Elias T. Kirche, Ph.D.
Department of Information Systems and Operations Management
Lutgert College of Business
Phone: (239) 590-7325
ekirche@fgcu.edu

Consultation Hours
T&R: 4-5 PM & W: 2-5 PM, other times by appointment

Class Schedule*: It provides a map of the course so you can organize and plan your studies accordingly. The critical item to remember is that project assignment and exam due dates cannot be delayed.

<table>
<thead>
<tr>
<th>Week number and date</th>
<th>Topic</th>
<th>Description</th>
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| 1 – 1/12             | Chapter 1 | -Course overview  
                        |       | -Introduction to Analytics and Excel  
                        |       |   - Decision Models  
                        |       |   - Problem Solving and Decision Making  
                        |       |   - Spreadsheet Add-ins for Business Analytics  
                        |       |   - Software requirement  
                        | Chapter 4 | Descriptive Statistical Measures (Chap. 4):  
                        |       |   - Populations and Samples  
                        |       |   - Measures of Location, Dispersion and Shape  
                        |       |   - Excel functions  
                        |       | - Assignment 1 Course expectations handout  
| 2 – 1/19             | Chapter 4 | Before class: review Online material: instructional videos in Descriptive Measures:  
                        |       |   D-1, D-2, D-3, and D-4  
                        |       | In-class applications: Descriptive Statistical Measures (Chap. 4):  
                        |       |   - Measures of Location, Dispersion and Shape  
                        |       |   - Measures of Association  
                        |       | Before class: review online instructional videos in probability distribution: Dist-1  
                        |       | In-class review: probability distribution and applications (Chap. 5)  
                        |       |   - Random variable and probability distribution  
                        |       |   - Continuous and discrete distributions  
                        |       | Due: Assignment 1 - upload to Canvas drop box  
                        |       | Assignment 2 handout  

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<tbody>
<tr>
<td>3 – 1/26</td>
<td>Chapter 6</td>
<td>Before class: Review online material - Sampling and estimation: confidence-r1</td>
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<td>In class applications: Sampling and estimation (Chap 6)</td>
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<td>• Estimating population parameters</td>
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<td>• Sampling error (margin of error)</td>
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<td>• Confidence interval for decision making</td>
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<td>4 – 2/2</td>
<td>Chapter 7</td>
<td>Before class: Review online material - Hypothesis Testing HT-1s, HT-2s</td>
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<td>Optional: Download (in Canvas) PowerPoint slides (PP1s, PP2s)</td>
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<td>In class applications: Statistical inference (Chap 7)</td>
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<td>• Hypothesis Testing</td>
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<td>• One-Sample Hypothesis Tests</td>
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<td>• Two-Sample Hypothesis Tests</td>
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<td>• ANOVA</td>
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<td>5 – 2/9</td>
<td>Chapter 7</td>
<td>In class applications: Statistical inference</td>
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<td>• Hypothesis Testing</td>
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<td>• ANOVA</td>
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<td>Due: Assignment 2</td>
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<td>6 – 2/16</td>
<td>Exam week</td>
<td>EXAM 1</td>
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<td>Part 1: Knowledge of concepts - closed book</td>
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<td>Part 2: Problem solving part (spreadsheet applications using Excel)</td>
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<td>7 – 2/23</td>
<td>Chapter 8</td>
<td>Regression Analysis</td>
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<td>• Simple Linear Regression</td>
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<td>• Evaluating Good Regression Models</td>
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<td>Assignment 3 handout</td>
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<td>8 – 3/1</td>
<td>Chapter 8</td>
<td>Regression Analysis</td>
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<td>• Simple and Multiple Linear Regression</td>
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<td>• Building Good Regression Models</td>
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<td>• Regression with Categorical Independent Variables</td>
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<td>9 – 3/8</td>
<td>No classes</td>
<td>Spring Break</td>
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| 10 – 3/8             | Chapter 8 | Regression Analysis (Chap 8)  
|                      |       | • Regression with Categorical Independent Variables  
| 11 – 3/15            | Chapter 9 | Forecasting (Chap 9)  
|                      |       | • Forecasting Techniques  
|                      |       | • Qualitative and Judgmental Forecasting  
|                      |       | • Forecasting Models for Time Series with a Linear Trend  
|                      |       | • Measures of Forecasting Accuracy  
| 12 – 3/22            | Exam week | **EXAM 2**  
|                      |       | Part 1: Knowledge of concepts - closed book  
|                      |       | Part 2: Problem solving part (spreadsheet applications using Excel)  
| 13 – 3/29            | Chapter 10 | Introduction to data mining  
|                      |       | • The Scope of Data Mining  
|                      |       | • Cluster analysis  
|                      |       | • Classification Techniques  
| 14 – 4/5             | Chapter 11 | Spreadsheet modeling and analysis  
|                      |       | • Implementing models on spreadsheets  
|                      |       | • Applications in business analytics  
|                      |       | • Developing user-friendly applications  
| 15 – 4/12            | Chapter 11 | Spreadsheet modeling and analysis  
|                      |       | • Developing user-friendly applications  
|                      |       | • Sensitivity analysis using Excel native functions  
| 16 – 4/19            | Chapter 12 | Simulation and Risk Analysis: In-class applications (*the outsourcing model, the profit model*)  
|                      |       | • Simulation and Risk Analysis  
|                      |       | • Spreadsheet Models with Random Variables  
|                      |       | • Monte Carlo Simulation Using Risk Solver  
| 17                   | Final exam week | See Gulfline for location, date & time for final exam schedule  
|                      |       | **Due: Assignment 4**  
|                      |       | Last day of class  


