some aspect of the US business environment, and the student should be prepared to explain how.

Your class participation grade is ultimately subjective, based on my perception of what you have contributed to the class discussions. You have the opportunity to influence my opinion during class, but not after the grade has been awarded. I will provide you with input regarding your participation periodically. If you want to discuss your participation grade (or how you can improve your participation), please feel free to see me at any time. If you are concerned about

your ability to participate fully in discussions, I will be happy to try to help you become more comfortable. Just ask. Reading a publication such as *The Wall Street Journal* or *The Economist* regularly will help you in this endeavor.

The course will include one midterm and a comprehensive final. In addition to classroom lectures, exams will cover all assigned reading, current business news, and material from business visits.

#### V. GRADING

Students will earn grades according to the following scheme:

|                              |                    |
|------------------------------|--------------------|
| Midterm examination          | 25% of final grade |
| Classroom participation      | 25% of final grade |
| Business visit participation | 25% of final grade |
| Final examination            | 25% of final grade |

Grades are assigned on a 10-point scale: 90-100=A, 80-89=B, 70-79=C, 60-69=F. No +/- grades will be used, nor will a D grade. Any exam or project turned in late will be penalized at the rate of 25% per day against the maximum value of the work. *This penalty applies regardless of the legitimacy of the excuse.* In particular, computer and printer problems, whether hardware or software, will not get you any special treatment. There will be no exceptions. Plan ahead and don't procrastinate.

#### VI. ACADEMIC INTEGRITY

Working together is a wonderful way to learn, and your instructor encourages it. You may (and should!) work with others in this class on any activity except examinations. All examinations, whether in-class or take-home, must be individual efforts.

Plagiarism is taking someone else's work and passing it off as your own. Plagiarism includes taking phrases, sentences, or paragraphs from someone else's writing and using them in your own writing without providing true attribution of their source. Avoiding plagiarism, of course, does not mean neglecting to conduct solid research. It is appropriate to read what various scholars and experts have learned about an issue before you form your own conclusions about it. However, you must ensure that you understand the literature. At a minimum, students should rephrase the literature's content, rather than quoting it verbatim. This practice also helps to ensure student understanding of the issue, as you cannot write intelligently unless you do know your subject. Another way to avoid plagiarism is to ensure that you utilize a large number of sources, so that your knowledge goes beyond that of any particular book or article.

The internet now provides students with the opportunity to purchase term papers or otherwise copy someone else's work. Turning any work that is not your own is a violation of academic integrity.

With regard to these and all other issues of academic integrity, students are also expected to adhere to the code of conduct as outlined in the UNF catalog. Anyone caught violating the academic integrity code will be disciplined fully.

#### VII. STUDENTS WITH DISABILITIES

If you have a disability, as defined by the Americans with Disabilities Act (ADA), which requires a classroom accommodation or auxiliary aid(s), please inform me of your needs during the first week of class so that I may take appropriate action. You should also notify the Office of Disabled Services Programs at 620-2769 concerning any needs you may have.

#### VIII. CLASSROOM ETIQUETTE

Students are expected to remain polite during classroom discussions and business visits. Even during heated debates, you must treat your classmates with respect. Violation of this policy will result in a reduction of your class participation grade. For example, you should not make derogatory remarks about your classmates' ideas. Instead, explain why you think they are wrong, backing up your viewpoint with sound economic analysis and refrain from personal attacks. Another example is being quiet while someone else (including your instructor!) has the floor.

You may *not* use cellular telephones or pagers in class. If you bring them to class, the *must* be turned off. If there is an emergency situation that requires you to have an active telephone or pager in class, you *must* notify your instructor *in advance* begins that your equipment will be turned on. In such cases, pagers (and cell phones, if possible) should be set to vibrate, not to sound an alarm. Violation of this policy will result in your being asked to leave the classroom for the remainder of the period. Repeated violations will be reported to the appropriate UNF authorities and

will result in disciplinary action.