**About the Course:** The course covers descriptive analytics, regression analysis, forecasting, risk analysis, simulation and data mining. The course provides you with the fundamental concepts and tools needed to understand the emerging role of business analytics in organizations and shows how to apply basic business analytics tools in a spreadsheet environment, and how to communicate with analytics professionals to effectively use and interpret analytic models and results for making better business decision. Emphasis is on applications, concepts and interpretation of results, rather than theory and calculations. Students use a computer software package for data analysis.

**Learning Objectives**
- Define and explain key business analytics terms
- Select appropriate models and techniques and tools for specific business decision
- Given data, apply appropriate analytical tools in the analysis of quantitative and qualitative data from a variety of business scenarios.
- Use software package for data analysis and interpretation through graphs, tables, and numerical output
- Be able to report results in a fair, objective and unbiased manner.

**Assignments and Projects:** This course involves "learning by doing" applications of Business Analytics concepts in the business world through course assignments and projects. There are 4 homework assignments and 1 course project. If you would like feedback on a draft of your assignment, I would be glad to review it if requested at least one week before the due date.

Assignment 1 is about course expectations. Log on to Canvas and answer the following questions in a short paragraph:

- What do you hope to gain from this course?
- Is there a topic you would like to know more about?

The remaining assignments involve analysis of problems and/or cases from the textbook (see the Schedule for due dates). The course project is a special case requiring the student to prepare and deliver a hard copy of a managerial report at the end of the course. Students are encouraged to submit their analysis or questions to the instructor with sufficient time for review and feedback. The analysis for all assignments/project will be done using Microsoft Excel with the assistance of Frontline Systems’ Risk Solver Platform and XLMiner. NO LATE ASSIGNMENT WILL BE ACCEPTED. It is your responsibility to submit the document on or before the due date.
Our computer lab has the required software for class instruction but, to complete assignments you may need a personal copy installed in your personal computer which can be downloaded from Frontline Systems website. See required Course Material on Canvas.

**Exams**

There will be 3 exams. The exams are based on the assignments, related chapters and materials covered in class lecturers.