## Applied Intercultural Communications: United States - MAN 6931

### Term

Fall 2006

### Schedule

- Mondays, Wednesdays. 10:30 – 11:45.
- Classroom 2124

### Instructor

Dr. Juan Pablo Stegmann

Office 42 / 3406

Office hours:

Mondays, Wednesdays 2:00 to 3:00 and by appointment

Phone 620-2780

E-mail: [j.stegman@unf.edu](mailto:j.stegman@unf.edu)

### Course Description.

This is the fourth course that Global MBA's are taking related to cross cultural management.

This course will focus on application of the ideas that they have studied in the three courses that the students have taken so far.

The center will be the cross cultural aspects of doing business with the USA: 1. the Americans, how they are, why, historical and cultural issues, and 2. cultural differences between Americans and other nations.

It will be based on: discussion of cases, most of them related to international business situations involving an American company and a foreign counterpart. Several videos will be shown related to American firms operating in foreign countries. Also some role-plays and class discussions will intend to reproduce international business negotiations between Americans and foreign companies.

### Books.

Cases-book to be acquired at UNF's Bookstore, check with Lisa Dykes if you have any doubt. **Required.**

## **Course Content.**

### **1. Cases**

- Case. Sony In America: An International Business Discussion Case (Japan)
- Case. Cross-Cultural Negotiation: Americans Negotiating A Contract In China (China)
- Case. Daimler: Organizing The Post-Merger Integration (Germany)
- Case. Daimler-Chrysler: Lessons In Post-Merger Integration (Germany)
- Case. Ste Basil Hotel, Moscow: Struggling With Values In A Post-Communist State (Russia)
- Case. Waking The Bear: 'Danonizing' The Bolshevik Biscuit Factory (Russia)
- Case. Dead Sea Salt Processing: A Bitter Mix Of Cultures (Israel)
- Case. Shield: product development in a distributed team (India)
- Case. The Bull Market: International Printers, Mexico, Cases A, B And C (Mexico)
- Case: Accor (France)
- Case. Barbie: The American I-Doll
- Case. Colgate
- Case: Alcot Sato Machine Tool Co. US-Russian negotiation (Russia)
- Case: Becton-Dickinson (Canada)
- Case: Duo Tsai Paint Company. Cultural differences and reorganizations (Taiwan)
- Case: IKEA (Sweden)
- Case: Ikea. Cross cultural differences between Swedish, German, French and American employees (Sweden, France, Germany, USA)
- Case: Kiel A.G. US-Swiss negotiations (Switzerland)
- Case: Lao Bao's. Cultural differences and management (Taiwan)
- Case: Mercedes Benz (Germany)
- Case: Polisar (Canada)

### **2. Videos.**

- Video and discussion: US-Japanese negotiation
- Video: Entering China
- Video: Honda in North America
- Video. Argentina and Ecuador
- Video. China
- Video. Cretors. Exporting pop-corn to global markets
- Video: British Petroleum. Building a global brand
- Video: Coke in Japan
- Video: Mc Donald's everywhere

- Video: Nike, CEO Phil Knight
- Video: South Africa's FDI
- Video: Starbucks. Building relationships with coffee
- Video: Worldbook

### 3. Class discussions

- Workshop: Hofstede's questionnaire. Dimensions of national culture
- Critical incidents in cross cultural management
- The Emperor's pot. US-Chinese negotiation.

### Communication Requirements

- Team Research Project and Seminar. The students, working in small teams, will have to develop a business case, and present to the rest of the class in the last week. A foreign company or foreign investor must start a new business in the USA. The students must: 1. explain the scenario in the foreign country, 2. develop and explain the new business with the USA, 3. develop all business strategy aspects of the deal: entry modes, international strategy, local organization, marketing / operations / financial / human resources strategies and 4. explain the cross cultural difficulties that it may have. The most important aspect is clearly this last point 4.
- Individual Cases. The students must read the cases for the required class, and bring the answers by that class. Cases brought after the due class will not be graded. The students will be required to participate in class discussions. Participation in class is considered a valuable way to train students to their future careers.

### Grading procedures.

- Assignments 45%
- Team Research Project - Seminar 45%
- Attendance 10%
- Extra credits will be given to students that demonstrate special will to contribute to class dynamics and to the learning process.