NO MAKEUP EXAMS will be given. Only the following reasons will be considered if you miss an exam: armed services requirement, extreme health situation, and death. Any exam that is missed without an appropriate documentation will automatically receive a score of zero.

**Class Format, Policies, and Student Participation**

Attendance at all classes is expected but not considered into your grade. Organize your professional and personal affairs to allow for attendance at every class session. You are responsible for all announcements and assignments made in class by your instructor. Poor attendance is correlated with lower performance in the course and I do pass around a class attendance sign-up sheet. So it is of your interest to attend all classes. Since we will not spend class time addressing all topics and problems surveyed in your text, use your notes as a 'guide' in preparing for the exam; text material not covered in class but descriptive in nature or closely related to lecture material will be appropriate for exam purposes. Classes meet twice each week for 75 minutes. The class policies listed below is intended to give you a behavioral framework in which you can build your own personal learning objectives for this course.

1. You are expected to have completed the assigned reading for the day.
2. Assignments are individual effort.
3. Your professionalism, integrity, and academic success are at stake if you fail to submit work on time.
4. Keep cell phones turned off (or on silent) when in class and do not use computers in the lab for navigating the internet or downloading emails.

**Grades:** When preparing your assignments pay attention to the analytical content, cleanliness, and organization of the document. They all contribute to your grade. The final grade is computed as a percentage of the total points earned in

Assignments: 4 assignments @ 12% (3% each)
Class participation @ 3%
Course project @ 10%
Exam 1 @ 20%
Exam 2 @ 20%
Final exam @ 35%
Letter grades will be assigned based on the following criteria as a percentage of total points:
92 and above: A
90 to less than 92: A-
87 to less than 90: B+
82 to less than 87: B
80 to less than 82: B-
75 to less than 80: C+
70 to less than 75: C
65 to less than 70: D+
60 to less than 65: D
below 60: F

Incomplete will be given by exception when a limited portion of the course material has not been completed by the last exam due date, in accordance with University policy published in the Catalog. The instructor on an individual basis will review each case.

**Required Course Material:**
A. **Textbook:** Business Analytics by James R. Evans, 2nd edition, Publisher: Pearson  

B. **Software:** Microsoft Excel and Frontline System’s Risk Solver Platform and XLMiner (student version)

Follow the instruction in CANVAS to download and install Frontline System’s Risk Solver Platform and XLMiner (student version)

C. Data files used course (free). Access the textbook companion website to download files at:
   [http://wps.prenhall.com/bp_evans_bus_2/](http://wps.prenhall.com/bp_evans_bus_2/)

Florida Gulf Coast University, in accordance with the Americans with Disabilities Act and the university’s guiding principles, will provide classroom and academic accommodations to students with documented disabilities. If you need to request an accommodation in this class due to a disability, or you suspect that your academic performance is affected by a disability, please see me or contact the Office of Adaptive Services. The Office of Adaptive Services is located in the Wellness Building. The phone number is 239-590-7956 or Video Phone (VP) 239-243-9453. In addition to classroom and campus accommodations, individuals with disabilities are encouraged to create their personal emergency evacuation plan and FGCU is committed to providing information on emergency notification procedures. You can find information on the emergency exits and Areas of Rescue Assistance for each building, as well as other emergency preparedness materials on the Environmental Health and Safety and University Police Department websites. If you will need assistance in the event of an
emergency due to a disability, please contact Adaptive Services for available services and information.

Additional assistance: The Center for Academic Achievement (CAA) offers academic support services for any FGCU student. The services are at no extra charge to students and include: peer tutoring, Supplemental Instruction, Student Success Workshops, and individualized academic coaching. If you would like to participate in or learn more about these services, please visit the CAA in Library 103. You may also email the CAA at caa@fgcu.edu or call at (239) 590-7906. The CAA website is www.fgcu.edu/caa.

* This is a planned course structure and may change if necessary to meet learning goals