The grading scale is as follows:

|            |    |
|------------|----|
| 94 – 100%  | A  |
| 93.99 – 90 | A- |
| 89.99 – 87 | B+ |
| 86.99 – 84 | B  |
| 83.99 – 80 | B- |
| 79.99 – 77 | C+ |
| 76.99 – 70 | C  |
| 69.99 – 60 | D  |
| Below 60%  | F  |

**Computer applications**

Students will be expected to have good Power-Point, BlackBoard and Internet literacy.

**Discipline**

**Students that disrupt the dynamics of the class will be required to leave the class definitively.**

## Active learning

This course tries to be extremely dynamic: lectures are intended to be minimal, just to reinforce the active learning.

This aspect follows Mel Silberman Active Learning approach. According to it, the average retention rates from various instructional modes are the following:

|                   |     |
|-------------------|-----|
| Lecture           | 5%  |
| Reading           | 10% |
| Audiovisuals      | 20% |
| Demonstration     | 30% |
| Discussion        | 50% |
| Practice by doing | 75% |
| Teaching others   | 90% |

In order to achieve Active Learning, the courses follows David Garvin's approach as to the 3 ways to create knowledge:

1. Intelligence (when the information already exists). To do so the following methodologies are used:

- lectures, videos, bibliography, reading material
- research on Internet (I supply them with a wide set of international web links so that they can develop their own international business intelligence network)
- research on UNF library
- E-learning to share information

2. Experience (when the information does not exist in an explicit way, but the facts exist, therefore the information is in an implicit way as the people have already had experiences). Methodologies used in class:

- cases (Harvard, IMD, INSEAD, etc.)
- class workshops, experiential exercises
- E-learning to share experiences

3. Experimentation (when the information does not exist and the realities do not exist either, and therefore the facts must be created in order to learn from them). Methodologies used in class:

- creation of their own strategies to real companies, their own business plan,

## **Dr. Stegmann's Resume.**

### **PART I. EDUCATION**

- 2005 Ph.D. Finance and Management. Warsaw University (WES: equivalent to US regionally accredited university). Poland. "Using the EVA model for investing in corporate stocks".
- 2004 Master of Business Administration. Warsaw University. Poland.
- 2001 Ph.D. Business Strategy. Pacific Western University. California, USA. "An integrative and modern approach to Business Strategy and Entrepreneurship based on Value Based Management and Knowledge Management".
- 1998 Program for Executive Development. IMD. Switzerland.
- 1989 Advanced Banking Lending Education. Bank of America. California, USA.
- 1979 Industrial Engineer (M.S.). Instituto Tecnológico de Buenos Aires. Argentina.
- 1973 Undergraduate. Colegio San Pablo (High School, Human Sciences). Argentina.
- 1973-2005 Several other courses and seminars in Argentina, USA, Canada, Uruguay, Peru.

### **PART II. BUSINESS EXPERIENCE**

I have worked in senior positions at leading multinational corporations in several areas of the organization: General Management, Finance, Administration, Strategic Planning, Intellectual Capital Development, Sales, Marketing, Operations, Human Resources, Procurement, Business Development, Project Management and Financial Engineering.

- 1994 – 2000 Telefonica de Argentina. Largest telephone conglomerate, \$4.5 billion revenues.
- Director of Finance.
  - Strategic Planning and Intellectual Capital Development Director (Knowledge Management).
- Unifon. Cellular telephone company of the Telefonica Group.
- Administration and Finance VP.
- 1993 – 1994 Rothschild Group, U.K. - Matte Group, Chile. Investment Banking.  
General Manager.
- 1990 – 1993 Galicia Capital Markets Argentina. Investment banking facility of the largest national private bank.  
Financial Engineering Manager.
- 1987 – 1989 Bank of America. Buenos Aires.  
Account Officer, Assistant Vice President.
- 1987 – 1988 Parana Brewery. Bemberg Group.  
Financial Manager.
- 1983 – 1986 Citibank. Buenos Aires.  
Corporate Bank. Product officer.  
Individual Bank. Business Development Manager.

- **Finance.** Debt and equity issues (commercial papers, Yankee bond, corporate bonds, and 3 IPO's for \$ 900 million), financial engineering (syndicated loans secured by oil reserves, freeways toll and export credit agencies, privatizations, debt equity swap for \$ 8 billion), commercial banking (\$ 90 million portfolio), financial administration (export credit agencies for \$ 600 million and collection process for \$ 2.5 billion), start up financing (for \$200 million), financial control, international trade financing, and financial analysis of around 2,000 U.S. public companies. Several transactions were performed with Citibank, J. P. Morgan, Bankers Trust, Salomon, Rothschild and other leading banks
- **International.** I have studied, worked, lived and traveled in 23 countries. In Argentina I had business meetings with national authorities: the President of the country, the Minister of Economy and the President of the Securities and Exchange Commission, as well as other corporate leaders. I have been interviewed and widely quoted by leading magazines and newspapers in Chile and Argentina. I have studied several programs with executives from all over the world. I am fluent in English, Spanish (native), French, and conversational in Portuguese and Italian. Basics of Latin
- **Strategic management.** Transformed the traditional strategic planning and control process into a knowledge management process, interacting with Leif Edvinsson (designated "The Brain of the Year 2000" by the Financial Times), as well as EDS, Ernst and Young, AT Kearney, Meta4. Used industrial economics models (game theory) in Argentina's telephone deregulation process
- **Entrepreneurship.** Participated in several start ups (cellular telephone company, aluminum plant contractor, brewery, ATM network, 2 investment banks, computer services, business school), new business development officer, and product officer at Citibank
- **Business Consulting / Project management.** Participated in the several projects, as consultant, as user or as manager, some of them with McKinsey, A. T. Kearney, Andersen, Boston Consulting, Cisco, Price, Siemens. Third party logistics, new business development, market research, conglomerate synergies, CEO's agenda, value drivers based planning and control system, outsourcing of IT, new competitive scenarios and strategies based in game theory and industrial economics, vision and future scenarios, new projects decision-making and approval process, CEO's value drivers management system, creation and implementation of the new strategic management process for a conglomerate based on knowledge management and value based management, international benchmarking system, scenario analysis (business opportunities), new capital expenditures model BSC, shared services, National Quality Award (Baldrige), 200 ATM joint network for 6 leading banks, ABC costing, SAP installation, data warehouse, merger with competitor.

### **PART III. ACADEMIC EXPERIENCE**

I teach a wide scope of disciplines (Strategic Management and Business Policy, International Management, Entrepreneurship, Ethics, Organization Theory, Organizational Behavior, Finance, Economics, Financial Management and Quantitative Methods in Management), using varied teaching techniques (cases, experiential learning, simulations, distance learning, research projects, consulting with real companies), at very different environments (undergraduate and graduate students, companies' executives, USA and Argentina)

2005 – 2006 Brewton Parker College, USA. Professor of Economics and Management

2002 – 2005 University of North Florida, USA. Professor of Strategic Management and International Business

1998 – 2002 Professor of Strategic Management (MBA level), at the ten highest regarded Argentine universities.

Professor of Business Ethics. MBA. Universidad Catolica Argentina

1996 – 1999 Professor of Finance. MBA. Buenos Aires Institute of Technology

1983 – 1986 Professor of Finance. Undergraduate. Universidad del Salvador. Argentina

I successfully developed two programs: Business Consulting (the students advised 3 multinationals), and Entrepreneurship (together with an incubator and UNF's Small Business Development Center, the students developed their own strategic plan and advised entrepreneurs)

The evaluations from the students have been quite high: in the last semester all the evaluations ranged between 4.87 and 4.17 (out of a maximum of 5)

I have also successfully presented one peer reviewed paper, published 2 books, wrote chapters in 3 other books, presented 11 papers in professional meetings and was quoted in 8 magazines and newspapers

#### **PART IV. MISCELLANEOUS**

**Community service.** Together with my wife, we introduced in Argentina a new treatment for autistic children, based on UCLA Ivar Lovaas Behavior Modification, which changed the history of this disease's treatment in the country. 400 therapists were trained and more than 50 children initially received treatment. Today hundreds of children are receiving this treatment in Argentina, Uruguay, Chile and Brazil. There are several groups of professionals following this treatment; some of them are working in Europe and the USA.